

APPENDIX K1

TRAFFIC STUDY



Traffic Study

for the:

CADO Warehouse Project

In the City of Menifee

September 2023

Kimley»»Horn

**TRAFFIC STUDY
FOR THE PROPOSED
CADO WAREHOUSE PROJECT
IN THE CITY OF MENIFEE**

Prepared by:

Kimley-Horn and Associates, Inc.

1100 Town and Country Road, Suite 700
Orange, California 92868

September 2023

TABLE OF CONTENTS

Page

Introduction.....	1
Purpose and Study Objectives	1
Project Overview	1
Analysis Scenarios and Methodology.....	4
Analysis Scenarios.....	4
Study Locations.....	4
Intersection Analysis – HCM Methodology	8
Roadway Analysis – HCM Methodology	10
Level of Service Standards and Measure of Significance	11
General Plan Circulation Map	11
Existing Traffic Conditions.....	14
Existing Street System.....	14
Existing Transit Service.....	15
Existing Traffic Volumes	15
Peak Hour Operation Conditions.....	15
Daily Roadway Operating Conditions	15
Project traffic.....	20
Project Trip Generation	20
Trip Distribution and Assignment.....	20
Existing Plus Project	25
Peak Hour Operating Conditions.....	25
Daily Roadway Operating Conditions	25
Future Conditions Without Project.....	30
Opening Year 2024 Cumulative Conditions	30
Cumulative Projects	30
Trip Generation	30
Trip Distribution and Assignment	30
Peak Hour Operating Conditions.....	37
Daily Roadway Operating Conditions	37
Future Conditions With Project.....	40
Opening Year 2024 Cumulative Plus Project	40
Peak Hour Operating Conditions.....	40
Daily Roadway Operating Conditions	41
Traffic Signal Warrant Analysis	46
Storage Capacity at Left-Turn Pockets.....	47
Recommended Improvements.....	47
Site Access and Circulation	54
Site Adjacent Roadway Improvements	54
Findings and Conclusions.....	56

LIST OF FIGURES

Figure 1 – Vicinity Map	2
Figure 2 – Site Plan	3
Figure 3A - Existing Lane Configuration and Traffic Control	6
Figure 3B - Existing Lane Configuration and Traffic Control	7
Figure 4 – City of Menifee Roadway Network	12
Figure 5 – City of Perris Roadway Network	13
Figure 6A – Existing Traffic Volumes	16
Figure 6B – Existing Traffic Volumes	16
Figure 7 – Project Trip Distribution.....	22
Figure 8A – Project-Related Traffic Volumes.....	23
Figure 8B – Project-Related Traffic Volumes.....	24
Figure 9A – Existing Plus Project Traffic Volumes	26
Figure 9B – Existing Plus Project Traffic Volumes	27
Figure 10 – Location of Cumulative Projects	31
Figure 11A – Cumulative Projects Traffic Volumes	33
Figure 11B – Cumulative Projects Traffic Volumes	34
Figure 12A – Opening Year 2024 Cumulative Traffic Volumes	35
Figure 12B – Opening Year 2024 Cumulative Traffic Volumes	36
Figure 13A – Opening Year 2024 Cumulative Plus Project Traffic Volumes	42
Figure 13B – Opening Year 2024 Cumulative Plus Project Traffic Volumes	43

LIST OF TABLES

Table 1 – Summary of Intersection Operation – Existing Conditions	18
Table 2 – Summary of Roadway Segment Analysis – Existing Conditions	19
Table 3 – Summary of Project Trip Generation	21
Table 4 – Summary of Intersection Operation – Existing Plus Project.....	28
Table 5 – Summary of Roadway Segment Analysis – Existing Plus Project.....	29
Table 6 – Summary of Cumulative Projects.....	32
Table 7 – Summary of Intersection Operation – Opening Year 2024 Cumulative	38
Table 8 – Summary of Roadway Segment Analysis – Opening Year 2024 Cumulative.....	39
Table 9 – Summary of Intersection Operation – Opening Year 2024 Cumulative Plus Project	44
Table 10 – Summary of Roadway Segment Analysis – Opening Year 2024 Cumulative Plus Project.....	45
Table 11 - Summary of Project Left-Turn Pocket Storage Capacity	48
Table 12 - Summary of Intersection Operations With Recommended Improvements	52
Table 13 - Summary of Roadway Segment Analysis With Recommended Improvements.....	53
Table 14 - Summary of Project Fair-Share.....	55

APPENDICES

APPENDIX A: APPROVED SCOPE OF STUDY FORM
APPENDIX B: TRAFFIC COUNT DATA SHEETS
APPENDIX C: INTERSECTION ANALYSIS WORKSHEETS
APPENDIX D: CUMULATIVE PROJECTS INFORMATION
APPENDIX E: TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS
APPENDIX F: PROJECT TRIP DISTRIBUTION
APPENDIX G: TUMF REGIONAL PROGRAM

**TRAFFIC STUDY
FOR THE PROPOSED
CADO WAREHOUSE PROJECT
IN THE CITY OF MENIFEE**

INTRODUCTION

Purpose and Study Objectives

This traffic study has been prepared to address the traffic-related effects of the proposed CADO Warehouse Project in the City of Menifee. This traffic study has been conducted in accordance with the City of Menifee *LOS Traffic Study Guidelines* (October 2020), and in accordance with the City of Menifee *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled* (January 2022).

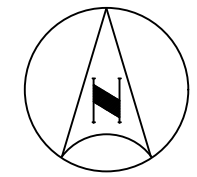
This report includes a description of existing traffic conditions in the surrounding area, estimated project trip generation and distribution, future traffic growth, and an assessment of project-related effects on the roadway system. Where necessary, circulation system improvements have been identified to address project-related effects at the study locations.

Project Overview

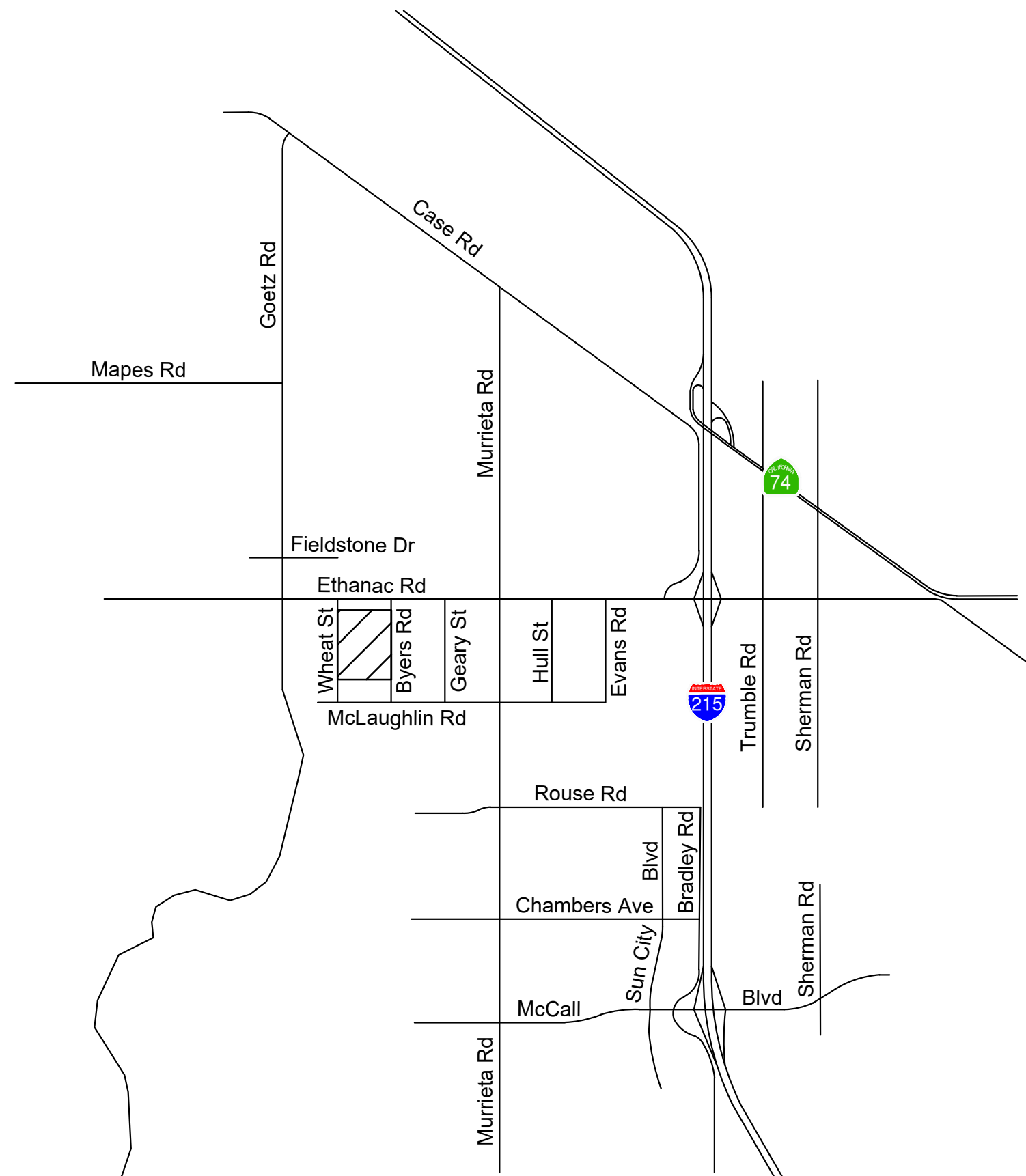
The CADO Warehouse project site is located on the southwest corner of the intersection of Kuffel Road at Byers Road, just south of Ethanac Road in the City of Menifee. The project site is approximately 36.8 acres and is generally bounded by Kuffel Road to the north, Byers Road to the east, Wheat Street to the east, and Corsica Lane to the south. The site is shown in its regional setting on **Figure 1**. The project site is currently vacant. The project consists of the construction of a warehouse building totaling approximately 700,037 square feet. A copy of the project site plan is provided on **Figure 2**.

Regional access to the site is provided primarily by the Interstate 215 (I-215) Freeway, located approximately half a mile east of the project site. Local access to the project area is provided primarily via Ethanac Roadway.

Direct vehicular access provisions for both passenger vehicles and trucks for the project site would consist of two full-movement driveways on Byers Road and two full-movement driveways on Wheat Street.



NOT TO SCALE



LEGEND:

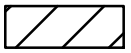
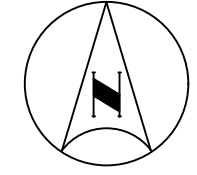
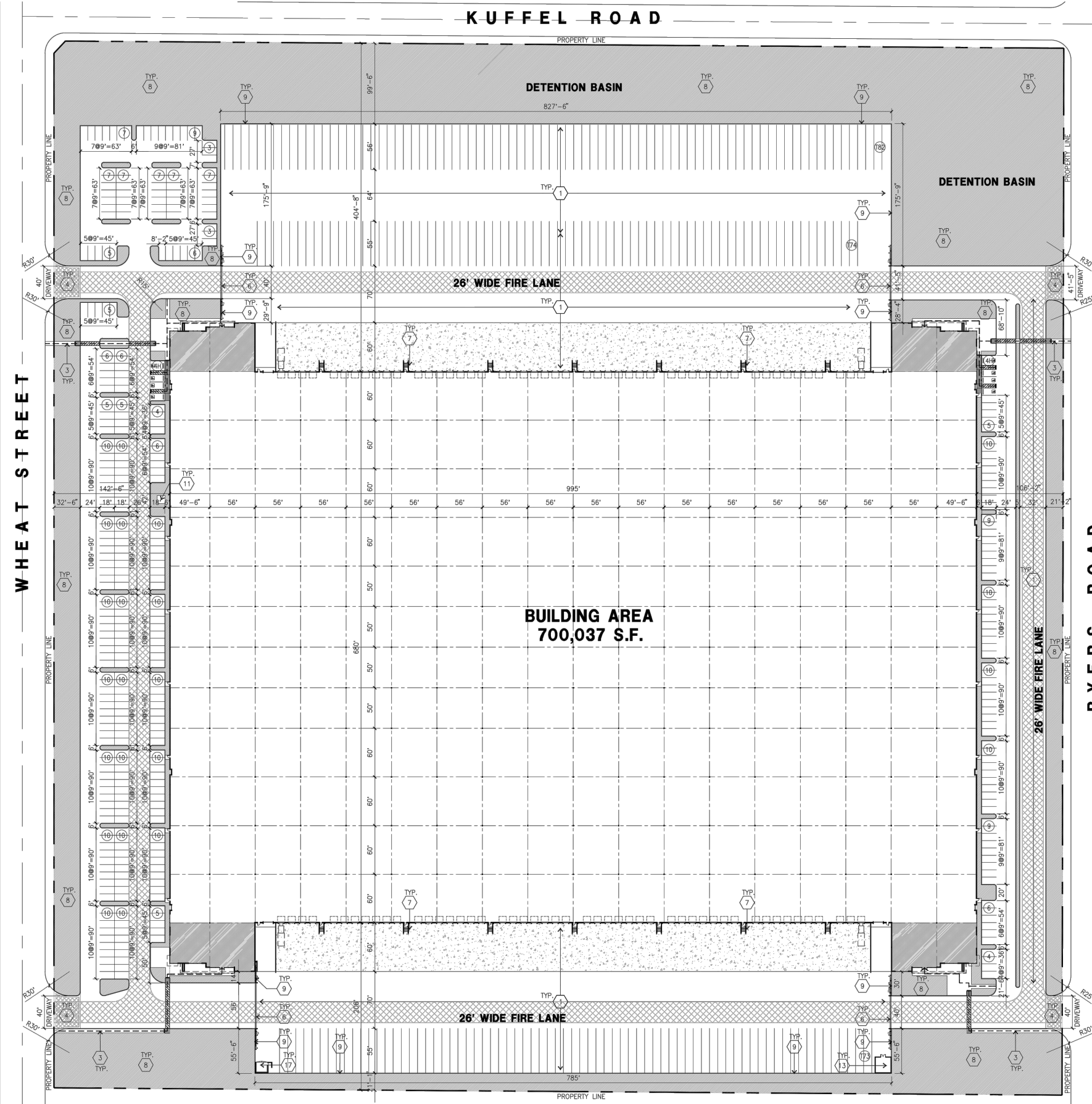
 = Project Site

FIGURE 1
VICINITY MAP





NOT TO SCALE

FIGURE 2
SITE PLAN

ANALYSIS SCENARIOS AND METHODOLOGY

Analysis Scenarios

In accordance with the City of Menifee *LOS Traffic Study Guidelines*, the project will be evaluated in the morning and evening peak hours for the following conditions:

- Existing Conditions
- Existing Plus Project
- Opening Year 2024 Cumulative
- Opening Year 2024 Cumulative Plus Project

Study Locations

The study locations were established in consultation with City staff through the Scoping Agreement process (Traffic Scoping/Study Application of the City of Menifee *LOS Traffic Study Guidelines*). A copy of the approved Scope of Study Form is provided in **Appendix A**.

Study Intersections:

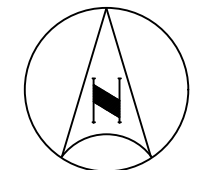
1. Goetz Road at Case Road
2. Murrieta Road at Case Road
3. Goetz Road at Mapes Road
4. I-215 SB Ramps/SR-74 at Bonnie Drive
5. I-215 NB Ramps at SR-74
6. Sherman Road at SR-74
7. Goetz Road at Fieldstone Drive
8. Goetz Road at Ethanac Road
9. Wheat Street at Ethanac Road
10. Byers Road at Ethanac Road
11. Murrieta Road at Ethanac Road
12. Evans Road at Ethanac Road
13. Barnet Road/Case Road at Ethanac Road
14. I-215 SB Ramps at Ethanac Road
15. I-215 NB Ramps at Ethanac Road
16. Trumble Road at Ethanac Road
17. Sherman Road at Ethanac Road
18. Byers Road at McLaughlin Road
19. Murrieta Road at McLaughlin Road
20. Murrieta Road at Rouse Road
21. Murrieta Road at Chambers Avenue
22. Murrieta Road at McCall Boulevard
23. Sun City Boulevard at McCall Boulevard
24. Bradley Road at McCall Boulevard

25. I-215 SB Ramps at McCall Boulevard
26. I-215 NB Ramps at McCall Boulevard
27. Encanto Drive at McCall Boulevard
28. Sherman Road at McCall Boulevard

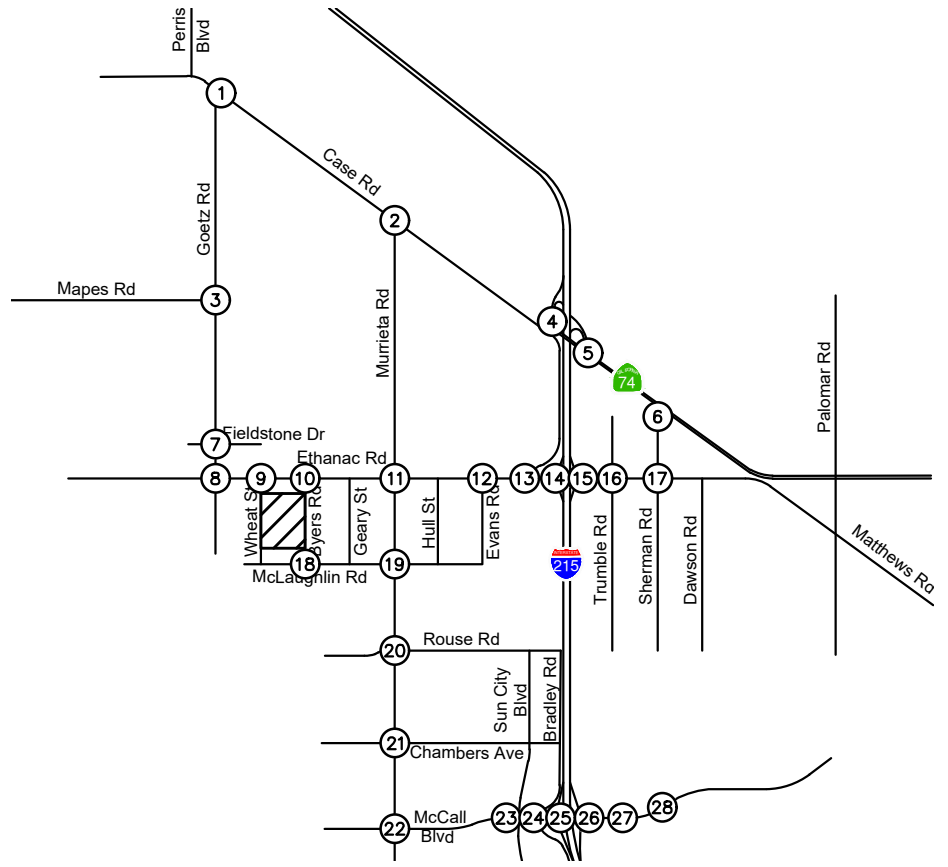
Study Roadway Segments:

1. Case Road: Goetz Road to Murrieta Road
2. Case Road: Murrieta Road to Mapes Road
3. Goetz Road: Case Road to Mapes Road
4. Goetz Road: Mapes Road to Ethanac Road
5. Murrieta Road: Case Road to Ethanac Road
6. Murrieta Road: Ethanac Road to Rouse Road
7. Murrieta Road: Chambers Avenue to McCall Boulevard
8. Ethanac Road: Goetz Road to Wheat Street
9. Ethanac Road: Wheat Street to Murrieta Road
10. Ethanac Road: Murrieta Road to Evans Road
11. Ethanac Road: Case Road to I-215 SB Ramps
12. Ethanac Road: I-215 SB Ramps to I-215 NB Ramps
13. Ethanac Road: I-215 NB Ramps to Trumble Road
14. McLaughlin Road: Byers Road to Murrieta Road
15. Byers Road: Ethanac Road to McLaughlin Road
16. Wheat Street: Ethanac Road to McLaughlin Road
17. McCall Boulevard: Murrieta Road to Sun City Boulevard
18. McCall Boulevard: Bradley Road to I-215 SB Ramps
19. McCall Boulevard: I-215 SB Ramps to I-215 NB Ramps
20. McCall Boulevard: I-215 NB Ramps to Encanto Drive

Existing lane configurations and traffic control at the study intersections are shown on **Figures 3A & 3B**.



NOT TO SCALE



1. Goetz Rd at Case Rd	2. Murrieta Rd at Case Rd	3. Goetz Rd at Mapes Rd	4. I-215 SB Ramps/ SR-74 at Bonnie Dr	5. I-215 NB Ramps at SR-74	6. SR-74 at Sherman Rd	7. Goetz Rd at Fieldstone Dr	8. Goetz Rd at Ethanac Rd
9. Wheat St at Ethanac Rd	10. Byers Rd at Ethanac Rd	11. Murrieta Rd at Ethanac Rd	12. Evans Rd at Ethanac Rd	13. Barnett Rd/Case Rd at Ethanac Rd	14. I-215 SB Ramps at Ethanac Rd		

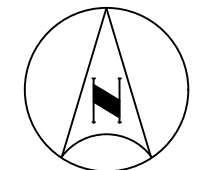
LEGEND:

- = Study Intersection
- = Turn or Through Lane
- = Signal
- = Stop Sign
- = All Way Stop
- F = Free Right Turn

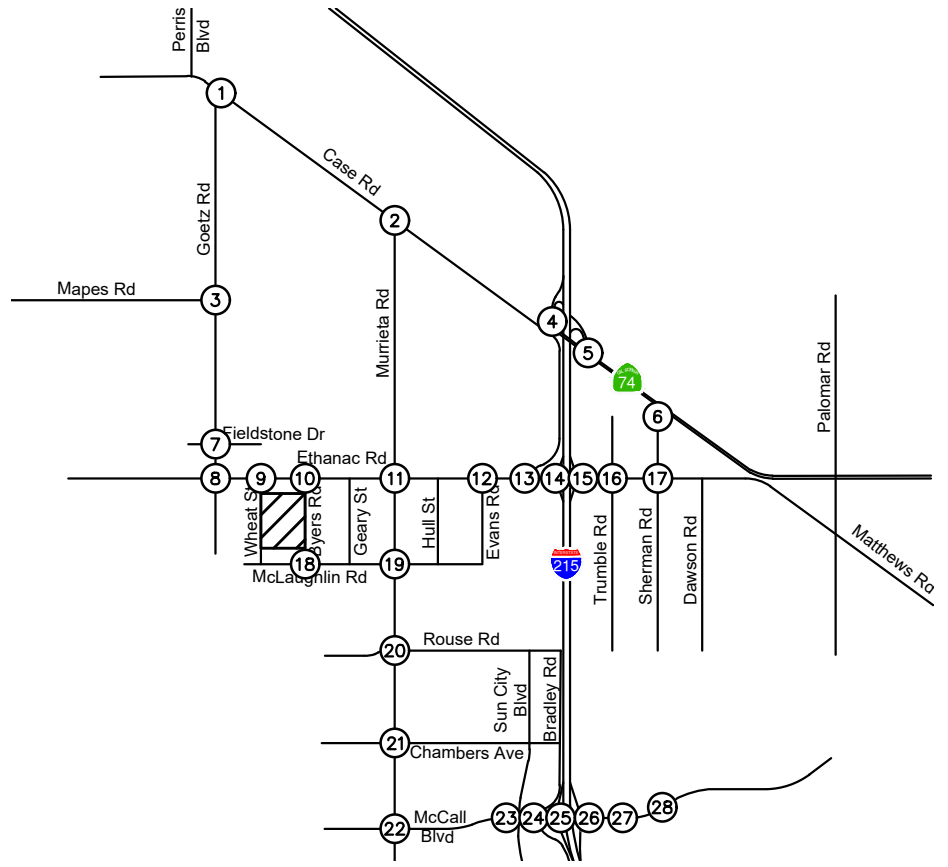
FIGURE 3A
EXISTING LANE CONFIGURATION AND TRAFFIC CONTROL



- 9 -



NOT TO SCALE



15. I-215 NB Ramps at Ethanac Rd	16. Trumble Rd at Ethanac Rd	17. Sherman Rd at Ethanac Rd	18. Byers Rd at McLaughlin Rd	19. Murrieta Rd at McLaughlin Rd	20. Murrieta Rd at Rouse Rd	21. Murrieta Rd at Chambers Ave	22. Murrieta Rd at McCall Blvd
			Future Intersection				
23. Sun City Blvd at McCall Blvd	24. Bradley Rd at McCall Blvd	25. I-215 SB Ramps at McCall Blvd	26. I-215 NB Ramps at McCall Blvd	27. Encanto Dr at McCall Blvd	28. Sherman Rd at McCall Blvd		

LEGEND:

- = Study Intersection
- = Turn or Through Lane
- = Signal
- = Stop Sign
- = All Way Stop
- = Free Right Turn

FIGURE 3B
EXISTING LANE CONFIGURATION AND TRAFFIC CONTROL

- 7 -

Intersection Analysis – HCM Methodology

Peak hour intersection operations were evaluated using the methodology outlined in the Transportation Resource Board (TRB) Highway Capacity Manual (HCM 6th Edition), consistent with the requirements of the City of Menifee. The intersection analysis was conducted using the Vistro software program and using the input parameters specified in the City of Menifee *LOS Traffic Study Guidelines*.

Per the HCM Methodology, Level of Service (LOS) for signalized intersections is defined in terms of average vehicle delay. Specifically, LOS criteria are stated in terms of the average control delay per vehicle during the peak hours. The average control delay includes initial deceleration delay, queue move-up time, and final acceleration time in addition to the stop delay.

The procedure for unsignalized intersection analysis determines the average total delay, expressed in seconds of delay per vehicle, for left turns from the major street and from the stop-controlled minor street traffic stream. Delay values are calculated based on the relationship between traffic on the major street and the availability of acceptable “gaps” in this stream through which conflicting traffic movements can be made.

The charts on the following page provide a description of the operating characteristics of each Level of Service and average seconds of delay for signalized and unsignalized intersections.

LEVEL OF SERVICE DEFINITIONS	
Level of Service	Description
A	No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized, and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted but not objectionably so.
D	This level encompasses a zone of increasing restriction, approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED AND UNSIGNALIZED INTERSECTIONS		
Level of Service	Signalized Intersection (Average delay per vehicle, in seconds) ¹	Unsignalized Intersections (Average delay per vehicle, in seconds) ²
A	≤ 10	0 - 10
B	> 10 - 20	> 10 - 15
C	> 20 - 35	> 15 - 25
D	> 35 - 55	> 25 - 35
E	> 55 - 80	> 35 - 50
F	> 80	> 50

¹ Source: Highway Capacity Manual (HCM 6th Edition), Exhibit 18-4.

² Source: Highway Capacity Manual (HCM 6th Edition), Exhibits 19-1 and 20-2.

Roadway Analysis – HCM Methodology

Roadway Level of Service analysis was conducted based on the City of Menifee roadway capacity thresholds presented in the following chart.

CITY OF MENIFEE ROADWAY CAPACITY				
Roadway Classification	No. of Lanes	Maximum Two-Way Traffic Volume (ADT)		
		Service Level C	Service Level D	Service Level E
Collector	2	10,400	11,700	13,000
Secondary	4	20,700	23,300	25,900
Major	4	27,300	30,700	34,100
Arterial	4	29,600	33,400	37,000
Mountain Arterial	2	12,900	14,500	16,100
Mountain Arterial	4	25,500	28,700	31,900
Urban Arterial	6	45,000	50,600	56,300
Urban Arterial	8	69,000	78,000	87,000
Expressway	4	53,000	58,000	64,000
Expressway	6	79,000	87,000	95,000
Expressway	8	106,000	119,000	132,000
Freeway	4	80,000	91,000	100,000
Freeway	6	102,000	123,000	132,000
Freeway	8	136,000	164,000	176,000
Freeway	10	169,000	205,000	220,000
Ramp ⁽¹⁾	1	16,000	18,000	20,000

Notes:
 (1) Ramp Capacity is given as a one-way traffic volume.

Source: City of Menifee Engineering Department, LOS Traffic Study Guidelines, October 2020

Consistent with the City of Menifee roadway capacity thresholds, the roadway LOS was determined based on the Highway Capacity Manual (HCM) methodology. Per the HCM methodology, Level of Service (LOS) for roadway segments is defined in terms of Volume-to-Capacity Ratios. The roadway analysis calculation returns a volume-to-capacity (V/C) ratio that translates into a corresponding Level of Service (LOS) measure, ranging from LOS A, representing uncongested, free flowing conditions, to LOS F, representing severely congested, over-capacity conditions. A summary description of each Level of Service and the corresponding V/C ratio is provided in the chart on the following page.

Roadway Level of Service Thresholds	
Level of Service	Volume-to-Capacity Ratios
A	0.00 - 0.60
B	0.61 - 0.70
C	0.71 - 0.80
D	0.81 - 0.90
E	0.91 - 1.00
F	> 1.00

Level of Service Standards and Measure of Significance

The City of Menifee *LOS Traffic Study Guidelines* (October 2020) establishes minimum Level of Service standards, which has identified LOS D as the threshold for acceptable operating conditions for intersections, except at constrained locations in close proximity to I-215, where LOS E is accepted during peak hours.

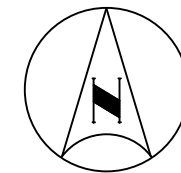
Study intersections and roadway segments are considered to have a project-related effect when any of the following occurs between the “without project” and the “plus project” conditions:

- 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 an unacceptable LOS (LOS E or LOS F)
- 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. This type of effect would be considered a cumulative effect in which the project would be required to contribute a fair share payment toward reducing the effect.

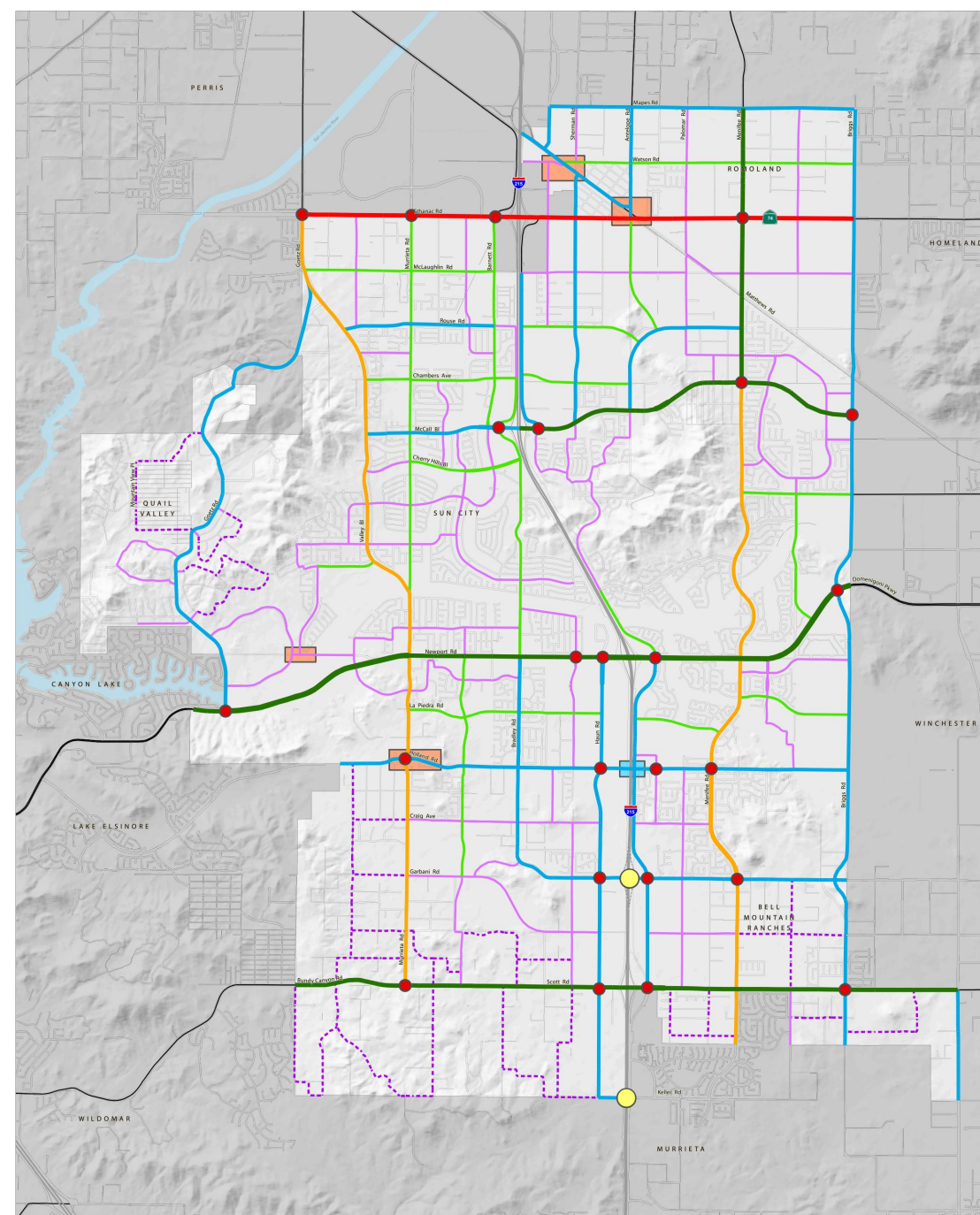
Per the City of Menifee *LOS Traffic Study Guidelines* (October 2020), project-related effects shall be clearly identified as direct or cumulative in the traffic study report. Only feasible improvements shall be recommended in the traffic study report. Analysis of the recommended improvements shall be provided to demonstrate the proposed improvement will reduce the project effect to meet LOS standards.

General Plan Circulation Map

The Cities of Menifee and Perris provide roadway designations for the roadway system serving the project site and the surrounding vicinity. A copy of the City of Menifee and City of Perris Roadway Network is provided on **Figures 4** and **5**, respectively.



NOT TO SCALE



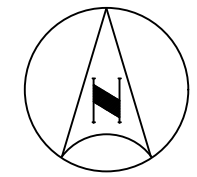
- Expressway (6 to 8 Lanes, Divided)
- Urban Arterial (6 Lanes, Divided)
- Arterial (4 Lanes, Divided)
- Major (4 Lanes, Divided)
- Mountain Arterial (4 Lanes, Undivided)
- Secondary (4 Lanes, Undivided)
- Collector / Interconnected Local (2 Lanes)
- - - Rural Collector / Interconnected Local (2 Lanes)
- Future Freeway Interchange
- Connectivity Analysis Zone - Roadway alignments, intersection geometrics and traffic control features subject to additional assessment
- Future Freeway Overcrossing
- Enhanced Intersection - Additional lanes / Right-of-Way required within 600 feet of the intersection



1/6/2014 0 0.5 1 Mile
Roadway_Network_020413

FIGURE 4
CITY OF MENIFEE - ROADWAY NETWORK





NOT TO SCALE

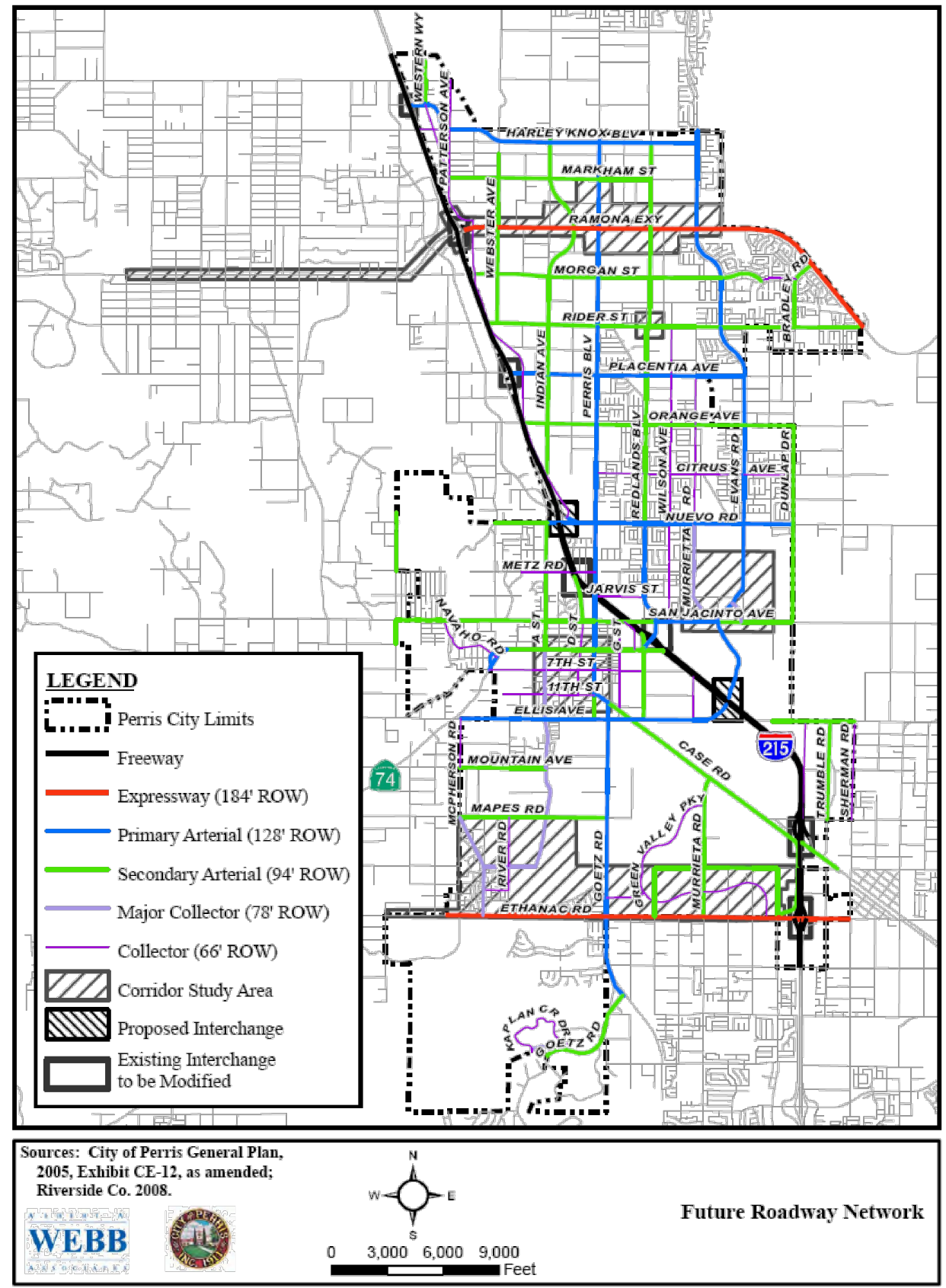


FIGURE 5
CITY OF PERRIS - ROADWAY NETWORK

EXISTING TRAFFIC CONDITIONS

Existing Street System

Regional access to the site is provided primarily by the Interstate 215 (I-215) Freeway, located approximately one half-mile east of the project site. In addition, State Route 74 (SR-74) is located approximately one mile north of the site. The following provides a description of the roadways surrounding the project site.

Case Road is an east-west undivided roadway with one lane in each direction. The posted speed limit is 55 miles per hour (mph), and on-street parking is prohibited on both sides. In the City of Perris General Plan, Case Road is designated as a Secondary Arterial.

Goetz Road is a north-south divided roadway with two lanes in each direction. The posted speed limit is 50 mph, and on-street parking is prohibited on both sides. In the City of Perris General Plan, Goetz Road is designated as a Primary Arterial. In the City of Menifee General Plan, Goetz Road is designated as an Arterial.

Murrieta Road is a north-south undivided roadway with one lane in each direction. The posted speed limit is 45 mph. In the City of Perris General Plan, Murrieta Road is designated as a Secondary Arterial. In the City of Menifee General Plan, Murrieta Road is designated as a Secondary roadway.

Ethanac Road is an east-west divided roadway with two lanes in each direction. The posted speed limit is 50 mph, and on-street parking is prohibited on both sides. In both Cities of Perris and Menifee General Plans, Ethanac Road is designated as an Expressway.

McLaughlin Road is an east-west undivided roadway with one lane in each direction. On-street parking is permitted on south side of the road. In the City of Menifee General Plan, McLaughlin Road is designated as a Secondary Arterial and the speed limit is 45 mph.

McCall Blvd is an east-west divided roadway that provides two lanes in each direction within the project vicinity. The posted speed limit is 35 mph, and on-street parking is permitted on both sides. McCall Blvd is designated as a Major roadway west of the I-215 freeway and an Urban Arterial east of the I-215 freeway in the City of Menifee General Plan.

Byers Road is a north-south unpaved roadway with one lane in each direction. In the City of Menifee General Plan, Byers Road is designated as a Collector. Byers Road would provide direct access to the project site.

Wheat Street is a north-south unpaved roadway with one lane in each direction. Wheat Street would provide direct access to the project site.

Existing Transit Service

Transit service to the City of Menifee is provided by Riverside Transit Agency (RTA), which serves the City of Riverside and surrounding cities. Currently there is no bus stop located near the project area. The closest RTA bus stop to the project site is located on north side of the Case Road and Ethanac Road intersection. Descriptions of the bus route serving the project are provided below.

RTA Route 61 operates in the City of Menifee, traveling along Murrieta Road and McCall Boulevard in the project vicinity. Route 61 operates on weekdays from approximately 4:40 AM to 8:15 PM with approximately 1-hour headways and weekends from approximately 6:50 AM to 7:30 PM with 1-hour headways.

RTA Route 74 operates in the City of Menifee, traveling along Ethanac Road and Murrieta Road in the project vicinity. Route 74 operates on weekdays from approximately 5:30 AM to 8:00 PM with approximately 1-hour headways, Weekends from approximately 6:00 AM to 8:00 PM with 1-hour headways.

Existing Traffic Volumes

Existing morning peak period (7:00 to 9:00 AM) and evening peak period (4:00 to 6:00 PM) turning movement and daily roadway traffic counts were collected for all study intersections and study roadway segments. The counts were completed in October 2021 and January 2022. Passenger car equivalent (PCE) factors, were then applied to the truck types, based on number of axles (1.5 PCE for 2-axle trucks, 2.0 PCE for 3-axle trucks, and 3.0 PCE for 4+-axle trucks) to determine the total existing PCE volumes. Existing morning and evening peak hour volumes are presented on **Figures 6A & 6B**. Peak hour intersection traffic count worksheets and daily roadway volume worksheets are provided in **Appendix B**.

Peak Hour Operation Conditions

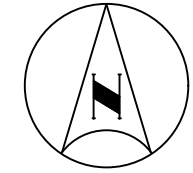
Intersection Level of Service analysis was conducted for the morning and evening peak hours using the analysis procedures and assumptions described previously in this report. The results of the intersection analysis for Existing Conditions are shown on **Table 1**. Copies of Existing Conditions intersection analysis worksheets are provided in **Appendix C**. Review of this table indicates that the following study intersection currently operates at an unacceptable LOS:

- #17 - Sherman Road at Ethanac Road: AM & PM - LOS E

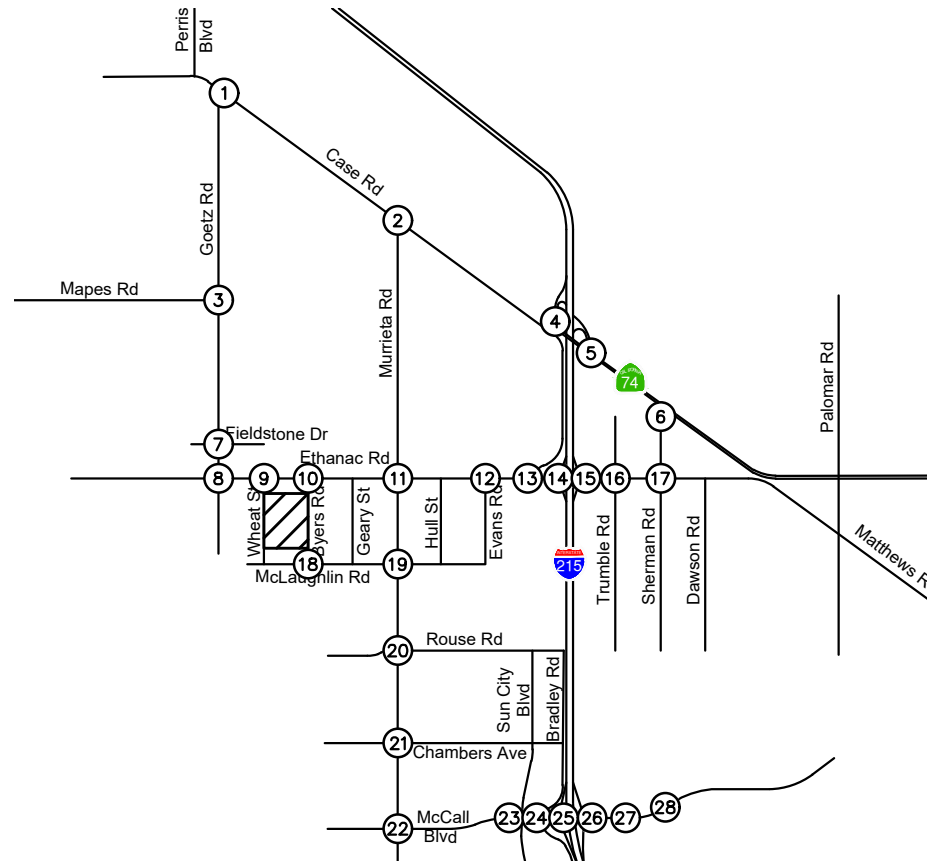
Daily Roadway Operating Conditions

Roadway Level of Service analysis was conducted based on the City of Menifee roadway capacity thresholds presented previously in this report. The results of the roadway analysis for Existing Conditions are shown on **Table 2**. Review of this table indicates that the following study roadway segment operates at an unacceptable Level of Service:

- Ethanac Road: I-215 NB Ramps to Trumble Road - LOS F



NOT TO SCALE



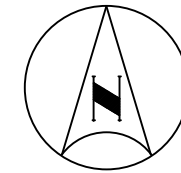
1. Goetz Rd at Case Rd	2. Murrieta Rd at Case Rd	3. Goetz Rd at Mapes Rd	4. I-215 SB Ramps/ SR-74 at Bonnie Dr	5. I-215 NB Ramps at SR-74	6. SR-74 at Sherman Rd	7. Goetz Rd at Fieldstone Dr	8. Goetz Rd at Ethanac Rd
<p>← 136/260 ← 188/206</p> <p>153/199 → 115/189 →</p> <p>233/132 → 251/156 →</p>	<p>← 140/232 ← 13/14</p> <p>177/269 → 35/104 →</p> <p>123/104 → 18/10 →</p>	<p>↖ 165/63 ↖ 141/323 ↖ 3/3</p> <p>↗ 1/0</p> <p>146/64 → 187/317 →</p> <p>268/210 → 278/161 → 14/0 →</p>	<p>↖ 18/44 ↖ 486/706</p> <p>29/38 → 136/264 →</p> <p>184/194 → 385/320 →</p>	<p>↖ 11/21 ↖ 131/207</p> <p>↖ 676/602 ↖ 531/503</p> <p>8/14 → 629/955 →</p>	<p>↖ 1/2 ↖ 4/2 ↖ 0/2</p> <p>↖ 1/2 ↖ 860/688 ↖ 239/183</p> <p>5/19 → 623/936 → 15/36 →</p> <p>46/76 → 1/0 → 250/243 →</p>	<p>↖ 17/64 ↖ 276/552 ↖ 12/16</p> <p>↖ 15/13 ↖ 0/3 ↖ 3/0</p> <p>68/35 → 4/1 → 60/25 →</p> <p>18/31 → 516/319 → 7/2 →</p>	<p>↖ 8/30 ↖ 110/245 ↖ 224/254</p> <p>↖ 271/239 ↖ 70/67 ↖ 167/275</p> <p>16/17 → 88/63 → 6/5 →</p> <p>2/7 → 229/134 → 371/227 →</p>
9. Wheat St at Ethanac Rd	10. Byers Rd at Ethanac Rd	11. Murrieta Rd at Ethanac Rd	12. Evans Rd at Ethanac Rd	13. Barnett Rd/Case Rd at Ethanac Rd	14. I-215 SB Ramps at Ethanac Rd		
<p>← 510/590</p> <p>689/542 →</p>	<p>← 512/598 ← 6/4</p> <p>692/538 → 2/1 →</p> <p>0/5 → 6/2 →</p>	<p>↖ 9/13 ↖ 34/75 ↖ 67/45</p> <p>↖ 48/42 ↖ 357/484 ↖ 78/212</p> <p>6/6 → 665/402 → 51/108 →</p> <p>97/106 → 90/76 → 162/143 →</p>	<p>← 549/754 ← 0/4</p> <p>854/602 → 1/3 →</p> <p>2/2 →</p>	<p>↖ 60/141 ↖ 324/425</p> <p>↖ 350/394 ↖ 475/493 ↖ 70/51</p> <p>151/169 → 608/442 → 24/18 →</p> <p>29/26 → 6/9 → 85/48 →</p>	<p>↖ 245/361 ↖ 124/193</p> <p>↖ 703/716 ↖ 105/125</p> <p>722/602 → 499/384 →</p>		

Note: Volumes reflect PCE adjustments.
See PCE Worksheets in Appendix C.

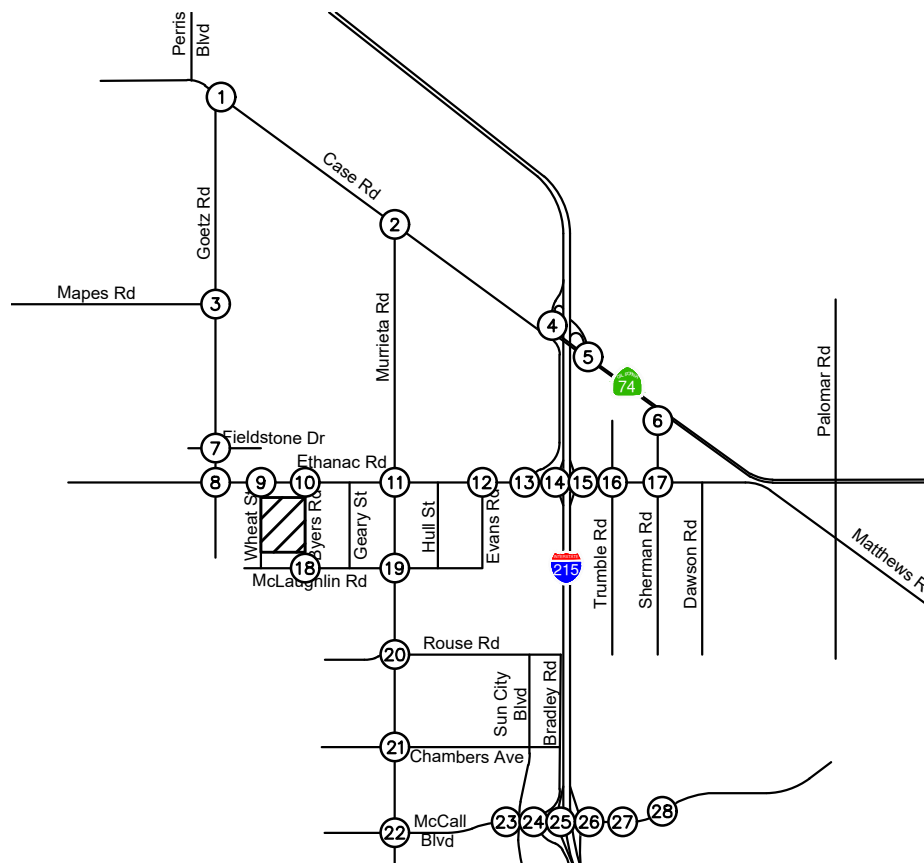
LEGEND:

- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 6A
EXISTING TRAFFIC VOLUMES



NOT TO SCALE



15. I-215 NB Ramps at Ethanac Rd	16. Trumble Rd at Ethanac Rd	17. Sherman Rd at Ethanac Rd	18. Byers Rd at McLaughlin Rd	19. Murrieta Rd at McLaughlin Rd	20. Murrieta Rd at Rouse Rd	21. Murrieta Rd at Chambers Ave	22. Murrieta Rd at McCall Blvd
<p>↖ 143/195 ↗ 456/413</p> <p>270/246 ↗ 580/570 →</p> <p>↖ 351/426 ↘ 0/2 ↗ 135/198</p>	<p>↖ 109/141 ↘ 9/15 ↗ 8/30</p> <p>↖ 11/4 ↘ 341/361 ↗ 61/44</p> <p>87/73 ↗ 558/588 → 34/33 ↘</p> <p>↖ 99/84 ↘ 9/5 ↗ 34/37</p>	<p>↖ 196/191 ↘ 7/2 ↗ 5/4</p> <p>↖ 8/3 ↘ 246/95 ↗ 0/2</p> <p>229/271 ↗ 222/173 → 14/15 ↘</p> <p>↖ 4/19 ↘ 3/5 ↗ 2/2</p>	Future Intersection	<p>↖ 2/7 ↘ 147/368 ↗ 12/25</p> <p>↖ 31/23 ↘ 0/7</p> <p>6/6 ↗ 3/3 →</p> <p>↖ 1/2 ↘ 298/297 ↗ 2/3</p>	<p>↖ 4/26 ↘ 120/297 ↗ 28/65</p> <p>↖ 40/61 ↘ 3/10 ↗ 10/4</p> <p>14/9 ↗ 18/8 → 6/2 ↘</p> <p>↖ 3/4 ↘ 234/227 ↗ 7/12</p>	<p>↖ 8/38 ↘ 188/222 ↗ 36/44</p> <p>↖ 15/57 ↘ 10/31 ↗ 7/6</p> <p>28/11 ↗ 44/24 → 51/24 ↘</p> <p>↖ 36/50 ↘ 211/256 ↗ 2/9</p>	<p>↖ 92/48 ↘ 90/115 ↗ 50/80</p> <p>↖ 76/125 ↘ 113/153 ↗ 25/77</p> <p>79/38 ↗ 191/121 → 1/1 ↘</p> <p>↖ 0/3 ↘ 149/184 ↗ 111/130</p>
23. Sun City Blvd at McCall Blvd	24. Bradley Rd at McCall Blvd	25. I-215 SB Ramps at McCall Blvd	26. I-215 NB Ramps at McCall Blvd	27. Encanto Dr at McCall Blvd	28. Sherman Rd at McCall Blvd		
<p>↖ 8/10 ↘ 45/77 ↗ 54/65</p> <p>↖ 42/228 ↘ 306/416 ↗ 136/67</p> <p>25/25 ↗ 371/324 → 32/59 ↘</p> <p>↖ 31/80 ↘ 53/121 ↗ 58/148</p>	<p>↖ 4/3 ↘ 51/89 ↗ 141/115</p> <p>↖ 94/120 ↘ 464/667 ↗ 480/568</p> <p>17/26 ↗ 466/509 → 48/67 ↘</p> <p>↖ 41/57 ↘ 44/84 ↗ 337/516</p>	<p>↖ 477/462 ↘ 3/3 ↗ 363/358</p> <p>↖ 813/794 ↘ 287/285</p> <p>844/845 → 318/315 ↘</p>	<p>↖ 495/244 ↘ 957/740</p> <p>234/283 ↗ 603/897 →</p> <p>↖ 201/383 ↘ 0/4 ↗ 256/480</p>	<p>↖ 121/140 ↘ 18/17 ↗ 30/30</p> <p>↖ 31/22 ↘ 1129/671 ↗ 72/32</p> <p>113/184 ↗ 653/982 → 76/261 ↘</p> <p>↖ 196/172 ↘ 28/19 ↗ 80/40</p>	<p>↖ 81/18 ↘ 10/3 ↗ 53/32</p> <p>↖ 54/13 ↘ 1024/622 ↗ 22/14</p> <p>112/12 ↗ 563/907 → 19/23 ↘</p> <p>↖ 26/26 ↘ 6/1 ↗ 26/8</p>		

Note: Volumes reflect PCE adjustments.
See PCE Worksheets in Appendix C.

LEGEND:

- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 6B
EXISTING TRAFFIC VOLUMES

**TABLE 1
SUMMARY OF INTERSECTION OPERATION
EXISTING CONDITIONS**

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Goetz Rd at Case Rd	S	38.1	D	29.8	C
2	Murrieta Rd at Case Rd	U	9.4	A	10.8	B
3	Goetz Rd at Mapes Rd	S	35.2	D	37.6	D
4	I-215 SB Ramps/SR-74 at Bonnie Dr	S	15.5	B	16.8	B
5	I-215 NB Ramps at SR-74	S	10.4	B	13.5	B
6	SR-74 at Sherman Rd	S	27.0	C	26.8	C
7	Goetz Rd at Fieldstone Dr	S	15.7	B	11.4	B
8	Goetz Rd at Ethanac Rd	S	42.9	D	43.5	D
9	Wheat St at Ethanac Rd	U	Future Intersection			
10	Byers Rd at Ethanac Rd	U	10.6	B	17.7	C
11	Murrieta Rd at Ethanac Rd	S	32.3	C	35.9	D
12	Evans Rd at Ethanac Rd	U	11.5	B	10.2	B
13	Barnett Rd/Case Rd at Ethanac Rd	S	31.3	C	33.2	C
14	I-215 SB Ramps at Ethanac Rd	S	20.4	C	26.1	C
15	I-215 NB Ramps at Ethanac Rd	S	32.5	C	36.9	D
16	Trumble Rd at Ethanac Rd	S	28.2	C	28.4	C
17	Sherman Rd at Ethanac Rd	U	49.4	E	38.7	E
18	Byers Rd at McLaughlin Rd	U	Future Intersection			
19	Murrieta Rd at McLaughlin Rd	U	12.9	B	18.4	C
20	Murrieta Rd at Rouse Rd	U	13.3	B	18.3	C
21	Murrieta Rd at Chambers Ave	U	10.1	B	10.6	B
22	Murrieta Rd at McCall Blvd	S	35.9	D	37.0	D
23	Sun City Blvd at McCall Blvd	S	26.5	C	27.6	C
24	Bradley Rd at McCall Blvd	S	31.3	C	31.6	C
25	I-215 SB Ramps at McCall Blvd	S	32.6	C	33.2	C
26	I-215 NB Ramps at McCall Blvd	S	26.7	C	31.9	C
27	Encanto Dr at McCall Blvd	S	25.7	C	24.4	C
28	Sherman Rd at McCall Blvd	S	18.6	B	8.9	A

Notes:

- **Bold and Shaded** values indicate intersections operating at an unacceptable Level of Service
- Delay values for signalized intersections represent the sum of average vehicle delay on all intersection approaches.
- Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.

S = Signalized
U = Unsignalized

TABLE 2
SUMMARY OF ROADWAY SEGMENT ANALYSIS
EXISTING CONDITIONS

Roadway	Segment	Existing Configuration	Existing ADT	LOS E Capacity ¹	V/C	LOS
Case Road	Goetz Road to Murrieta Road	2-Lane Arterial	7,642	13,000	0.588	A
	Murrieta Road to Mapes Road	2-Lane Arterial	5,815	13,000	0.447	A
Goetz Road	Case Road to Mapes Road	4-Lane Arterial	7,669	37,000	0.207	A
	Mapes Road to Ethanac Road	2-Lane Arterial	11,487	13,000	0.884	D
Murrieta Road	Case Road to Ethanac Road	2-Lane Secondary	2,521	13,000	0.194	A
	Ethanac Road to Rouse Road	2-Lane Secondary	7,947	13,000	0.611	B
	Chambers Avenue to McCall Blvd	4-Lane Secondary	7,587	25,900	0.293	A
Ethanac Road	Goetz Road to Wheat Street	4-Lane Arterial	14,349	37,000	0.388	A
	Wheat Street to Murrieta Road	4-Lane Arterial	14,391	37,000	0.389	A
	Murrieta Road to Evans Road	4-Lane Arterial	17,715	37,000	0.479	A
	Case Road to I-215 SB Ramps	4-Lane Arterial	25,161	37,000	0.680	B
	I-215 SB Ramps to I-215 NB Ramps	3-Lane Arterial	18,907	27,750	0.681	B
	I-215 NB Ramps to Trumble Road	2-Lane Arterial	14,139	13,000	1.088	F
McLaughlin Road	Byers Road to Murrieta Road	2-Lane Secondary	0	13,000	0.000	A
Byers Road	Ethanac Road to McLaughlin Road	2-Lane Collector	0	13,000	0.000	A
Wheat Street	Ethanac Road to McLaughlin Road	2-Lane Collector	0	13,000	0.000	A
McCall Blvd	Murrieta Road to Sun City Blvd	4-Lane Major	8,375	34,100	0.246	A
	Bradley Road to I-215 SB Ramps	4-Lane Major	28,352	34,100	0.831	D
	I-215 SB Ramps to I-215 NB Ramps	4-Lane Major	27,453	34,100	0.805	D
	I-215 NB Ramps to Encanto Drive	4-Lane Arterial	27,638	37,000	0.747	C

Notes: ¹ Source: City of Menifee Engineering Department, LOS Traffic Study Guidelines, October 2020
LOS = Level of Service
ADT = Average Daily Traffic
V / C = Volume to Capacity

PROJECT TRAFFIC

Direct vehicular access provisions for both passenger vehicles and trucks for the project site would consist of two full-movement driveways on Byers Road and two full-movement driveways on Wheat Street. On-site drive aisles would provide two-way circulation on site.

Project Trip Generation

Trip generation estimates for the project are based on daily and peak hourly trip generation rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition). For analysis purposes, the following ITE land use and trip rates were assumed for the proposed project:

- 700,037 SF of High-Cube Fulfillment Center Sort (ITE 155)

Passenger vehicle and truck mix assumptions were applied to the project land uses based on the ITE Trip Generation Manual (10th Edition, Supplement) and the City of Fontana Truck Trip Generation Study (2003). Passenger car equivalent (PCE) factors were then applied to the truck types, based on number of axles (1.5 PCE for 2-axle trucks, 2.0 PCE for 3-axle trucks, and 3.0 PCE for 4+-axle trucks) to determine the total PCE volumes to be generated by the project. The trip generation rates, PCE factors, and the resulting trip generation estimates for the project are summarized on **Table 3**. Based on Table 3, the total project is estimated to generate 4,716 daily PCE trips, with 639 PCE trips (517 inbound and 122 outbound) in the morning peak hour and 879 PCE trips (343 inbound and 536 outbound) in the evening peak hour.

Trip Distribution and Assignment

Project trip distribution assumptions for the project site were developed considering the proposed site use and routes to and from the freeway system. Trip distribution assumptions for the proposed project are shown on **Figure 7**. Trip distribution percentages at each study intersection were applied to the project trip generation to determine the project trips through each intersection. The resulting project-related peak hour trips are shown on **Figures 8A & 8B**. Project trip assignment volumes at the project driveways under Existing Plus Project and Opening Year 2024 Cumulative Plus Project conditions are provided in **Appendix F**.

**TABLE 3
SUMMARY OF PROJECT TRIP GENERATION
CADO WAREHOUSE PROJECT**

TRIP GENERATION RATES

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
High-Cube Fulfillment Center - Sort	155b	KSF	6.44	0.71	0.17	0.87	0.47	0.73	1.20

PROJECT TRIP GENERATION

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
High-Cube Fulfillment Center - Sort	700.037	KSF	4,508	494	116	610	328	512	840
Passenger Vehicles	97.00%		4,373	479	113	592	318	497	815
Trucks	3.00%		135	15	3	18	10	15	25

PROJECT TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

Vehicle Type	Vehicle Mix ^{1,2}	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	97.00%	4,373	1.0	4,373	479	113	592	318	497	815
2-Axle Trucks	0.51%	23	1.5	35	4	1	5	3	4	7
3-Axle Trucks	0.68%	31	2.0	62	7	2	9	4	7	11
4+ Axle Trucks	1.81%	82	3.0	246	27	6	33	18	28	46
Total Truck PCE Trips				343	38	9	47	25	39	64
Total Project PCE Trips				4,716	517	122	639	343	536	879

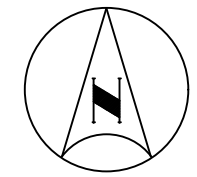
Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition

¹ Passenger Vehicle and Truck splits taken from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition Supplement.

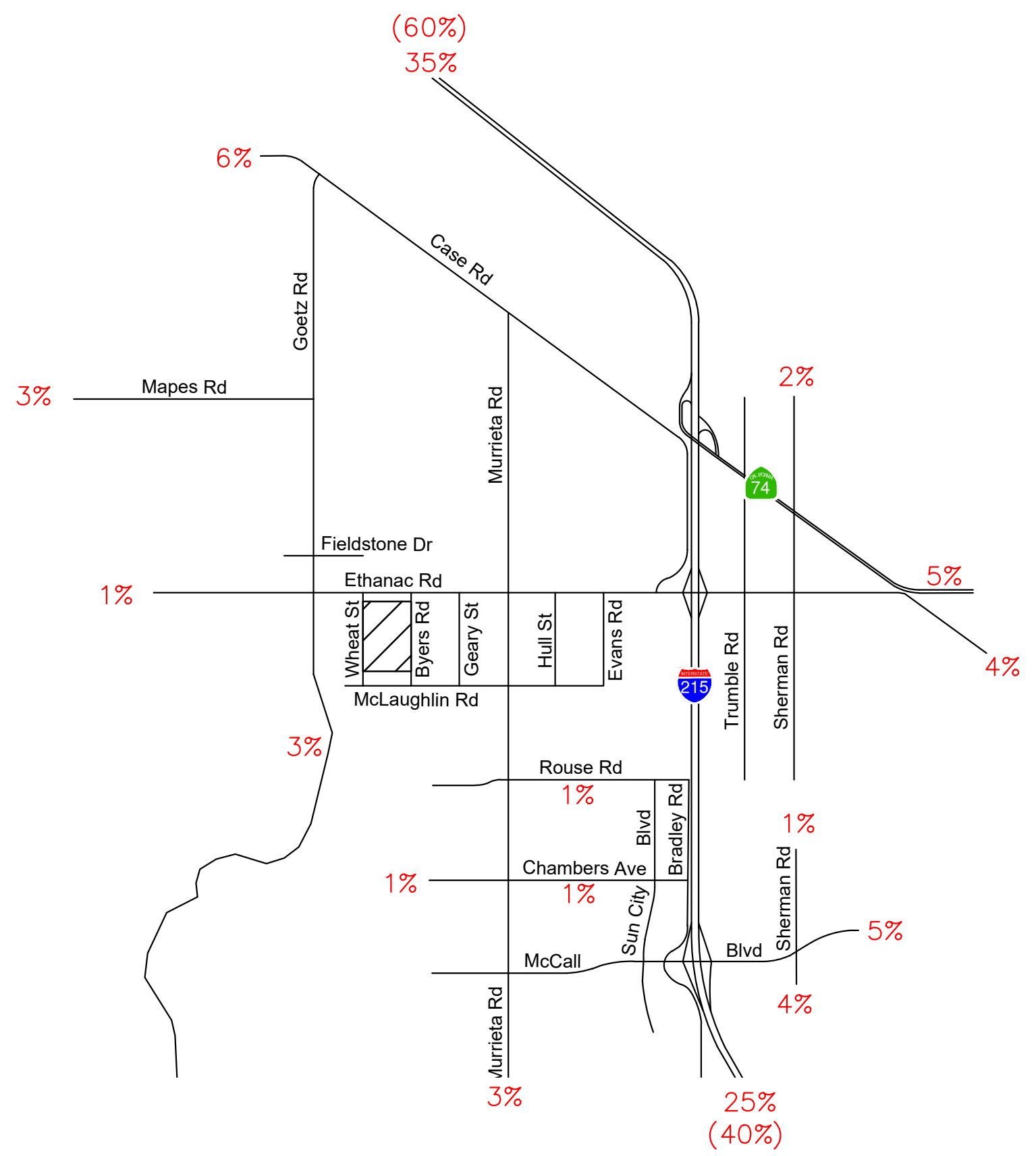
² Truck mix percentages were calculated based on a ratio between the ITE truck splits and the Truck Trip Generation Study - City of Fontana, August 2003

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet



NOT TO SCALE



LEGEND:


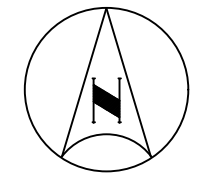
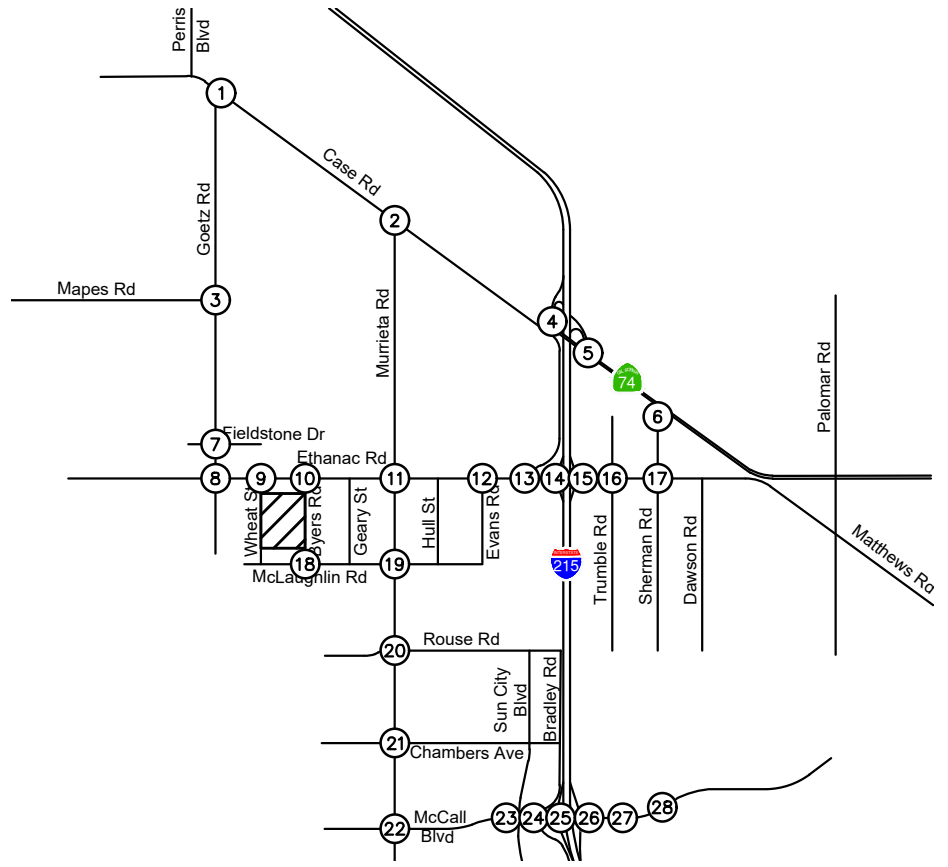
-  = Project Site
- XX% = Passenger Car Trip Distribution Percentage
- (XX%) = Truck Trip Distribution Percentage

FIGURE 7
PROJECT TRIP DISTRIBUTION



NOT TO SCALE



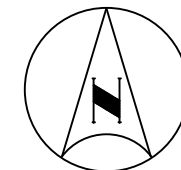
1. Goetz Rd at Case Rd	2. Murrieta Rd at Case Rd	3. Goetz Rd at Mapes Rd	4. I-215 SB Ramps/ SR-74 at Bonnie Dr	5. I-215 NB Ramps at SR-74	6. SR-74 at Sherman Rd	7. Goetz Rd at Fieldstone Dr	8. Goetz Rd at Ethanac Rd
	← 17/11	← 28/20	← 17/11	← 3/15	← 24/16	← 42/30	← 42/30 ← 9/45 ← 1/5 ← 3/15
28/20 → 6/30 →		14/10 → 3/15 → 6/30 →	24/16 →		3/15 → 10/6 →	9/45 →	5/3 → 14/10 →
9. Wheat St at Ethanac Rd	10. Byers Rd at Ethanac Rd	11. Murrieta Rd at Ethanac Rd	12. Evans Rd at Ethanac Rd	13. Barnett Rd/Case Rd at Ethanac Rd	14. I-215 SB Ramps at Ethanac Rd		
← 4/22 ← 234/155	← 234/155 ← 194/129	← 17/11 ← 385/255	← 385/255	← 385/255	← 385/255	← 198/131 ← 187/124	
6/4 → 55/39 → 9/44 → 76/327 →	76/327 → 6/4 → 4/22 → 31/135 →	96/409 → 11/54 → 27/18 →	96/409 →	96/409 →	60/251 → 36/158 →		

LEGEND:

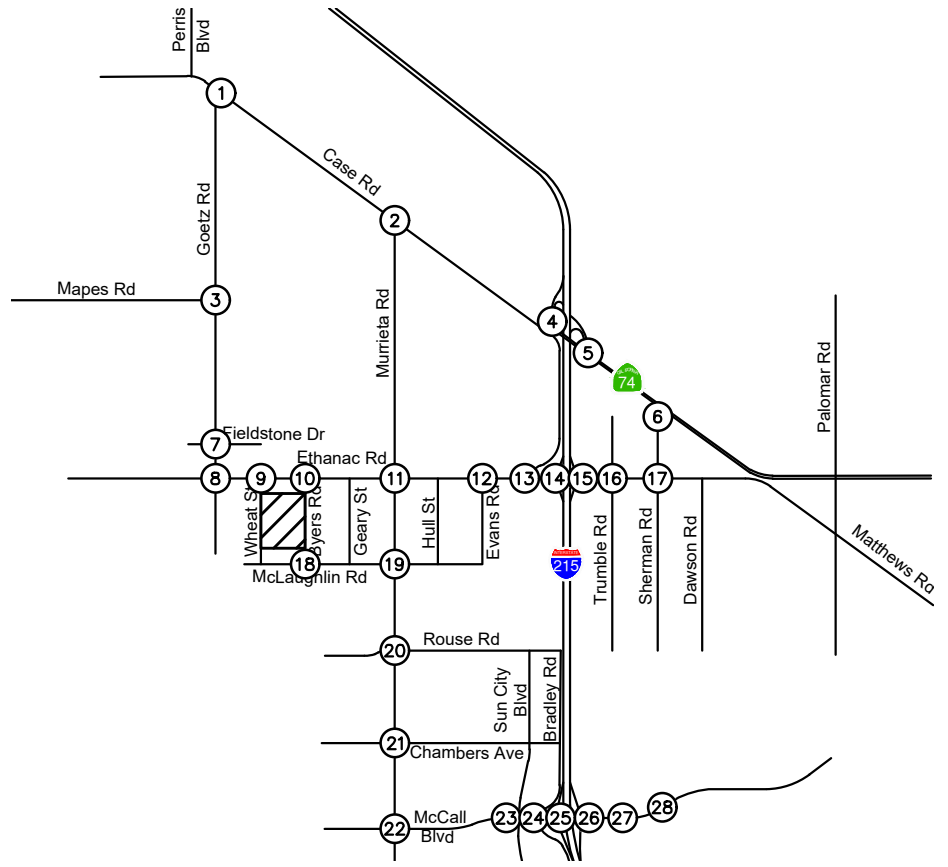
- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 8A
PROJECT-RELATED TRAFFIC VOLUMES





NOT TO SCALE



15. I-215 NB Ramps at Ethanac Rd	16. Trumble Rd at Ethanac Rd	17. Sherman Rd at Ethanac Rd	18. Byers Rd at McLaughlin Rd	19. Murrieta Rd at McLaughlin Rd	20. Murrieta Rd at Rouse Rd	21. Murrieta Rd at Chambers Ave	22. Murrieta Rd at McCall Blvd
← 29/19	← 29/19	↙ 10/6 ← 14/10	↙ 2/9 ↘ 28/18	↙ 11/54	↙ 12/57 ↘ 1/5 ↖ 5/3	↙ 1/5 ↘ 10/47 ↖ 1/5 ↖ 5/3	↙ 3/15 ↘ 7/32 ↖ 25/17
52/211 ↗ 8/40 → 158/105 ↘	8/40 →	2/10 ↗ 5/25 → 1/5 ↘ 5/3 ↘		2/9 ↘ 28/18 ↗ 27/18 →	49/33 →	39/27 →	14/10 →
23. Sun City Blvd at McCall Blvd	24. Bradley Rd at McCall Blvd	25. I-215 SB Ramps at McCall Blvd	26. I-215 NB Ramps at McCall Blvd	27. Encanto Dr at McCall Blvd	28. Sherman Rd at McCall Blvd		
← 25/17	← 25/17	↙ 7/30 ← 25/17	↖ 29/19 ← 19/13	← 29/19	↙ 5/3 ← 24/16		
7/32 →	7/32 →	4/20 → 3/12 ↘	11/50 → 6/4 ↘	6/30 → 5/20 ↘ 19/13 ↘	1/5 ↗ 5/25 →		

LEGEND:

- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 8B
PROJECT-RELATED TRAFFIC VOLUMES



EXISTING PLUS PROJECT

Project-related traffic was added to the existing traffic volumes, and the resulting traffic volumes at the study locations are shown on **Figures 9A & 9B**.

Peak Hour Operating Conditions

Intersection Level of Service analysis was conducted for the morning and evening peak hours for the Existing Plus Project conditions. The results of the intersection analysis are shown on **Table 4**. Intersection analysis worksheets are provided in **Appendix C**.

Review of this table indicates that, with the addition of project traffic, the following study intersections would operate at an unacceptable Level of Service:

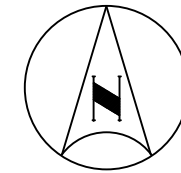
- #9 – Wheat Street at Ethanac Road: AM & PM - LOS F
- #10 - Byers Road at Ethanac Road: AM & PM - LOS F
- #15 - I-215 NB Ramps at Ethanac Road: PM – LOS F
- #17 - Sherman Road at Ethanac Road: AM – LOS F & PM – LOS E

The Level of Service for an unsignalized intersection is reported based on the single approach movement with the highest delay, which in this case, would be the northbound approach for intersections 9, 10 and 17. The side street traffic at these intersections experience delay during the peak hours while waiting for an acceptable gap in traffic on Ethanac Road. While the side street approaches operate at a deficient Level of Service based on the highest delay approach, the overall intersection delay would be acceptable. Any queuing that occurs on the side streets are contained on the minor intersection approaches and do not impact the progression of traffic on the main arterials.

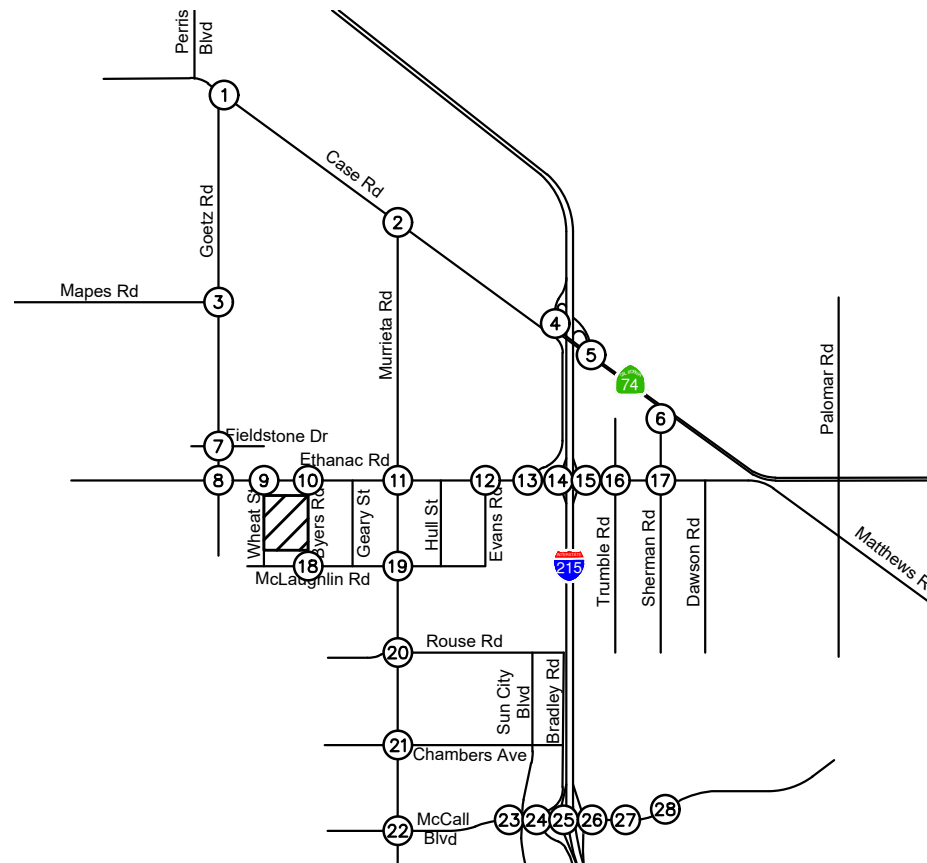
Daily Roadway Operating Conditions

Roadway Level of Service analysis was conducted based on the roadway capacities presented previously in this report. The results of the roadway analysis for Existing Plus Project conditions are shown on **Table 5**. Review of this table indicates that, with the addition of project traffic, the following study roadway segment operates at an unacceptable Level of Service on a daily basis:

- Goetz Road: Mapes Road to Ethanac Road - LOS E
- Ethanac Road: I-215 NB Ramps to Trumble Road - LOS F



NOT TO SCALE



1. Goetz Rd at Case Rd	2. Murrieta Rd at Case Rd	3. Goetz Rd at Mapes Rd	4. I-215 SB Ramps/ SR-74 at Bonnie Dr	5. I-215 NB Ramps at SR-74	6. SR-74 at Sherman Rd	7. Goetz Rd at Fieldstone Dr	8. Goetz Rd at Ethanac Rd
<p>← 136/260 ← 188/206</p> <p>153/199 → 143/209 ↘</p> <p>239/162 ↗ 251/156 ↗</p>	<p>← 140/232 ← 30/25</p> <p>177/269 → 35/104 ↘</p> <p>123/104 ↗ 18/10 ↗</p>	<p>↖ 165/63 ↖ 169/343 ↖ 3/3</p> <p>↗ 1/0</p> <p>146/64 ↗ 201/327 ↘</p> <p>271/225 ↗ 284/191 ↗ 14/0 ↗</p>	<p>↖ 35/55 ↖ 486/706</p> <p>29/38 ↗ 136/264 ↘</p> <p>184/194 ↗ 409/336 ↗</p>	<p>↖ 11/21 ↖ 134/222</p> <p>↗ 676/602 ↗ 555/519</p> <p>8/14 ↗ 629/955 ↘</p>	<p>↖ 1/2 ↖ 4/2 ↖ 0/2</p> <p>↗ 1/2 ↗ 884/704 ↗ 239/183</p> <p>5/19 ↗ 626/951 ↘ 25/42 ↘</p> <p>48/86 ↗ 1/0 ↗ 250/243 ↗</p>	<p>↖ 17/64 ↖ 318/582 ↖ 12/16</p> <p>↗ 15/13 ↗ 0/3 ↗ 3/0</p> <p>68/35 ↗ 4/1 ↗ 60/25 ↘</p> <p>18/31 ↗ 525/364 ↗ 7/2 ↗</p>	<p>↖ 8/30 ↖ 110/245 ↖ 266/284</p> <p>↗ 280/284 ↗ 71/72 ↗ 170/290</p> <p>16/17 ↗ 93/66 ↗ 6/5 ↘</p> <p>2/7 ↗ 229/134 ↗ 385/237 ↗</p>
9. Wheat St at Ethanac Rd	10. Byers Rd at Ethanac Rd	11. Murrieta Rd at Ethanac Rd	12. Evans Rd at Ethanac Rd	13. Barnett Rd/Case Rd at Ethanac Rd	14. I-215 SB Ramps at Ethanac Rd		
<p>← 514/612 ← 234/155</p> <p>695/546 → 55/39 ↘</p> <p>9/44 ↗ 76/327 ↗</p>	<p>← 746/753 ← 200/133</p> <p>768/865 → 8/5 ↘</p> <p>4/27 ↗ 37/137 ↗</p>	<p>↖ 26/24 ↖ 34/75 ↖ 67/45</p> <p>↗ 48/42 ↗ 742/739 ↗ 78/212</p> <p>6/6 ↗ 761/811 ↗ 62/162 ↘</p> <p>124/124 ↗ 90/76 ↗ 162/143 ↗</p>	<p>← 934/1009 ← 0/4</p> <p>950/1011 → 1/3 ↘</p> <p>2/2 ↗</p>	<p>↖ 60/141 ↖ 324/425</p> <p>↗ 350/394 ↗ 860/748 ↗ 70/51</p> <p>151/169 ↗ 704/851 ↗ 24/18 ↘</p> <p>29/26 ↗ 6/9 ↗ 85/48 ↗</p>	<p>↖ 443/492 ↖ 124/193</p> <p>↗ 890/840 ↗ 105/125</p> <p>782/853 → 535/542 ↘</p>		

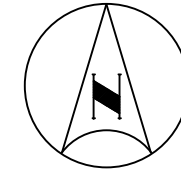
LEGEND:

= Project Site

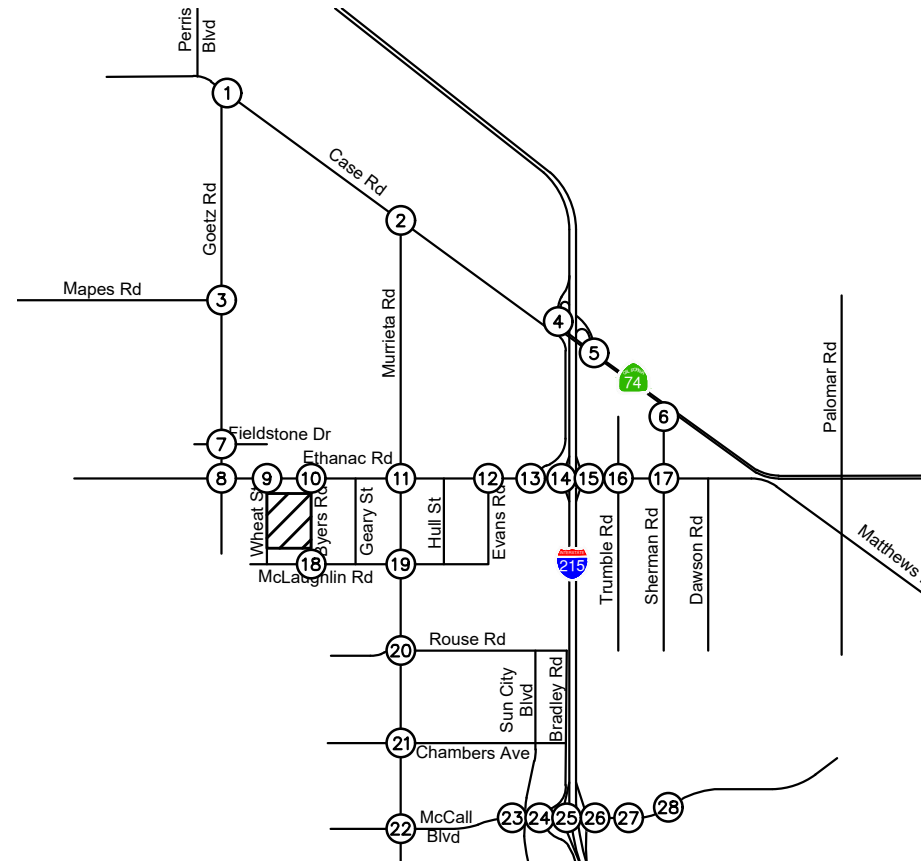
= Study Intersection

xx/yy = AM/PM Volumes

FIGURE 9A
EXISTING PLUS PROJECT TRAFFIC VOLUMES



NOT TO SCALE



15. I-215 NB Ramps at Ethanac Rd	16. Trumble Rd at Ethanac Rd	17. Sherman Rd at Ethanac Rd	18. Byers Rd at McLaughlin Rd	19. Murrieta Rd at McLaughlin Rd	20. Murrieta Rd at Rouse Rd	21. Murrieta Rd at Chambers Ave	22. Murrieta Rd at McCall Blvd
<p>↖ 143/195 ↗ 485/432</p> <p>322/457 ↗ 588/610 ↗</p> <p>509/531 ↗ 0/2 ↗ 135/198 ↗</p>	<p>↖ 109/141 ↗ 9/15 ↘ 8/30</p> <p>↖ 11/4 ↗ 370/380 ↘ 61/44</p> <p>87/73 ↗ 566/628 ↗ 34/33 ↗</p> <p>99/84 ↗ 9/5 ↗ 34/37 ↗</p>	<p>↖ 206/197 ↗ 7/2 ↘ 5/4</p> <p>↖ 8/3 ↗ 260/105 ↘ 0/2</p> <p>231/281 ↗ 227/198 ↗ 15/20 ↗</p> <p>9/22 ↗ 3/5 ↗ 2/2 ↗</p>	<p>↖ 2/9 ↗ 28/18</p>	<p>↖ 2/7 ↗ 158/422 ↘ 12/25</p> <p>↖ 31/23 ↗ 0/7</p> <p>6/6 ↗ 5/12 ↗</p> <p>29/20 ↗ 325/315 ↗ 2/3 ↗</p>	<p>↖ 4/26 ↗ 132/354 ↘ 29/70</p> <p>↖ 45/64 ↗ 3/10 ↘ 10/4</p> <p>14/9 ↗ 18/8 ↗ 6/2 ↗</p> <p>3/4 ↗ 283/260 ↗ 7/12 ↗</p>	<p>↖ 9/43 ↗ 198/269 ↘ 37/49</p> <p>↖ 20/60 ↗ 10/31 ↘ 7/6</p> <p>33/14 ↗ 44/24 ↗ 51/24 ↗</p> <p>36/50 ↗ 250/283 ↗ 2/9 ↗</p>	<p>↖ 92/48 ↗ 93/130 ↘ 57/112</p> <p>↖ 101/142 ↗ 113/153 ↘ 25/77</p> <p>79/38 ↗ 191/121 ↗ 1/1 ↗</p> <p>0/3 ↗ 163/194 ↗ 111/130 ↗</p>
23. Sun City Blvd at McCall Blvd	24. Bradley Rd at McCall Blvd	25. I-215 SB Ramps at McCall Blvd	26. I-215 NB Ramps at McCall Blvd	27. Encanto Dr at McCall Blvd	28. Sherman Rd at McCall Blvd		
<p>↖ 8/10 ↗ 45/77 ↘ 54/65</p> <p>↖ 42/228 ↗ 331/433 ↘ 136/67</p> <p>25/25 ↗ 378/356 ↗ 32/59 ↗</p> <p>31/80 ↗ 53/121 ↗ 58/148 ↗</p>	<p>↖ 4/3 ↗ 51/89 ↘ 141/115</p> <p>↖ 94/120 ↗ 489/684 ↘ 480/568</p> <p>17/26 ↗ 473/541 ↗ 48/67 ↗</p> <p>41/57 ↗ 44/84 ↗ 337/516 ↗</p>	<p>↖ 477/462 ↗ 3/3 ↘ 370/388</p> <p>↖ 838/811 ↗ 287/285</p> <p>848/865 ↗ 321/327 ↗</p>	<p>↖ 524/263 ↗ 976/753</p> <p>234/283 ↗ 614/947 ↗</p> <p>207/387 ↗ 0/4 ↗ 256/480 ↗</p>	<p>↖ 121/140 ↗ 18/17 ↘ 30/30</p> <p>↖ 31/22 ↗ 1158/690 ↘ 72/32</p> <p>113/184 ↗ 659/1012 ↗ 81/281 ↗</p> <p>215/185 ↗ 28/19 ↗ 80/40 ↗</p>	<p>↖ 86/21 ↗ 10/3 ↘ 53/32</p> <p>↖ 54/13 ↗ 1048/638 ↘ 22/14</p> <p>113/17 ↗ 568/932 ↗ 19/23 ↗</p> <p>26/26 ↗ 6/1 ↗ 26/8 ↗</p>		

LEGEND:

= Project Site

= Study Intersection

xx/yy = AM/PM Volumes

FIGURE 9B
EXISTING PLUS PROJECT TRAFFIC VOLUMES



**TABLE 4
SUMMARY OF INTERSECTION OPERATION
EXISTING PLUS PROJECT**

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Change in Delay	Project-Related Effect?	Without Project		With Project		Change in Delay	Project-Related Effect?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	Goetz Rd at Case Rd	S	38.0	D	38.9	D	0.9	No	29.8	C	30.6	C	0.8	No
2	Murrieta Rd at Case Rd	U	9.4	A	9.4	A	0.0	No	10.8	B	10.9	B	0.0	No
3	Goetz Rd at Mapes Rd	S	35.2	D	35.2	D	0.0	No	37.6	D	37.7	D	0.1	No
4	I-215 SB Ramps/SR-74 at Bonnie Dr	S	15.5	B	15.7	B	0.2	No	16.8	B	16.9	B	0.1	No
5	I-215 NB Ramps at SR-74	S	10.4	B	10.5	B	0.1	No	13.5	B	14.1	B	0.6	No
6	SR-74 at Sherman Rd	S	27.0	C	26.9	C	-0.1	No	26.8	C	26.8	C	0.0	No
7	Goetz Rd at Fieldstone Dr	S	15.7	B	15.7	B	0.0	No	11.4	B	11.1	B	-0.4	No
8	Goetz Rd at Ethanac Rd	S	42.9	D	45.0	D	2.1	No	43.5	D	44.0	D	0.5	No
9	Wheat St at Ethanac Rd	U	-	-	50.3	F	-	Yes	-	-	50.5	F	-	Yes
10	Byers Rd at Ethanac Rd	U	10.6	B	53.3	F	42.7	Yes	17.7	C	64.4	F	46.7	Yes
11	Murrieta Rd at Ethanac Rd	S	32.3	C	32.8	C	0.5	No	35.9	D	38.6	D	2.7	No
12	Evans Rd at Ethanac Rd	U	11.5	B	12.0	B	0.5	No	10.2	B	12.2	B	2.0	No
13	Barnett Rd/Case Rd at Ethanac Rd	S	31.3	C	30.1	C	-1.2	No	33.2	C	30.7	C	-2.5	No
14	I-215 SB Ramps at Ethanac Rd	S	20.4	C	32.0	C	11.6	No	26.1	C	47.9	D	21.8	No
15	I-215 NB Ramps at Ethanac Rd	S	32.5	C	48.9	D	16.4	No	36.9	D	83.3	F	46.4	Yes
16	Trumble Rd at Ethanac Rd	S	28.2	C	28.5	C	0.3	No	28.4	C	28.4	C	0.0	No
17	Sherman Rd at Ethanac Rd	U	49.4	E	57.8	F	8.4	Yes	38.7	E	46.5	E	7.8	Yes
18	Byers Rd at McLaughlin Rd	U	-	-	6.4	A	-	No	-	-	6.6	A	-	No
19	Murrieta Rd at McLaughlin Rd	U	12.9	B	14.4	B	1.5	No	18.4	C	21.6	C	3.2	No
20	Murrieta Rd at Rouse Rd	U	13.3	B	14.4	B	1.1	No	18.3	C	21.1	C	2.8	No
21	Murrieta Rd at Chambers Ave	U	10.1	B	10.5	B	0.4	No	10.6	B	11.8	B	1.2	No
22	Murrieta Rd at McCall Blvd	S	35.9	D	36.7	D	0.8	No	37.0	D	37.6	D	0.6	No
23	Sun City Blvd at McCall Blvd	S	26.5	C	26.1	C	-0.4	No	27.6	C	27.2	C	-0.4	No
24	Bradley Rd at McCall Blvd	S	31.3	C	31.7	C	0.4	No	31.6	C	31.7	C	0.1	No
25	I-215 SB Ramps at McCall Blvd	S	32.6	C	32.6	C	0.0	No	33.2	C	33.4	C	0.2	No
26	I-215 NB Ramps at McCall Blvd	S	26.7	C	26.7	C	0.0	No	31.9	C	33.0	C	1.1	No
27	Encanto Dr at McCall Blvd	S	25.7	C	26.5	C	0.8	No	24.4	C	25.1	C	0.6	No
28	Sherman Rd at McCall Blvd	S	18.6	B	18.8	B	0.2	No	8.9	A	9.4	A	0.5	No

Notes:

- **Bold and Shaded** values indicate intersections operating at an unacceptable Level of Service

- Delay values for signalized intersections represent the sum of average vehicle delay on all intersection approaches.

- Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.

S = Signalized
U = Unsignalized

TABLE 5
SUMMARY OF ROADWAY SEGMENT ANALYSIS
EXISTING PLUS PROJECT

Roadway	Segment	Existing Configuration	Existing ADT	Project ADT	Existing Plus Project ADT	LOS E Capacity ¹	V/C	LOS
Case Road	Goetz Road to Murrieta Road	2-Lane Arterial	7,642	0	7,642	13,000	0.588	A
	Murrieta Road to Mapes Road	2-Lane Arterial	5,815	77	5,892	13,000	0.453	A
Goetz Road	Case Road to Mapes Road	4-Lane Arterial	7,669	264	7,933	37,000	0.214	A
	Mapes Road to Ethanac Road	2-Lane Arterial	11,487	396	11,883	13,000	0.914	E
Murrieta Road	Case Road to Ethanac Road	2-Lane Secondary	2,521	77	2,598	13,000	0.200	A
	Ethanac Road to Rouse Road	2-Lane Secondary	7,947	357	8,304	13,000	0.639	B
	Chambers Avenue to McCall Blvd	4-Lane Secondary	7,587	422	8,009	25,900	0.309	A
Ethanac Road	Goetz Road to Wheat Street	4-Lane Arterial	14,349	572	14,921	37,000	0.403	A
	Wheat Street to Murrieta Road	4-Lane Arterial	14,391	3,985	18,376	37,000	0.497	A
	Murrieta Road to Evans Road	4-Lane Arterial	17,715	3,551	21,266	37,000	0.575	A
	Case Road to I-215 SB Ramps	4-Lane Arterial	25,161	3,551	28,712	37,000	0.776	C
	I-215 SB Ramps to I-215 NB Ramps	3-Lane Arterial	18,907	1,956	20,863	27,750	0.752	C
	I-215 NB Ramps to Trumble Road	2-Lane Arterial	14,139	308	14,447	13,000	1.111	F
McLaughlin Road	Byers Road to Murrieta Road	2-Lane Secondary	0	164	164	13,000	0.013	A
Byers Road	Ethanac Road to McLaughlin Road	2-Lane Collector	0	1,588	1,588	13,000	0.122	A
Wheat Street	Ethanac Road to McLaughlin Road	2-Lane Collector	0	2,968	2,968	13,000	0.228	A
McCall Blvd	Murrieta Road to Sun City Blvd	4-Lane Major	8,375	257	8,632	34,100	0.253	A
	Bradley Road to I-215 SB Ramps	4-Lane Major	28,352	257	28,609	34,100	0.839	D
	I-215 SB Ramps to I-215 NB Ramps	4-Lane Major	27,453	334	27,787	34,100	0.815	D
	I-215 NB Ramps to Encanto Drive	4-Lane Arterial	27,638	438	28,076	37,000	0.759	C

Notes: 1. Source: City of Menifee Engineering Department, LOS Traffic Study Guidelines, October 2020
ADT = Average Daily Traffic
V / C = Volume to Capacity
LOS = Level of Service

FUTURE CONDITIONS WITHOUT PROJECT

Opening Year 2024 Cumulative Conditions

The project Opening Year is anticipated to be Year 2024. Based on consultation with City staff, an ambient annual growth rate of 2.0% per year was applied to existing traffic volumes to develop Opening Year 2024 Base forecasts.

Cumulative Projects

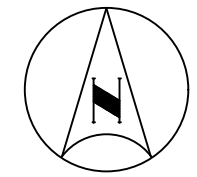
Cumulative Projects consists of development projects that have been approved but are not yet constructed/occupied, and projects that are in various stages of the application and approval process but have not yet been approved. The locations of the Cumulative Projects are shown on **Figure 10**.

Trip Generation

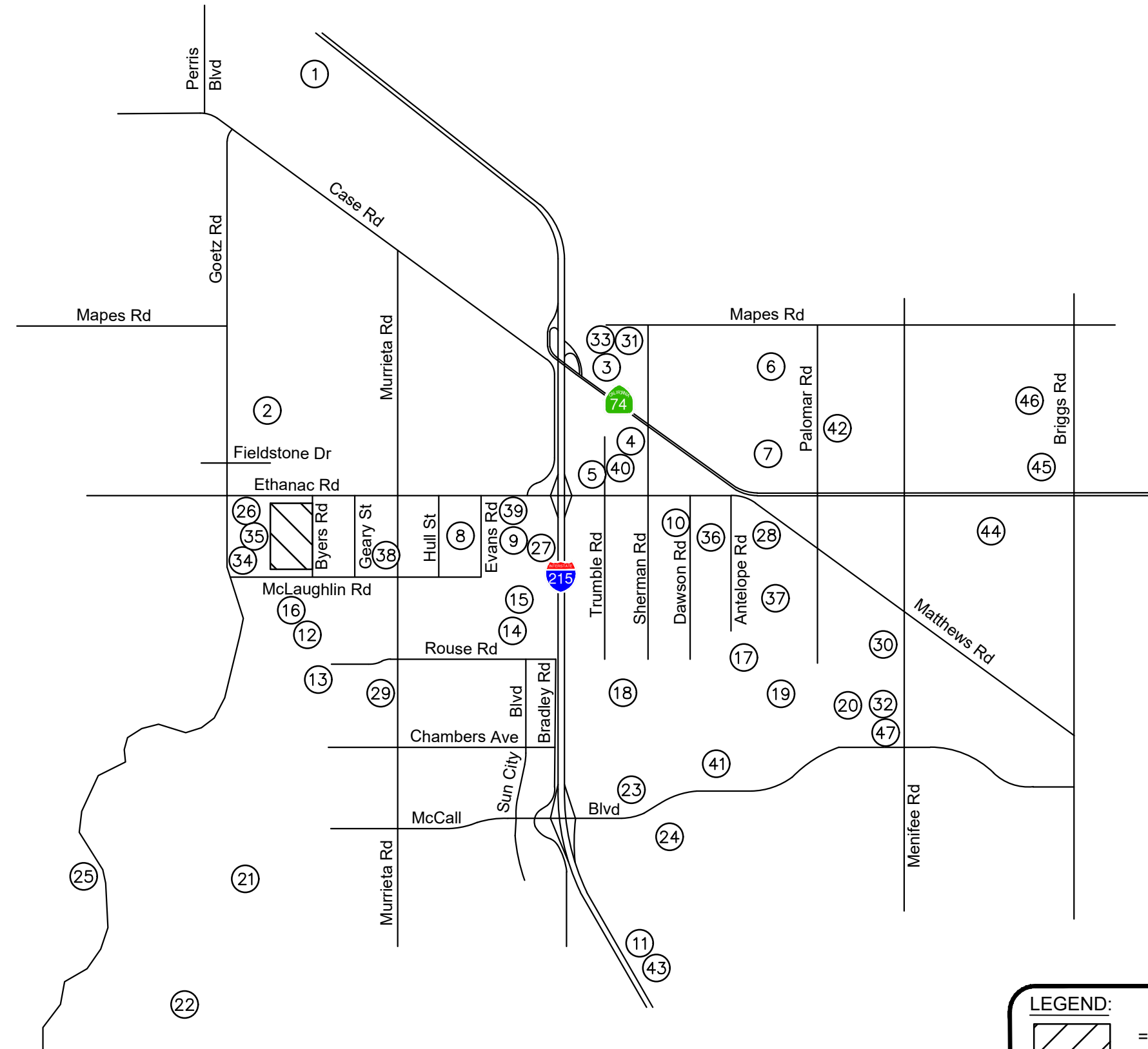
Trip generation information for the Cumulative Projects was obtained from approved traffic studies, where available; or was developed by Kimley-Horn if approved traffic studies were not available. A summary of Cumulative Projects in the project vicinity and the trip generation associated with each is provided on **Table 6**.

Trip Distribution and Assignment

Likewise, trip distribution and assignment for the Cumulative Projects were either obtained from approved traffic studies, where available; or were developed by Kimley-Horn if approved traffic studies were not available. Trip distribution assumptions for Cumulative Projects are provided in **Appendix D**. Traffic volumes associated with the Cumulative Projects were compiled for each of the study intersections and are shown on **Figures 11A & 11B**. The Cumulative Projects traffic volumes were added to the Opening Year 2024 Base traffic volumes. Traffic volumes for Opening Year 2024 Cumulative are shown on **Figures 12A & 12B**.



NOT TO SCALE



LEGEND:



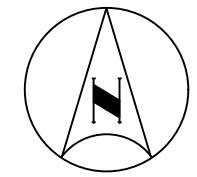
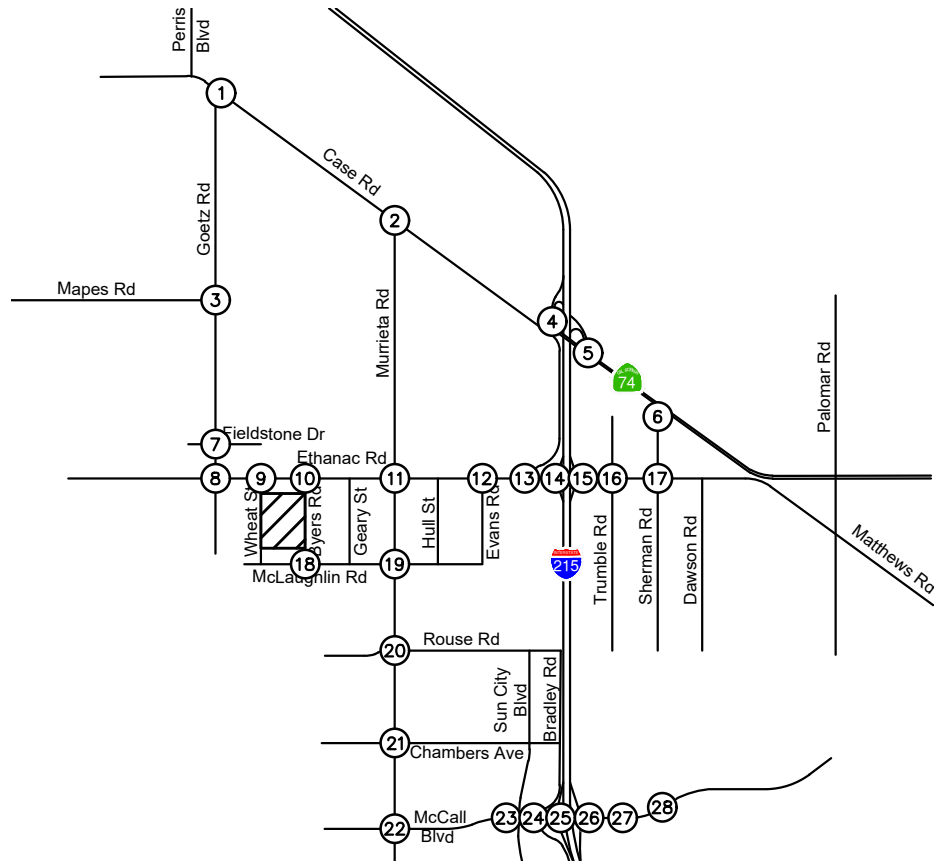
-  = Project Site
-  = Cumulative Project

FIGURE 10
LOCATION OF CUMULATIVE PROJECTS



NOT TO SCALE



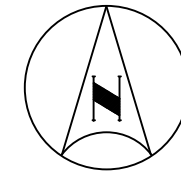
1. Goetz Rd at Case Rd	2. Murrieta Rd at Case Rd	3. Goetz Rd at Mapes Rd	4. I-215 SB Ramps/ SR-74 at Bonnie Dr	5. I-215 NB Ramps at SR-74	6. SR-74 at Sherman Rd	7. Goetz Rd at Fieldstone Dr	8. Goetz Rd at Ethanac Rd
← 34/45 2/6	← 29/20	← 21/53	← 9/3 ← 155/212	← 138/207 ← 172/188 ← 196/193	← 285/210 12/8	← 25/54	← 8/19 ← 22/37 ← 33/31 ← 0/1 ← 51/33
38/38 → 19/47 ↘ 42/33 → 6/2 ↗	14/31 → 14/16 ↘ 16/15 →	4/1 ↘ 1/4 → 48/35 →	16/26 ↘ 24/19 → 172/174 →	171/239 →	138/303 → 33/16 ↘ 9/28 → 4/12 ↗	49/39 →	1/0 → 17/13 → 17/28 ↗
9. Wheat St at Ethanac Rd	10. Byers Rd at Ethanac Rd	11. Murrieta Rd at Ethanac Rd	12. Evans Rd at Ethanac Rd	13. Barnett Rd/Case Rd at Ethanac Rd	14. I-215 SB Ramps at Ethanac Rd		
← 179/354	← 179/344 69/97	← 3/9 ← 11/7 7/12 ← 224/407 92/281	← 293/652 301/239	← 9/3 ← 543/810 43/79	← 310/446 ← 282/188 ← 279/454 94/279		
316/245 → 1/0 ↘ 15/55 ↗	331/244 → 89/66 ↗	369/326 → 50/40 ↘ 24/55 → 9/3 → 263/174 ↗	608/537 → 30/31 ↘ 30/48 → 181/282 ↗	721/758 → 68/61 ↗	427/464 → 375/363 ↘		

LEGEND:

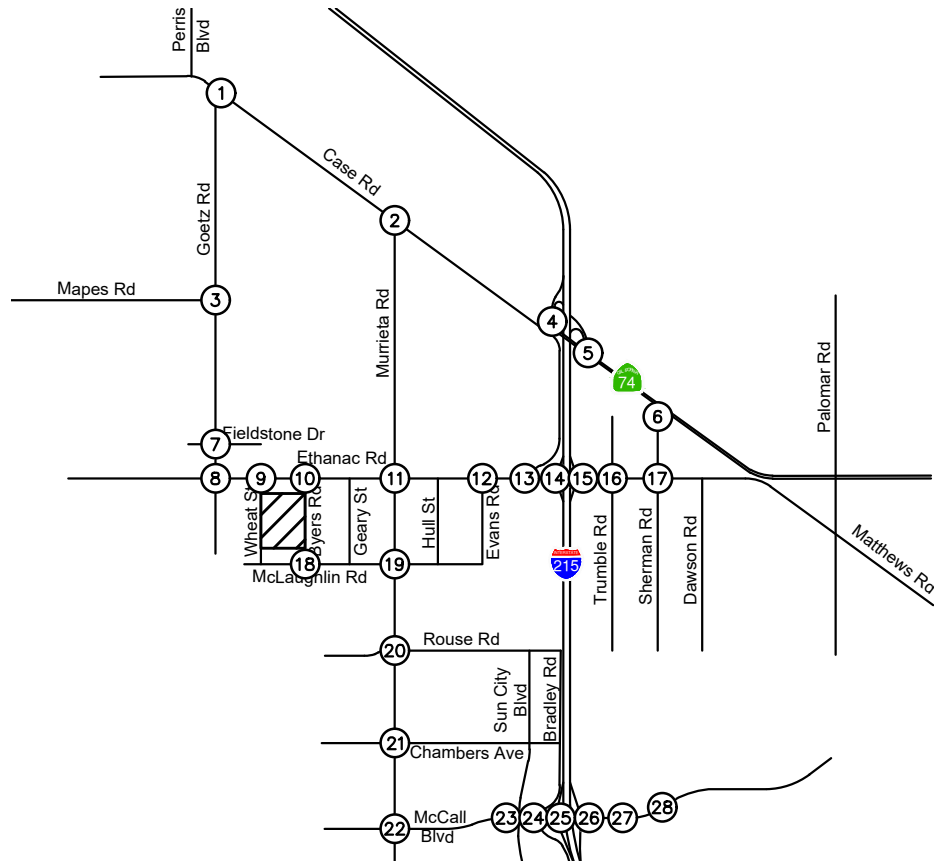
- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 11A
CUMULATIVE PROJECTS TRAFFIC VOLUMES





NOT TO SCALE

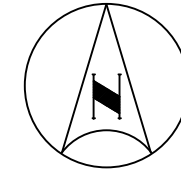


15. I-215 NB Ramps at Ethanac Rd	16. Trumble Rd at Ethanac Rd	17. Sherman Rd at Ethanac Rd	18. Byers Rd at McLaughlin Rd	19. Murrieta Rd at McLaughlin Rd	20. Murrieta Rd at Rouse Rd	21. Murrieta Rd at Chambers Ave	22. Murrieta Rd at McCall Blvd
<p>↖ 94/284 ↙ 119/308</p> <p>↖ 397/431 ↙ 312/221</p> <p>↖ 254/425 ↙ 275/185</p>	<p>↖ 21/62</p> <p>← 165/466</p> <p>↖ 60/42 ↙ 467/319 ↘ 60/42</p> <p>↖ 21/62</p>	<p>↖ 3/1 ↙ 30/15</p> <p>↖ 8/25 ↙ 182/527</p> <p>↖ 1/3 ↙ 526/356 ↘ 60/43</p> <p>↖ 22/62</p>	<p>↖ 9/29 ↙ 13/10</p> <p>↖ 6/14 ↙ 0/10 ↘ 0/11</p> <p>0/56 →</p> <p>↖ 26/17</p>	<p>↖ 156/337</p> <p>↖ 29/47</p> <p>13/10 ↘</p> <p>↖ 6/14 ↙ 301/244 ↘ 27/30</p>	<p>↖ 78/262 ↙ 119/132 ↘ 0/1</p> <p>↖ 1/0</p> <p>↖ 234/154 ↙ 78/51</p> <p>↖ 26/87 ↙ 99/133</p>	<p>↖ 0/1 ↙ 275/233 ↘ 0/1</p> <p>↖ 1/0</p> <p>↖ 78/51</p> <p>↖ 26/87 ↙ 149/308</p>	<p>↖ 164/137 ↙ 137/113</p> <p>↖ 70/155 ↙ 32/108</p> <p>↖ 88/182 ↙ 96/63</p>
23. Sun City Blvd at McCall Blvd	24. Bradley Rd at McCall Blvd	25. I-215 SB Ramps at McCall Blvd	26. I-215 NB Ramps at McCall Blvd	27. Encanto Dr at McCall Blvd	28. Sherman Rd at McCall Blvd		
<p>← 102/263</p> <p>233/176 →</p>	<p>← 102/263</p> <p>233/176 →</p>	<p>↖ 37/124 ↙ 169/312</p> <p>↖ 65/139 ↙ 174/185</p> <p>↖ 139/103 ↙ 145/108</p>	<p>↖ 250/247 ↙ 187/189</p> <p>↖ 136/90 ↙ 172/325</p> <p>↖ 52/135 ↙ 133/222</p>	<p>↖ 76/62</p> <p>← 279/312</p> <p>↖ 36/90 ↙ 230/361 ↘ 37/95</p> <p>↖ 81/64</p>	<p>↖ 98/124</p> <p>← 104/126</p> <p>↖ 96/133 ↙ 98/139 ↘ 36/90</p> <p>↖ 76/62</p>		

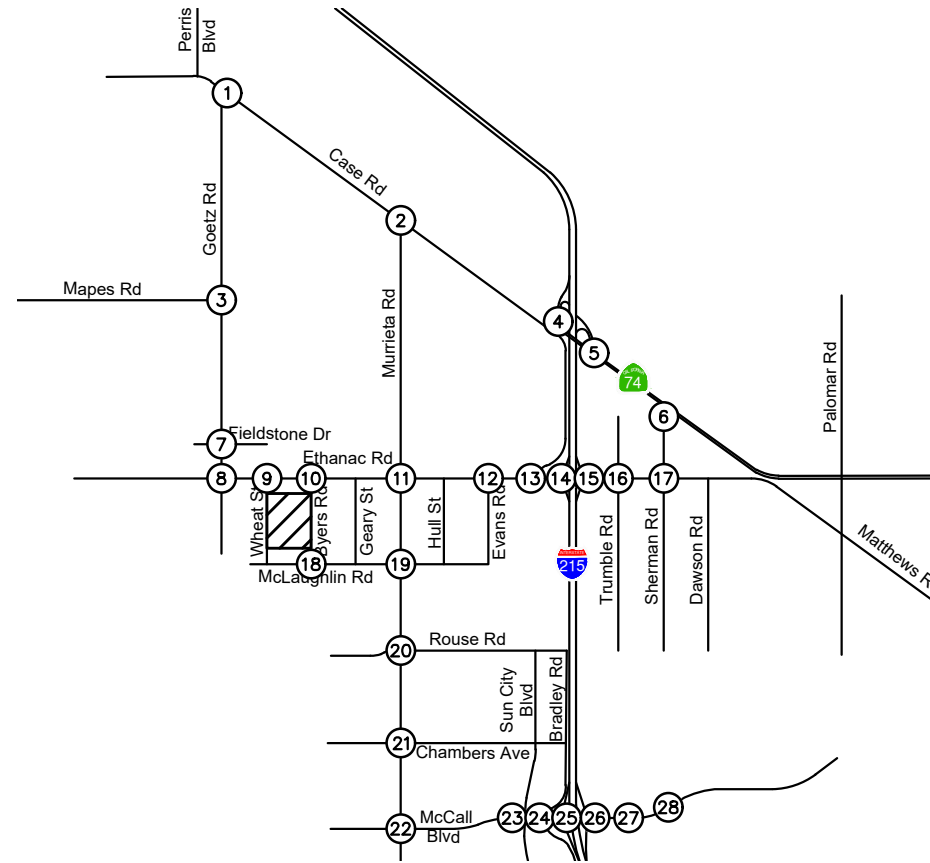
LEGEND:

- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 11B
CUMULATIVE PROJECTS TRAFFIC VOLUMES



NOT TO SCALE



1. Goetz Rd at Case Rd	2. Murrieta Rd at Case Rd	3. Goetz Rd at Mapes Rd	4. I-215 SB Ramps/ SR-74 at Bonnie Dr	5. I-215 NB Ramps at SR-74	6. SR-74 at Sherman Rd	7. Goetz Rd at Fieldstone Dr	8. Goetz Rd at Ethanac Rd
<p>← 178/321 201/224</p> <p>200/249 → 141/247 ↘</p> <p>289/173 → 272/167 ↗</p>	<p>← 177/266 14/15</p> <p>202/316 → 51/126 ↘</p> <p>146/125 → 19/11 ↗</p>	<p>↖ 175/67 ↖ 170/395 ↖ 3/3</p> <p>↗ 1/0</p> <p>155/68 → 202/337 ↘</p> <p>285/227 → 343/206 ↗ 15/0 ↗</p>	<p>↖ 28/50 ↖ 670/960</p> <p>31/40 → 160/306 ↘</p> <p>219/225 → 580/513 ↗</p>	<p>↖ 12/22 ↖ 277/426</p> <p>↖ 889/826 ↖ 759/726</p> <p>8/15 → 838/1251 ↗</p>	<p>↖ 1/2 ↖ 4/2 ↖ 0/2</p> <p>↗ 1/2 ↗ 1197/939 ↗ 265/202</p> <p>5/20 → 798/1295 ↗ 49/54 ↗</p> <p>58/109 → 1/0 ↗ 269/270 ↗</p>	<p>↖ 18/68 ↖ 318/639 ↖ 13/17</p> <p>↗ 16/14 ↗ 0/3 ↗ 3/0</p> <p>72/37 → 4/1 ↗ 64/27 ↗</p> <p>19/33 → 596/377 ↗ 7/2 ↗</p>	<p>↖ 8/32 ↖ 125/279 ↖ 259/306</p> <p>↗ 320/284 ↗ 74/72 ↗ 228/325</p> <p>17/18 → 94/67 ↗ 6/5 ↗</p> <p>2/7 → 260/155 ↗ 410/269 ↗</p>
9. Wheat St at Ethanac Rd	10. Byers Rd at Ethanac Rd	11. Murrieta Rd at Ethanac Rd	12. Evans Rd at Ethanac Rd	13. Barnett Rd/Case Rd at Ethanac Rd	14. I-215 SB Ramps at Ethanac Rd		
<p>← 720/979</p> <p>1046/820 → 1/0 ↘</p> <p>15/55 ↗</p>	<p>← 722/978 75/101</p> <p>1065/814 → 2/1 ↘</p> <p>0/5 → 95/68 ↗</p>	<p>↖ 10/14 ↖ 39/89 ↖ 82/55</p> <p>↗ 58/57 ↗ 602/920 ↗ 175/506</p> <p>6/6 → 1074/752 ↗ 104/154 ↗</p> <p>127/167 → 104/84 ↗ 435/326 ↗</p>	<p>← 875/1451 301/243</p> <p>1513/1175 → 31/34 ↘</p> <p>30/48 → 183/284 ↗</p>	<p>↖ 73/152 ↖ 343/451</p> <p>↗ 371/418 ↗ 1047/1333 ↗ 117/133</p> <p>160/179 → 1365/1227 ↗ 25/19 ↗</p> <p>31/28 → 6/10 ↗ 158/112 ↗</p>	<p>↖ 570/829 ↖ 413/393</p> <p>↖ 1024/1213 ↖ 205/412</p> <p>1192/1102 → 904/770 ↘</p>		

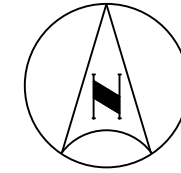
Note: Volumes reflect PCE adjustments.

LEGEND:

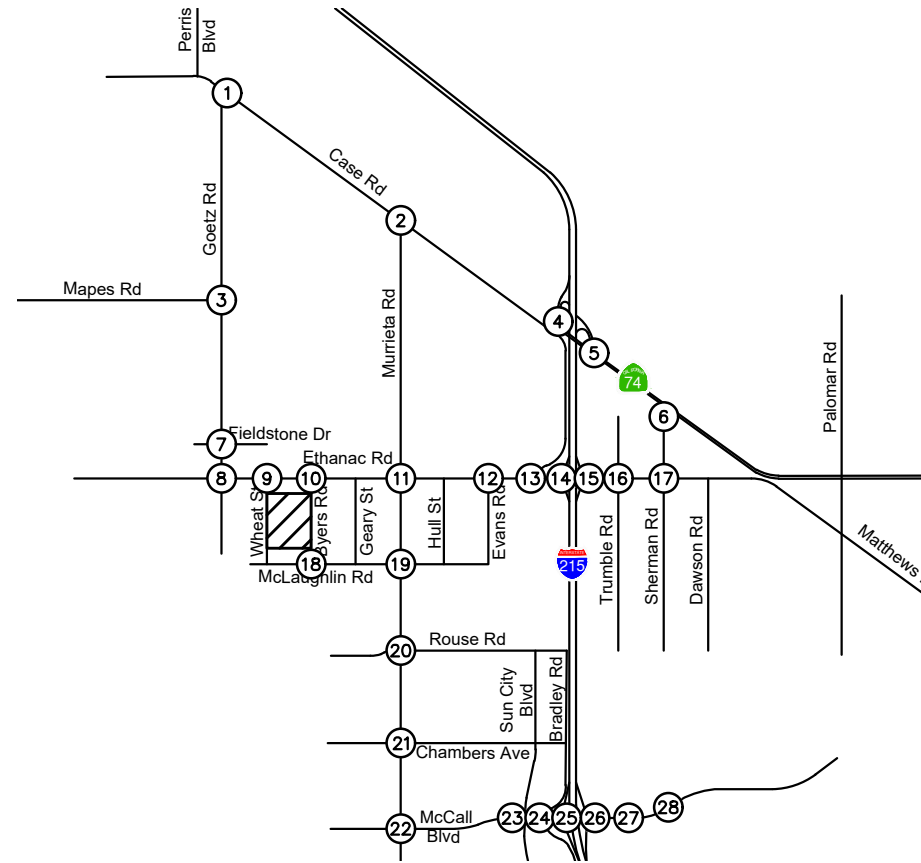
- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 12A
OPENING YEAR 2024 CUMULATIVE TRAFFIC VOLUMES





NOT TO SCALE



15. I-215 NB Ramps at Ethanac Rd	16. Trumble Rd at Ethanac Rd	17. Sherman Rd at Ethanac Rd	18. Byers Rd at McLaughlin Rd	19. Murrieta Rd at McLaughlin Rd	20. Murrieta Rd at Rouse Rd	21. Murrieta Rd at Chambers Ave	22. Murrieta Rd at McCall Blvd
<p>↖ 246/491 ↗ 602/746</p> <p>683/692 ↘ 927/825 ↘</p> <p>↖ 626/877 ↗ 0/2 ↘ 418/395</p>	<p>↖ 137/211 ↗ 10/16 ↘ 8/32</p> <p>↖ 12/4 ↗ 526/849 ↘ 65/47</p> <p>152/119 ↘ 1058/942 ↘ 96/77 ↘</p> <p>↖ 126/151 ↗ 10/5 ↘ 36/39</p>	<p>↖ 211/203 ↗ 7/2 ↘ 35/19</p> <p>↖ 16/28 ↗ 443/628 ↘ 0/2</p> <p>244/290 ↘ 761/539 ↘ 75/59 ↘</p> <p>↖ 26/82 ↗ 3/5 ↘ 2/2</p>	<p>↖ 9/29 ↗ 13/10</p> <p>↖ 6/14 ↗ 0/10 ↘ 0/11</p> <p>0/56 →</p> <p>↖ 26/17</p>	<p>↖ 2/7 ↗ 312/727 ↘ 13/27</p> <p>↖ 33/24 ↗ 29/54</p> <p>6/6 ↘</p> <p>↖ 16/13 ↗ 7/16 ↘ 617/559 ↘ 29/33</p>	<p>↖ 82/290 ↗ 246/447 ↘ 30/70</p> <p>↖ 43/65 ↗ 3/11 ↘ 11/4</p> <p>249/164 ↘ 19/8 ↘ 84/53 ↘</p> <p>↖ 29/91 ↗ 347/374 ↘ 7/13</p>	<p>↖ 8/41 ↗ 474/468 ↘ 38/48</p> <p>↖ 17/60 ↗ 11/33 ↘ 7/6</p> <p>31/12 ↘ 47/25 ↘ 132/76 ↘</p> <p>↖ 64/140 ↗ 373/579 ↘ 2/10</p>	<p>↖ 98/51 ↗ 259/259 ↘ 190/198</p> <p>↖ 151/288 ↗ 120/162 ↘ 59/190</p> <p>84/40 ↘ 202/128 ↘ 1/1 ↘</p> <p>↖ 0/3 ↗ 246/377 ↘ 214/201</p>
23. Sun City Blvd at McCall Blvd	24. Bradley Rd at McCall Blvd	25. I-215 SB Ramps at McCall Blvd	26. I-215 NB Ramps at McCall Blvd	27. Encanto Dr at McCall Blvd	28. Sherman Rd at McCall Blvd		
<p>↖ 8/11 ↗ 48/82 ↘ 57/69</p> <p>↖ 45/242 ↗ 426/704 ↘ 144/71</p> <p>27/27 ↘ 626/519 ↘ 34/63 ↘</p> <p>↖ 33/85 ↗ 56/128 ↘ 61/157</p>	<p>↖ 4/3 ↗ 54/94 ↘ 149/122</p> <p>↖ 100/127 ↗ 594/970 ↘ 509/602</p> <p>18/28 ↘ 727/716 ↘ 51/71 ↘</p> <p>↖ 43/60 ↗ 47/89 ↘ 357/547</p>	<p>↖ 543/614 ↗ 3/3 ↘ 554/691</p> <p>↖ 927/981 ↗ 478/487</p> <p>1034/999 →</p> <p>↖ 482/442</p>	<p>↖ 775/506 ↗ 1201/973</p> <p>384/390 ↘ 811/1276 ↘</p> <p>↖ 265/541 ↗ 0/4 ↘ 404/731</p>	<p>↖ 204/210 ↗ 19/18 ↘ 32/32</p> <p>↖ 33/23 ↗ 1476/1023 ↘ 76/34</p> <p>156/285 ↘ 922/1402 ↘ 118/372 ↘</p> <p>↖ 289/246 ↗ 30/20 ↘ 85/42</p>	<p>↖ 184/143 ↗ 11/3 ↘ 56/34</p> <p>↖ 57/14 ↗ 1189/785 ↘ 23/15</p> <p>215/146 ↘ 695/1100 ↘ 56/114 ↘</p> <p>↖ 104/90 ↗ 6/1 ↘ 28/8</p>		

Note: Volumes reflect PCE adjustments.

LEGEND:

- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 12B
OPENING YEAR 2024 CUMULATIVE TRAFFIC VOLUMES



Peak Hour Operating Conditions

Intersection Level of Service analysis was conducted for Opening Year 2024 Cumulative conditions, and the results are shown on **Table 7**. Intersection analysis worksheets for this condition are provided in **Appendix C**. Review of this table indicates that, with the addition of ambient growth and cumulative projects traffic, the following intersections would operate at an unacceptable Level of Service under Opening Year 2024 conditions:

- #10 - Byers Road at Ethanac Road: PM - LOS E
- #11 - Murrieta Road at Ethanac Road: AM & PM - LOS F
- #12 - Evans Road at Ethanac Road: AM & PM - LOS F
- #14 - I-215 SB Ramps at Ethanac Road: AM & PM - LOS F
- #15 - I-215 NB Ramps at Ethanac Road: AM & PM - LOS F
- #16 - Trumble Road at Ethanac Road: PM - LOS E
- #17 - Sherman Road at Ethanac Road: AM & PM - LOS F
- #19 - Murrieta Rd at McLaughlin Road: PM - LOS F
- #20 - Murrieta Road at Rouse Road: AM & PM - LOS F
- #21 - Murrieta Road at Chambers Avenue: AM & PM - LOS E
- #25 - I-215 SB Ramps at McCall Boulevard: PM - LOS E
- #26 - I-215 NB Ramps at McCall Boulevard: PM - LOS E

Daily Roadway Operating Conditions

Roadway Level of Service analysis was conducted based on the roadway capacities presented previously in this report. The results of the roadway analysis for Opening Year 2024 Cumulative conditions are shown on **Table 8**. Review of this table indicates that the following study roadway segments would operate at an unacceptable Level of Service on a daily basis:

- Goetz Road: Mapes Road to Ethanac Road - LOS F
- Murrieta Road: Ethanac Road to Rouse Road - LOS F
- Ethanac Road: Case Road to I-215 SB Ramps - LOS F
- Ethanac Road: I-215 SB Ramps to I-215 NB Ramps - LOS F
- Ethanac Road: I-215 NB Ramps to Trumble Road - LOS F
- McCall Boulevard: Bradley Road to I-215 SB Ramps - LOS F
- McCall Boulevard: I-215 SB Ramps to I-215 NB Ramps - LOS F
- McCall Boulevard: I-215 NB Ramps to Encanto Drive - LOS F

TABLE 7
SUMMARY OF INTERSECTION OPERATION
OPENING YEAR 2024 CUMULATIVE

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Goetz Rd at Case Rd	S	37.3	D	29.4	C
2	Murrieta Rd at Case Rd	U	10.0	B	12.3	B
3	Goetz Rd at Mapes Rd	S	33.7	C	37.7	D
4	I-215 SB Ramps/SR-74 at Bonnie Dr	S	14.0	B	17.4	B
5	I-215 NB Ramps at SR-74	S	13.6	B	19.5	B
6	SR-74 at Sherman Rd	S	28.3	C	30.8	C
7	Goetz Rd at Fieldstone Dr	S	15.7	B	11.2	B
8	Goetz Rd at Ethanac Rd	S	45.2	D	46.3	D
9	Wheat St at Ethanac Rd	U	12.5	B	11.8	B
10	Byers Rd at Ethanac Rd	U	14.2	B	46.9	E
11	Murrieta Rd at Ethanac Rd	S	103.3	F	277.8	F
12	Evans Rd at Ethanac Rd	U	>180	F	>180	F
13	Barnett Rd/Case Rd at Ethanac Rd	S	39.1	D	38.8	D
14	I-215 SB Ramps at Ethanac Rd	S	121.1	F	233.3	F
15	I-215 NB Ramps at Ethanac Rd	S	164.3	F	316.8	F
16	Trumble Rd at Ethanac Rd	S	48.3	D	55.6	E
17	Sherman Rd at Ethanac Rd	U	>180	F	>180	F
18	Byers Rd at McLaughlin Rd	U	7.0	A	7.3	A
19	Murrieta Rd at McLaughlin Rd	U	25.4	D	122.2	F
20	Murrieta Rd at Rouse Rd	U	118.6	F	>180	F
21	Murrieta Rd at Chambers Ave	U	35.0	E	38.5	E
22	Murrieta Rd at McCall Blvd	S	37.1	D	41.8	D
23	Sun City Blvd at McCall Blvd	S	23.8	C	25.4	C
24	Bradley Rd at McCall Blvd	S	32.2	C	33.8	C
25	I-215 SB Ramps at McCall Blvd	S	52.8	D	70.7	E
26	I-215 NB Ramps at McCall Blvd	S	37.7	D	56.8	E
27	Encanto Dr at McCall Blvd	S	42.3	D	42.2	D
28	Sherman Rd at McCall Blvd	S	32.9	C	22.3	C

Notes:

- **Bold and Shaded** values indicate intersections operating at an unacceptable Level of Service
- Delay values for signalized intersections represent the sum of average vehicle delay on all intersection approaches.
- Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.

S = Signalized
U = Unsignalized

TABLE 8
SUMMARY OF ROADWAY SEGMENT ANALYSIS
OPENING YEAR 2024 CUMULATIVE

Roadway	Segment	Existing ADT	Opening Year 2024 Base ADT	Cumulative Projects	Opening Year 2024 Cumulative ADT	LOS E Capacity ¹	V/C	LOS
Case Road	Goetz Road to Murrieta Road	7,642	8,101	1,032	9,133	13,000	0.703	B
	Murrieta Road to Mapes Road	5,815	6,164	638	6,802	13,000	0.523	A
Goetz Road	Case Road to Mapes Road	7,669	8,129	972	9,101	37,000	0.246	A
	Mapes Road to Ethanac Road	11,487	12,176	1,106	13,282	13,000	1.022	F
Murrieta Road	Case Road to Ethanac Road	2,521	2,672	316	2,988	13,000	0.230	A
	Ethanac Road to Rouse Road	7,947	8,424	5,664	14,088	13,000	1.084	F
	Chambers Avenue to McCall Blvd	7,587	8,042	5,922	13,964	25,900	0.539	A
Ethanac Road	Goetz Road to Wheat Street	14,349	15,210	1,665	16,875	37,000	0.456	A
	Wheat Street to Murrieta Road	14,391	15,254	9,882	25,136	37,000	0.679	B
	Murrieta Road to Evans Road	17,715	18,778	13,316	32,094	37,000	0.867	D
	Case Road to I-215 SB Ramps	25,161	26,671	18,276	44,947	37,000	1.215	F
	I-215 SB Ramps to I-215 NB Ramps	18,907	20,041	13,561	33,602	27,750	1.211	F
	I-215 NB Ramps to Trumble Road	14,139	14,987	8,680	23,667	13,000	1.821	F
McLaughlin Road	Byers Road to Murrieta Road	0	0	286	286	13,000	0.022	A
Byers Road	Ethanac Road to McLaughlin Road	0	0	2,077	2,077	13,000	0.160	A
Wheat Street	Ethanac Road to McLaughlin Road	0	0	738	738	13,000	0.057	A
McCall Blvd	Murrieta Road to Sun City Blvd	8,375	8,878	4,240	13,118	34,100	0.385	A
	Bradley Road to I-215 SB Ramps	28,352	30,053	4,240	34,293	34,100	1.006	F
	I-215 SB Ramps to I-215 NB Ramps	27,453	29,100	6,531	35,631	34,100	1.045	F
	I-215 NB Ramps to Encanto Drive	27,638	29,296	10,292	39,588	37,000	1.070	F

Notes: 1. Source: City of Menifee Engineering Department, LOS Traffic Study Guidelines, October 2020
ADT = Average Daily Traffic
V / C = Volume to Capacity
LOS = Level of Service

FUTURE CONDITIONS WITH PROJECT

Opening Year 2024 Cumulative Plus Project

Project-related traffic for the CADO Warehouse project was added to the Opening Year 2024 Cumulative traffic volumes, and the resulting “Plus Project” traffic volumes are shown on **Figures 13A & 13B**.

Peak Hour Operating Conditions

Intersection Level of Service analysis was conducted for the Opening Year 2024 Cumulative Plus Project condition. The results are shown on **Table 9**. Copies of the intersection analysis worksheets are provided in **Appendix C**. Review of Table 9 indicates that, with the addition of project traffic, the following intersections would operate at an unacceptable Level of Service under Opening Year 2024 Cumulative Plus Project conditions:

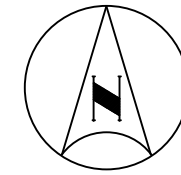
- #9 – Wheat Street at Ethanac Road: AM & PM - LOS F
- #10 - Byers Road at Ethanac Road: AM & PM - LOS F
- #11 - Murrieta Road at Ethanac Road: AM & PM - LOS F
- #12 - Evans Road at Ethanac Road: AM & PM - LOS F
- #14 - I-215 SB Ramps at Ethanac Road: AM & PM - LOS F
- #15 - I-215 NB Ramps at Ethanac Road: AM & PM - LOS F
- #16 - Trumble Road at Ethanac Road: PM - LOS E
- #17 - Sherman Road at Ethanac Road: AM & PM - LOS F
- #19 - Murrieta Rd at McLaughlin Road: PM - LOS F
- #20 - Murrieta Road at Rouse Road: AM & PM - LOS F
- #21 - Murrieta Road at Chambers Avenue: AM – LOS E & PM – LOS F
- #25 - I-215 SB Ramps at McCall Boulevard: PM - LOS E
- #26 - I-215 NB Ramps at McCall Boulevard: PM - LOS E

Recommended improvements for the study intersections are presented in the Recommended Improvements section of this report. Copies of intersection analysis worksheets are provided in **Appendix C**.

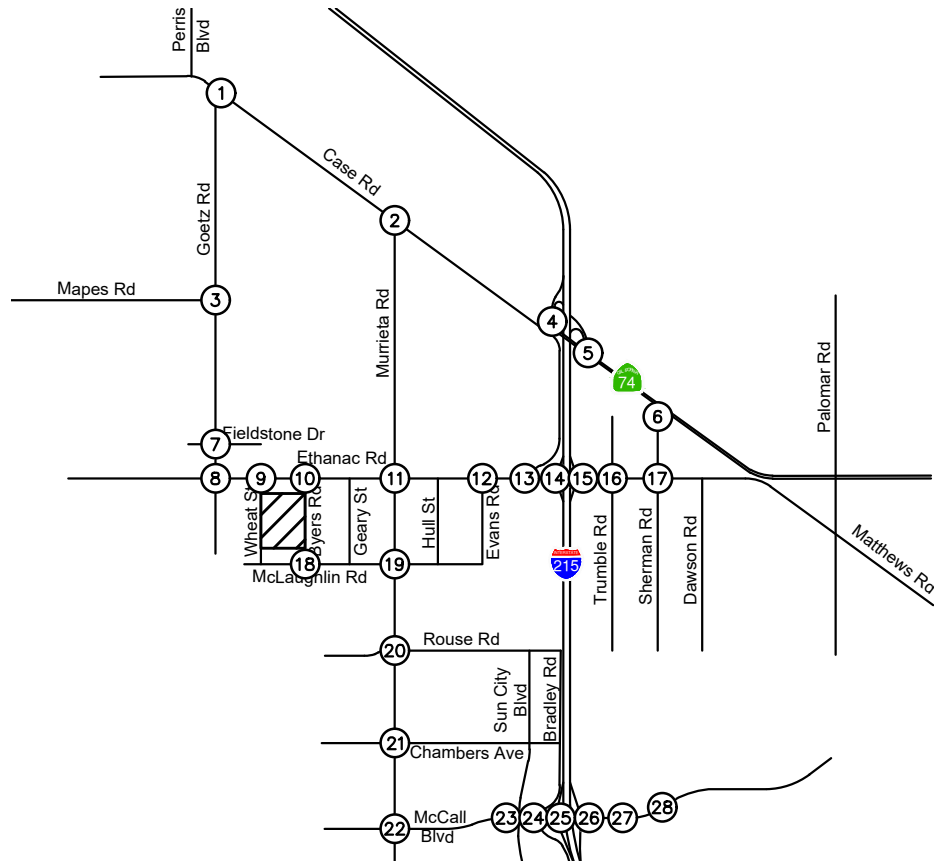
Daily Roadway Operating Conditions

Roadway Level of Service analysis was conducted based on the roadway capacities presented previously in this report. The results of the roadway analysis for Opening Year 2024 Cumulative Plus Project conditions are shown on **Table 10**. Review of this table indicates that the following study roadway segments would operate at an unacceptable Level of Service on a daily basis:

- Goetz Road: Mapes Road to Ethanac Road - LOS F
- Murrieta Road: Ethanac Road to Rouse Road - LOS F
- Ethanac Road: Murrieta Road to Evans Road - LOS E
- Ethanac Road: Case Road to I-215 SB Ramps - LOS F
- Ethanac Road: I-215 SB Ramps to I-215 NB Ramps - LOS F
- Ethanac Road: I-215 NB Ramps to Trumble Road - LOS F
- McCall Boulevard: Bradley Road to I-215 SB Ramps - LOS F
- McCall Boulevard: I-215 SB Ramps to I-215 NB Ramps - LOS F
- McCall Boulevard: I-215 NB Ramps to Encanto Drive - LOS F



NOT TO SCALE



1. Goetz Rd at Case Rd	2. Murrieta Rd at Case Rd	3. Goetz Rd at Mapes Rd	4. I-215 SB Ramps/ SR-74 at Bonnie Dr	5. I-215 NB Ramps at SR-74	6. SR-74 at Sherman Rd	7. Goetz Rd at Fieldstone Dr	8. Goetz Rd at Ethanac Rd
<p>← 178/321 201/224</p> <p>200/249 → 169/267 ↘</p> <p>295/203 → 272/167 ↗</p>	<p>← 177/266 31/26</p> <p>202/316 → 51/126 ↘</p> <p>146/125 → 19/11 ↗</p>	<p>↖ 175/67 ↘ 198/415 ↔ 3/3</p> <p>↗ 1/0</p> <p>155/68 → 216/347 ↘</p> <p>288/242 → 349/236 ↗ 15/0 ↖</p>	<p>↖ 45/61 ↘ 670/960</p> <p>31/40 → 160/306 ↘</p> <p>219/225 → 604/529 ↗</p>	<p>↖ 12/22 ↘ 280/441</p> <p>↗ 889/826 ↘ 783/742</p> <p>8/15 → 838/1251 ↗</p>	<p>↖ 1/2 ↘ 4/2 ↔ 0/2</p> <p>↗ 1/2 ↘ 1221/955 ↔ 265/202</p> <p>5/20 → 801/1310 ↗ 59/60 ↘</p> <p>60/119 → 1/0 ↗ 269/270 ↖</p>	<p>↖ 18/68 ↘ 360/669 ↔ 13/17</p> <p>↗ 16/14 ↘ 0/3 ↔ 3/0</p> <p>72/37 → 4/1 ↗ 64/27 ↖</p> <p>19/33 → 605/422 ↗ 7/2 ↖</p>	<p>↖ 8/32 ↘ 125/279 ↔ 301/336</p> <p>↗ 329/329 ↘ 75/77 ↔ 231/340</p> <p>17/18 → 99/70 ↗ 6/5 ↖</p> <p>2/7 → 260/155 ↗ 424/279 ↖</p>
9. Wheat St at Ethanac Rd	10. Byers Rd at Ethanac Rd	11. Murrieta Rd at Ethanac Rd	12. Evans Rd at Ethanac Rd	13. Barnett Rd/Case Rd at Ethanac Rd	14. I-215 SB Ramps at Ethanac Rd		
<p>← 724/1001 234/155</p> <p>1052/824 → 56/39 ↘</p> <p>9/44 → 91/382 ↗</p>	<p>← 956/1133 269/230</p> <p>1141/1141 → 8/5 ↘</p> <p>4/27 → 126/203 ↗</p>	<p>↖ 27/25 ↘ 39/89 ↔ 82/55</p> <p>↗ 58/57 ↘ 987/1175 ↔ 175/506</p> <p>6/6 → 1170/1161 ↗ 115/208 ↖</p> <p>154/185 → 104/84 ↗ 435/326 ↖</p>	<p>← 1260/1706 301/243</p> <p>1609/1584 → 31/34 ↘</p> <p>30/48 → 183/284 ↗</p>	<p>↖ 73/152 ↘ 343/451</p> <p>↗ 371/418 ↘ 1432/1588 ↔ 117/133</p> <p>160/179 → 1461/1636 ↗ 25/19 ↖</p> <p>31/28 → 6/10 ↗ 158/112 ↖</p>	<p>↖ 768/960 ↘ 413/393</p> <p>↗ 1211/1337 ↘ 205/412</p> <p>1252/1353 → 940/928 ↘</p>		

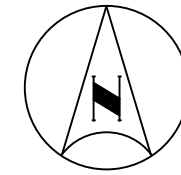
Note: Volumes reflect PCE adjustments.

LEGEND:

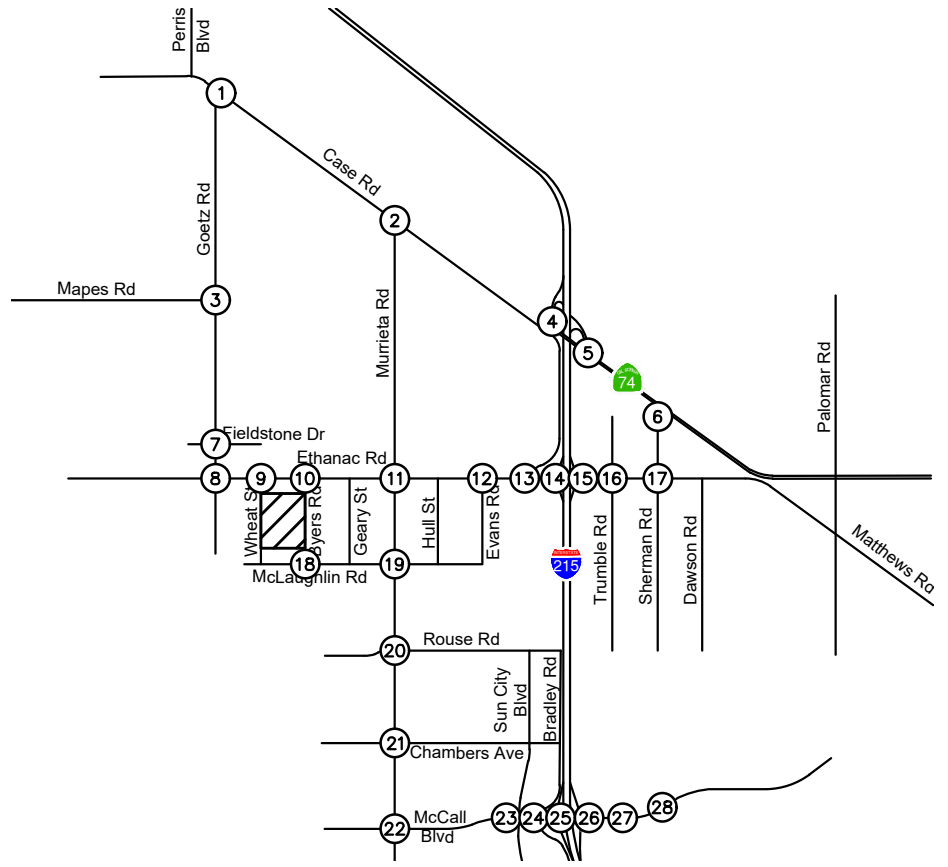
- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 13A
OPENING YEAR 2024 CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES





NOT TO SCALE



15. I-215 NB Ramps at Ethanac Rd	16. Trumble Rd at Ethanac Rd	17. Sherman Rd at Ethanac Rd	18. Byers Rd at McLaughlin Rd	19. Murrieta Rd at McLaughlin Rd	20. Murrieta Rd at Rouse Rd	21. Murrieta Rd at Chambers Ave	22. Murrieta Rd at McCall Blvd
<p>↖ 246/491 ↙ 631/765</p> <p>735/903 → 935/865 →</p> <p>↖ 784/982 ↘ 0/2 ↘ 418/395</p>	<p>↖ 137/211 ↘ 10/16 ↘ 8/32</p> <p>↖ 12/4 ↙ 555/868 ↘ 65/47</p> <p>152/119 → 1066/982 → 96/77 →</p> <p>↖ 126/151 ↘ 10/5 ↘ 36/39</p>	<p>↖ 221/209 ↘ 7/2 ↘ 35/19</p> <p>↖ 16/28 ↙ 457/638 ↘ 0/2</p> <p>246/300 → 766/564 → 76/64 →</p> <p>↖ 31/85 ↘ 3/5 ↘ 2/2</p>	<p>↖ 9/29 ↘ 15/19</p> <p>↖ 34/32 ↙ 0/10 ↘ 0/11</p> <p>0/56 →</p> <p>↖ 26/17</p>	<p>↖ 2/7 ↘ 323/781 ↘ 13/27</p> <p>↖ 33/24 ↙ 29/54</p> <p>6/6 →</p> <p>18/22 →</p> <p>↖ 35/34 ↘ 644/577 ↘ 29/33</p>	<p>↖ 82/290 ↘ 258/504 ↘ 31/75</p> <p>↖ 48/68 ↙ 3/11 ↘ 11/4</p> <p>249/164 → 19/8 → 84/53 →</p> <p>↖ 29/91 ↘ 396/407 ↘ 7/13</p>	<p>↖ 9/46 ↘ 484/515 ↘ 39/53</p> <p>↖ 22/63 ↙ 11/33 ↘ 7/6</p> <p>36/15 → 47/25 → 132/76 →</p> <p>↖ 64/140 ↘ 412/606 ↘ 2/10</p>	<p>↖ 98/51 ↘ 262/274 ↘ 197/230</p> <p>↖ 176/305 ↙ 120/162 ↘ 59/190</p> <p>84/40 → 202/128 → 1/1 →</p> <p>↖ 0/3 ↘ 260/387 ↘ 214/201</p>
23. Sun City Blvd at McCall Blvd	24. Bradley Rd at McCall Blvd	25. I-215 SB Ramps at McCall Blvd	26. I-215 NB Ramps at McCall Blvd	27. Encanto Dr at McCall Blvd	28. Sherman Rd at McCall Blvd		
<p>↖ 8/11 ↘ 48/82 ↘ 57/69</p> <p>↖ 45/242 ↙ 451/721 ↘ 144/71</p> <p>27/27 → 633/551 → 34/63 →</p> <p>↖ 33/85 ↘ 56/128 ↘ 61/157</p>	<p>↖ 4/3 ↘ 54/94 ↘ 149/122</p> <p>↖ 100/127 ↙ 619/987 ↘ 509/602</p> <p>18/28 → 734/748 → 51/71 →</p> <p>↖ 43/60 ↘ 47/89 ↘ 357/547</p>	<p>↖ 543/614 ↘ 3/3 ↘ 561/721</p> <p>↖ 952/998 ↙ 478/487</p> <p>1038/1019 → 485/454 →</p>	<p>↖ 804/525 ↙ 1220/986</p> <p>384/390 → 822/1326 →</p> <p>↖ 271/545 ↘ 0/4 ↘ 404/731</p>	<p>↖ 204/210 ↘ 19/18 ↘ 32/32</p> <p>↖ 33/23 ↙ 1505/1042 ↘ 76/34</p> <p>156/285 → 928/1432 → 123/392 →</p> <p>↖ 308/259 ↘ 30/20 ↘ 85/42</p>	<p>↖ 189/146 ↘ 11/3 ↘ 56/34</p> <p>↖ 57/14 ↙ 1213/801 ↘ 23/15</p> <p>216/151 → 700/1125 → 56/114 →</p> <p>↖ 104/90 ↘ 6/1 ↘ 28/8</p>		

Note: Volumes reflect PCE adjustments.

LEGEND:

- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 13B
OPENING YEAR 2024 CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES



**TABLE 9
SUMMARY OF INTERSECTION OPERATION
OPENING YEAR 2024 CUMULATIVE PLUS PROJECT**

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Change in Delay	Project-Related Effect?	Without Project		With Project		Change in Delay	Project-Related Effect?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	Goetz Rd at Case Rd	S	37.3	D	37.1	D	-0.2	No	29.4	C	30.0	C	0.6	No
2	Murrieta Rd at Case Rd	U	10.0	B	10.0	B	0.0	No	12.3	B	12.3	B	0.0	No
3	Goetz Rd at Mapes Rd	S	33.7	C	33.9	C	0.2	No	37.7	D	37.9	D	0.2	No
4	I-215 SB Ramps/SR-74 at Bonnie Dr	S	14.0	B	13.8	B	-0.2	No	17.4	B	17.2	B	-0.2	No
5	I-215 NB Ramps at SR-74	S	13.6	B	13.6	B	0.0	No	19.5	B	20.0	B	0.5	No
6	SR-74 at Sherman Rd	S	28.3	C	28.4	C	0.1	No	30.8	C	31.1	C	0.3	No
7	Goetz Rd at Fieldstone Dr	S	15.7	B	15.3	B	-0.4	No	11.2	B	11.0	B	-0.2	No
8	Goetz Rd at Ethanac Rd	S	45.2	D	47.5	D	2.3	No	46.3	D	48.5	D	2.2	No
9	Wheat St at Ethanac Rd	U	12.5	B	120.4	F	107.9	Yes	11.8	B	251.0	F	239.2	Yes
10	Byers Rd at Ethanac Rd	U	14.2	B	190.6	F	176.4	Yes	46.9	E	>180	F	-	Yes
11	Murrieta Rd at Ethanac Rd	S	103.3	F	119.3	F	16.0	Yes	277.8	F	543.1	F	265.3	Yes
12	Evans Rd at Ethanac Rd	U	>180	F	>180	F	-	Yes	>180	F	>180	F	-	Yes
13	Barnett Rd/Case Rd at Ethanac Rd	S	39.1	D	48.0	D	8.9	No	38.8	D	54.5	D	15.7	No
14	I-215 SB Ramps at Ethanac Rd	S	121.1	F	165.2	F	44.1	Yes	233.3	F	335.6	F	102.3	Yes
15	I-215 NB Ramps at Ethanac Rd	S	164.3	F	215.2	F	50.9	Yes	316.8	F	400.7	F	83.9	Yes
16	Trumble Rd at Ethanac Rd	S	48.3	D	49.2	D	0.9	No	55.6	E	61.9	E	6.3	Yes
17	Sherman Rd at Ethanac Rd	U	>180	F	>180	F	-	Yes	>180	F	>180	F	-	Yes
18	Byers Rd at McLaughlin Rd	U	7.0	A	6.9	A	-0.1	No	7.3	A	7.3	A	0.0	No
19	Murrieta Rd at McLaughlin Rd	U	25.4	D	29.8	D	4.4	No	122.2	F	207.3	F	85.1	Yes
20	Murrieta Rd at Rouse Rd	U	118.6	F	176.7	F	58.1	Yes	>180	F	>180	F	-	Yes
21	Murrieta Rd at Chambers Ave	U	35.0	E	38.8	E	3.8	Yes	38.5	E	54.1	F	15.6	Yes
22	Murrieta Rd at McCall Blvd	S	37.1	D	38.0	D	0.9	No	41.8	D	44.7	D	2.9	No
23	Sun City Blvd at McCall Blvd	S	23.8	C	23.6	C	-0.2	No	25.4	C	25.2	C	-0.2	No
24	Bradley Rd at McCall Blvd	S	32.2	C	32.1	C	-0.1	No	33.8	C	34.5	C	0.7	No
25	I-215 SB Ramps at McCall Blvd	S	52.8	D	53.3	D	0.5	No	70.7	E	75.8	E	5.1	Yes
26	I-215 NB Ramps at McCall Blvd	S	37.7	D	38.2	D	0.5	No	56.8	E	57.4	E	0.6	Yes
27	Encanto Dr at McCall Blvd	S	42.3	D	45.1	D	2.8	No	42.2	D	45.4	D	3.2	No
28	Sherman Rd at McCall Blvd	S	32.9	C	33.6	C	0.7	No	22.3	C	22.6	C	0.3	No

Notes:

- **Bold and Shaded** values indicate intersections operating at an unacceptable Level of Service
 - Delay values for signalized intersections represent the sum of average vehicle delay on all intersection approaches.
 - Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.
- S = Signalized
U = Unsignalized

TABLE 10
SUMMARY OF ROADWAY SEGMENT ANALYSIS
OPENING YEAR 2024 CUMULATIVE PLUS PROJECT

Roadway	Segment	Opening Year 2024 Cumulative ADT	Project ADT	Opening Year 2024 Plus Project ADT	LOS E Capacity ¹	V/C	LOS
Case Road	Goetz Road to Murrieta Road	9,133	0	9,133	13,000	0.703	B
	Murrieta Road to Mapes Road	6,802	77	6,879	13,000	0.529	A
Goetz Road	Case Road to Mapes Road	9,101	264	9,365	37,000	0.253	A
	Mapes Road to Ethanac Road	13,282	396	13,678	13,000	1.052	F
Murrieta Road	Case Road to Ethanac Road	2,988	77	3,065	13,000	0.236	A
	Ethanac Road to Rouse Road	14,088	357	14,445	13,000	1.111	F
	Chambers Avenue to McCall Blvd	13,964	422	14,386	25,900	0.555	A
Ethanac Road	Goetz Road to Wheat Street	16,875	572	17,447	37,000	0.472	A
	Wheat Street to Murrieta Road	25,136	3,985	29,121	37,000	0.787	C
	Murrieta Road to Evans Road	32,094	3,551	35,645	37,000	0.963	E
	Case Road to I-215 SB Ramps	44,947	3,551	48,498	37,000	1.311	F
	I-215 SB Ramps to I-215 NB Ramps	33,602	1,956	35,558	27,750	1.281	F
	I-215 NB Ramps to Trumble Road	23,667	308	23,975	13,000	1.844	F
McLaughlin Road	Byers Road to Murrieta Road	286	164	450	13,000	0.035	A
Byers Road	Ethanac Road to McLaughlin Road	2,077	1,588	3,665	13,000	0.282	A
Wheat Street	Ethanac Road to McLaughlin Road	738	2,968	3,706	13,000	0.285	A
McCall Blvd	Murrieta Road to Sun City Blvd	13,118	257	13,375	34,100	0.392	A
	Bradley Road to I-215 SB Ramps	34,293	257	34,550	34,100	1.013	F
	I-215 SB Ramps to I-215 NB Ramps	35,631	334	35,965	34,100	1.055	F
	I-215 NB Ramps to Encanto Drive	39,588	438	40,026	37,000	1.082	F

Notes: 1 Source: City of Menifee Engineering Department, LOS Traffic Study Guidelines, October 2020
ADT = Average Daily Traffic
V / C = Volume to Capacity
LOS = Level of Service

TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signal warrant analyses were conducted for the following unsignalized intersections:

- #9 – Wheat Street at Ethanac Road
- #10 – Byers Road at Ethanac Road
- #12 - Evans Road at Ethanac Road
- #17 - Sherman Road at Ethanac Road
- #19 - Murrieta Rd at McLaughlin Road
- #20 - Murrieta Road at Rouse Road
- #21 - Murrieta Road at Chambers Avenue

Signal warrants were based on the 2014 California Manual on Uniform Traffic Control Devices (CA MUTCD). The warrants were conducted using Warrant 3 (Peak Hour Warrant) for the following conditions:

- Existing Plus Project
- Opening Year 2024 Cumulative
- Opening Year 2024 Cumulative Plus Project

Traffic signal warrant analysis worksheets are provided in **Appendix E**. Based on the signal warrant analysis, Signal Warrant 3 was met under following conditions:

- Existing Plus Project
 - #9 – Wheat Street at Ethanac Road: PM
 - #10 - Byers Road at Ethanac Road: PM
- Opening Year 2024 Cumulative
 - #12 - Evans Road at Ethanac Road: AM & PM
 - #17 - Sherman Road at Ethanac Road: AM & PM
 - #20 - Murrieta Road at Rouse Road: PM
- Opening Year 2024 Cumulative Plus Project
 - #9 – Wheat Street at Ethanac Road: AM & PM
 - #10 - Byers Road at Ethanac Road: AM & PM
 - #12 - Evans Road at Ethanac Road: AM & PM
 - #17 - Sherman Road at Ethanac Road: AM & PM
 - #20 - Murrieta Road at Rouse Road: PM

The CA MUTCD specifically states that, “The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.” The reference document goes on to state a number of other factors to take into account when considering a signal for a specific location, including whether or not a signal would improve the overall safety of the intersection, whether it would benefit or disrupt progressive traffic flow, and consideration of site-specific characteristics such as queuing, signal spacing, and overall delay to the main street through movements. The decision to install a traffic signal should be based on engineering judgement, and not solely upon satisfying a single peak hour warrant.

STORAGE CAPACITY AT LEFT-TURN POCKETS

Queue lengths at left-turn pockets were assessed at the following locations:

- #9 – Wheat Street at Ethanac Road
 - Westbound Left Turn
- #10 – Byers Road at Ethanac Road
 - Westbound Left Turn

A summary of existing left-turn pocket storage capacity, as well as 50th and 95th percentile queue lengths at the locations noted above are shown on **Table 11**. The table shows that the 50th and 95th percentile queues would exceed the available existing storage capacity at Intersection #10 under Opening Year 2024 Cumulative Plus Project Plus Improvements conditions. The left-turn pocket capacity worksheets are provided in **Appendix C** of this report.

RECOMMENDED IMPROVEMENTS

Based on the City of Menifee *LOS Traffic Study Guidelines* (October 2020), under Opening Year 2024 Cumulative Plus Project Conditions, the project would cause a project-related effect at the following intersections:

- #9 - Wheat Street at Ethanac Road (Direct effect)
- #10 - Byers Road at Ethanac Road (Cumulative effect)
- #11 - Murrieta Road at Ethanac Road (Cumulative effect)
- #12 - Evans Road at Ethanac Road (Cumulative effect)
- #14 - I-215 SB Ramps at Ethanac Road (Cumulative effect)
- #15 - I-215 NB Ramps at Ethanac Road (Cumulative effect)
- #16 - Trumble Road at Ethanac Road (Cumulative effect)
- #17 - Sherman Road at Ethanac Road (Cumulative effect)
- #19 - Murrieta Rd at McLaughlin Road (Cumulative effect)
- #20 - Murrieta Road at Rouse Road (Cumulative effect)
- #21 - Murrieta Road at Chambers Avenue (Cumulative effect)
- #25 - I-215 SB Ramps at McCall Boulevard (Cumulative effect)
- #26 - I-215 NB Ramps at McCall Boulevard (Cumulative effect)

TABLE 11
SUMMARY OF LEFT-TURN POCKET STORAGE CAPACITY

Intersection	Left-Turn Movement	Storage Capacity (ft/ln)	Peak Hour	Peak Hour Queue Length (ft/ln)							
				Existing		Opening Year 2024 Cumulative		Opening Year 2024 Cumulative Plus Project		Opening Year 2024 Cumulative Plus Project With Improvement	
				50th Percentile	95th Percentile	50th Percentile	95th Percentile	50th Percentile	95th Percentile	50th Percentile	95th Percentile
Wheat St at Ethanac Rd (#9)	WBL	100	AM	N/A ¹	0	N/A ¹	0	N/A ¹	45	N/A ¹	45
			PM	N/A ¹	0	N/A ¹	0	N/A ¹	19	N/A ¹	19
Byers Rd at Ethanac Rd (#10)	WBL	100	AM	N/A ¹	1	N/A ¹	10	N/A ¹	60	210	183
			PM	N/A ¹	1	N/A ¹	11	N/A ¹	49	329	294

Notes:
¹ 50th percentile queue not reported for unsignalized intersections

Implementation of the following improvements under Opening Year 2024 Cumulative Plus Project conditions are recommended to address the project-related effect at the study intersections:

#9 – Wheat Street at Ethanac Road

- Modify the existing northbound shared lane to a right-turn only (northbound left-out restricted)

#10 - Byers Road at Ethanac Road

- Install traffic signal (City DIF)
- Modify the existing northbound shared lane to a right-turn lane
- Add a dedicated northbound left-turn lane
- Add protected westbound left-turn phasing
- Increase the left turn pocket length to 350 feet

#11 - Murrieta Road at Ethanac Road:

- Add a dedicated northbound right-turn lane
- Add northbound right-turn overlap phasing
- Add eastbound right-turn lane
- Add a dedicated northbound left-turn lane
- Modify northbound/southbound phasing from split to protected

#12 - Evans Road at Ethanac Road:

- Install traffic signal (City DIF)
- Modify the existing northbound shared lane to a right-turn lane
- Add a northbound left-turn lane
- Add northbound right-turn overlap phasing

#14 - I-215 SB Ramps at Ethanac Road (Regional TUMF):

- Add 2nd eastbound through lane
- Add 2nd westbound left-turn lane
- Modify southbound approach to provide one left-turn, one right-turn, and one shared Left/Thru/Right movements
- Add free eastbound right-turn lane

#15 - I-215 NB Ramps at Ethanac Road (Regional TUMF):

- Add 2nd eastbound through lane
- Add 2nd westbound through lane
- Add a dedicated westbound right-turn lane
- Add 2nd eastbound left-turn lane
- Add 2nd northbound left-turn lane

#16 - Trumble Road at Ethanac Road:

- Add 2nd eastbound through lane
- Add 2nd westbound through lane

#17 - Sherman Road at Ethanac Road:

- Install traffic signal (City DIF)
- Add 2nd eastbound through lane
- Add 2nd westbound through lane
- Modify the northbound approach to include a dedicated left-turn lane and a shared left/through/right lane
- Add a dedicated southbound left-turn lane
- Add a dedicated eastbound left-turn lane
- Add a dedicated westbound left-turn lane
- Add protected left-turn phasing on the eastbound/westbound approaches
- Add split phasing on the northbound/southbound approaches

#20 - Murrieta Road at Rouse Road:

- Install traffic signal (City DIF)

#25 - I-215 SB Ramps at McCall Boulevard:

- Add 2nd southbound right-turn lane
- Add southbound left-turn lane

#26 - I-215 NB Ramps at McCall Boulevard:

- Add 2nd northbound right-turn lane

A summary of the intersection operation before and after implementation of the recommended improvements is provided on **Table 12**. A copy of the Regional TUMF Program improvements for the Ethanac Road/I-215 freeway interchange is provided in **Appendix G**.

Based on the City of Menifee *LOS Traffic Study Guidelines* (October 2020), under Opening Year 2024 Cumulative Plus Project Conditions, the project-would cause a project-related effect at the following roadway sections:

- Goetz Road: Mapes Road to Ethanac Road (Cumulative effect)
- Murrieta Road: Ethanac Road to Rouse Road (Cumulative effect)
- Ethanac Road: Murrieta Road to Evans Road (Cumulative effect)
- Ethanac Road: Case Road to I-215 SB Ramps (Cumulative effect)
- Ethanac Road: I-215 SB Ramps to I-215 NB Ramps (Cumulative effect)
- Ethanac Road: I-215 NB Ramps to Trumble Road (Cumulative effect)
- McCall Boulevard: Bradley Road to I-215 SB Ramps (Cumulative effect)
- McCall Boulevard: I-215 SB Ramps to I-215 NB Ramps (Cumulative effect)
- McCall Boulevard: I-215 NB Ramps to Encanto Drive (Cumulative effect)

Roadway improvements are recommended to address deficient roadway segments. A summary of the roadway analysis after implementation of the recommended roadway improvements is provided on **Table 13**.

**TABLE 12
SUMMARY OF INTERSECTION OPERATION
RECOMMENDED IMPROVEMENTS**

Int. #	Intersection	Improvements	Peak Hour	Proposed Traffic Control	OPENING YEAR 2024 CUMULATIVE PLUS PROJECT					
					Without Project		With Project		With Improvements	
					Delay	LOS	Delay	LOS	Delay	LOS
9	Wheat St at Ethanac Rd	•Modify the existing northbound shared lane to a right-turn only (northbound left-out restricted)	AM	U	-	A	120.4	F	14.5	B
			PM	U	-	A	251.0	F	24.1	C
10	Byers Rd at Ethanac Rd	•Install traffic signal •Modify the existing northbound shared lane to a right-turn lane •Add a dedicated northbound left-turn lane •Add protected westbound left-turn phasing •Increase the left turn pocket length to 350 feet	AM	S	14.2	B	190.6	F	13.6	B
			PM	S	46.9	E	>180	F	14.1	B
11	Murrieta Rd at Ethanac Rd	•Add a dedicated northbound right-turn lane •Add northbound right-turn overlap phasing •Add eastbound right-turn lane •Add a dedicated northbound left-turn lane •Modify northbound/southbound phasing from split to protected	AM	S	103.3	F	119.3	F	29.3	C
			PM	S	277.8	F	543.1	F	46.3	D
12	Evans Rd at Ethanac Rd	•Install traffic signal •Modify the existing northbound shared lane to a right-turn lane •Add a northbound left-turn lane •Add northbound right-turn overlap phasing	AM	S	>180	F	>180	F	17.0	B
			PM	S	>180	F	>180	F	14.9	B
14	I-215 SB Ramps at Ethanac Rd	•Add 2nd eastbound through lane •Add 2nd westbound left-turn lane •Modify southbound approach to provide one left turn, one right-turn, and one shared Left/Thru/Right movements •Add free eastbound right-turn lane	AM	S	121.1	F	165.2	F	26.8	C
			PM	S	233.3	F	335.6	F	39.1	D
15	I-215 NB Ramps at Ethanac Rd	•Add 2nd eastbound through lane •Add 2nd westbound through lane •Add a dedicated westbound right-turn lane •Add 2nd eastbound left-turn lane •Add 2nd northbound left-turn lane	AM	S	164.3	F	215.2	F	34.7	C
			PM	S	316.8	F	400.7	F	51.9	D
16	Trumble Rd at Ethanac Rd	•Add 2nd eastbound through lane •Add 2nd westbound through lane	AM	S	48.3	D	49.2	D	27.9	C
			PM	S	55.6	E	61.9	E	31.9	C
17	Sherman Rd at Ethanac Rd	•Install traffic signal •Add 2nd eastbound through lane •Add 2nd westbound through lane •Modify the northbound approach to include a dedicated left-turn lane and a shared left/through/right lane •Add a dedicated southbound left-turn lane •Add a dedicated eastbound left-turn lane •Add a dedicated westbound left-turn lane •Add protected left-turn phasing on the eastbound/westbound approaches •Add split phasing on the northbound/southbound approaches	AM	S	>180	F	>180	F	28.4	C
			PM	S	>180	F	>180	F	32.1	C
20	Murrieta Rd at Rouse Rd	•Install Traffic Signal	AM	S	118.6	F	176.7	F	19.8	B
			PM	S	>180	F	>180	F	13.4	B
25	I-215 SB Ramps at McCall Blvd	•Add 2nd southbound right-turn lane •Add southbound left-turn lane	AM	S	52.8	D	53.3	D	31.2	C
			PM	S	70.7	E	75.8	E	34.4	C
26	I-215 NB Ramps at McCall Blvd	•Add 2nd northbound right-turn lane	AM	S	37.7	D	38.2	D	27.4	C
			PM	S	56.8	E	57.4	E	35.1	D

Notes:
- **Bold and Shaded** values indicate intersections operating at an unacceptable Level of Service
- Delay values for signalized intersections represent the sum of average vehicle delay on all intersection approaches.
S = Signalized
U = Unsignalized

TABLE 13
SUMMARY OF ROADWAY SEGMENT ANALYSIS WITH IMPROVEMENTS
OPENING YEAR 2024 CUMULATIVE PLUS PROJECT

Roadway	Segment	Existing Configuration	Recommended Configuration	Opening Year 2024 Cumulative ADT	Project ADT	Opening Year 2024 Plus Project ADT	Recommended LOS E Capacity ¹	V/C	LOS
Goetz Road	Mapes Road to Ethanac Road	2-Lane Arterial	4-Lane Arterial	13,282	396	13,678	37,000	0.370	A
Murrieta Road	Ethanac Road to Rouse Road	2-Lane Secondary	4-Lane Secondary	14,088	357	14,445	25,900	0.558	A
Ethanac Road	Murrieta Road to Evans Road	4-Lane Arterial	6-Lane Urban Arterial	32,094	3,551	35,645	56,300	0.633	B
	Case Road to I-215 SB Ramps	4-Lane Arterial	6-Lane Urban Arterial	44,947	3,551	48,498	56,300	0.861	D
	I-215 SB Ramps to I-215 NB Ramps	3-Lane Arterial	6-Lane Urban Arterial	33,602	1,956	35,558	56,300	0.632	B
	I-215 NB Ramps to Trumble Road	2-Lane Arterial	4-Lane Arterial	23,667	308	23,975	37,000	0.648	B
McCall Blvd	Bradley Road to I-215 SB Ramps	4-Lane Major	4-Lane Arterial ²	34,293	257	34,550	37,000	0.934	E
	I-215 SB Ramps to I-215 NB Ramps	4-Lane Major	4-Lane Arterial ²	35,631	334	35,965	37,000	0.972	E
	I-215 NB Ramps to Encanto Drive	4-Lane Arterial	6-Lane Urban Arterial ²	39,588	438	40,026	56,300	0.711	C

Notes: ¹ Source: City of Menifee Engineering Department, LOS Traffic Study Guidelines, October 2020

² Roadway segment is currently built to ultimate configuration.

ADT = Average Daily Traffic

V / C = Volume to Capacity

LOS = Level of Service

Recommended improvements may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair-share contribution toward future improvements, or a combination of these approaches. The project fair share proportion for non-programmed improvements at deficient study intersections and roadway segments under Opening Year 2024 Cumulative Plus Project conditions is shown on **Table 14**. The proposed project will pay fair share for non-programmed improvements at deficient study intersections. For programmed improvements, the developer will pay into the regional transportation fee program.

SITE ACCESS AND CIRCULATION

The project site plan presented on Figure 2 (previously referenced) indicates that vehicular access provisions for the project site would consist of two full-movement, 40-foot driveways on Byers Road and two full-movement, 40-foot driveways on Wheat Street.

On-site drive aisles would provide two-way circulation on site. The proposed project would include 234 trailer stalls and 389 passenger car stalls. It is recommended that the project install truck turn restriction signs for all driveways to restrict trucks from traveling to/from the south on Wheat Street and Byers Road.

SITE ADJACENT ROADWAY IMPROVEMENTS

The project would construct the following site adjacent roadway improvements:

- **Byers Road**

Construction along the Project frontage to its ultimate half width as a 2-Lane Industrial Collector (78-foot right-of-way). Based on conversation with City of Menifee Staff, the intersection of Ethanac Road and Byers Road would be signalized.

- **Wheat Street**

Construction along the Project frontage to its ultimate half width as a 2-Lane Modified Industrial Collector (74-foot right-of-way).

TABLE 14
SUMMARY OF PROJECT FAIR SHARE
OPENING YEAR 2024 CUMULATIVE PLUS PROJECT

Int. #	Intersection	AM Peak Hour					PM Peak Hour				
		Total Volume		Total	Project	%age	Total Volume		Total	Project	%age
		2022	2024	Growth	Trips		2022	2024	Growth	Trips	
Opening Year 2024 Cumulative Conditions											
9	Wheat St at Ethanac Rd	1,199	2,166	967	384	17.7%	1,132	2,445	1,313	591	24.2%
10	Byers Rd at Ethanac Rd	1,218	2,504	1,286	545	21.8%	1,148	2,739	1,591	772	28.2%
11	Murrieta Rd at Ethanac Rd	1,664	3,352	1,688	536	31.8%	1,712	3,877	2,165	747	34.5%
12	Evans Rd at Ethanac Rd	1,406	3,414	2,008	481	24.0%	1,365	3,899	2,534	664	26.2%
14	I-215 SB Ramps at Ethanac Rd	2,398	4,789	2,391	481	20.1%	2,381	5,383	3,002	664	22.1%
15	I-215 NB Ramps at Ethanac Rd	1,935	3,749	1,814	247	13.6%	2,050	4,403	2,353	375	15.9%
16	Trumble Rd at Ethanac Rd	1,360	2,273	913	37	4.1%	1,415	2,551	1,136	59	5.2%
17	Sherman Rd at Ethanac Rd	936	1,860	924	37	4.0%	782	1,918	1,136	59	5.2%
20	Murrieta Rd at Rouse Rd	487	1,217	730	67	9.2%	725	1,688	963	98	10.2%
25	I-215 SB Ramps at McCall Blvd	3,105	4,060	955	39	4.1%	3,062	4,296	1,234	79	6.4%
26	I-215 NB Ramps at McCall Blvd	2,746	3,905	1,159	65	1.7%	3,031	4,507	1,476	86	1.9%
Roadway	Segment	Daily Traffic									
		Total Volume		Total	Project	Fair Share					
		2022	2024	Growth	Trips	%age					
Goetz Road	Mapes Road to Ethanac Road	11,487	13,678	2,191	396	18.1%					
Murrieta Road	Ethanac Road to Rouse Road	7,947	14,445	6,498	357	5.5%					
Ethanac Road	Murrieta Road to Evans Road	17,715	35,645	17,930	3,551	19.8%					
	Case Road to I-215 SB Ramps	25,161	48,498	23,337	3,551	15.2%					
	I-215 SB Ramps to I-215 NB Ramps	18,907	35,558	16,651	1,956	11.7%					
	I-215 NB Ramps to Trumble Road	14,139	23,975	9,836	308	3.1%					
McCall	Bradley Road to I-215 SB Ramps	28,352	34,550	6,198	257	4.1%					
	I-215 SB Ramps to I-215 NB Ramps	27,453	35,965	8,512	334	3.9%					
	I-215 NB Ramps to Encanto Drive	27,638	40,026	12,388	438	3.5%					
Notes: - Fair Share percentage is to be applied to non-programmed improvements											

FINDINGS AND CONCLUSIONS

- The proposed CADO Warehouse project site located in the City of Menifee. The project will involve the construction of an industrial building totaling 700,037 square feet.
- The project is estimated to generate 4,716 PCE trips daily, with 639 PCE trips in the morning peak hour and 879 PCE trips in the evening peak hour.
- Vehicular access provisions for the proposed project would consist of two driveways on Byers Road and two driveways on Wheat Street.
- The project opening year is anticipated to be Year 2024. The Opening Year 2024 Cumulative condition includes a 2% ambient annual growth rate. With the addition of ambient growth and Cumulative Projects traffic, the following intersections would operate at an unacceptable Level of Service:
 - #10 - Byers Road at Ethanac Road
 - #11 - Murrieta Road at Ethanac Road
 - #12 - Evans Road at Ethanac Road
 - #14 - I-215 SB Ramps at Ethanac Road
 - #15 - I-215 NB Ramps at Ethanac Road
 - #16 - Trumble Road at Ethanac Road
 - #17 - Sherman Road at Ethanac Road
 - #19 - Murrieta Rd at McLaughlin Road
 - #20 - Murrieta Road at Rouse Road
 - #21 - Murrieta Road at Chambers Avenue
 - #25 - I-215 SB Ramps at McCall Boulevard
 - #26 - I-215 NB Ramps at McCall Boulevard
- Project traffic was added to Opening Year 2024 traffic volumes to establish the conditions for Opening Year 2024 Cumulative Plus Project condition. Under this condition, the following intersections continue to operate at an unacceptable Level of Service:
 - #9 - Wheat Street at Ethanac Road
 - #10 - Byers Road at Ethanac Road
 - #11 - Murrieta Road at Ethanac Road
 - #12 - Evans Road at Ethanac Road
 - #14 - I-215 SB Ramps at Ethanac Road
 - #15 - I-215 NB Ramps at Ethanac Road
 - #16 - Trumble Road at Ethanac Road
 - #17 - Sherman Road at Ethanac Road
 - #19 - Murrieta Rd at McLaughlin Road
 - #20 - Murrieta Road at Rouse Road
 - #21 - Murrieta Road at Chambers Avenue
 - #25 - I-215 SB Ramps at McCall Boulevard
 - #26 - I-215 NB Ramps at McCall Boulevard

- Based on the City of Menifee *LOS Traffic Study Guidelines* (October 2020), under Opening Year 2024 Cumulative Plus Project Conditions, the project-would cause a project-related effect at the following intersections:
 - #9 - Wheat Street at Ethanac Road (Direct effect)
 - #10 - Byers Road at Ethanac Road (Cumulative effect)
 - #11 - Murrieta Road at Ethanac Road (Cumulative effect)
 - #12 - Evans Road at Ethanac Road (Cumulative effect)
 - #14 - I-215 SB Ramps at Ethanac Road (Cumulative effect)
 - #15 - I-215 NB Ramps at Ethanac Road (Cumulative effect)
 - #16 - Trumble Road at Ethanac Road (Cumulative effect)
 - #17 - Sherman Road at Ethanac Road (Cumulative effect)
 - #19 - Murrieta Rd at McLaughlin Road (Cumulative effect)
 - #20 - Murrieta Road at Rouse Road (Cumulative effect)
 - #21 - Murrieta Road at Chambers Avenue (Cumulative effect)
 - #25 - I-215 SB Ramps at McCall Boulevard (Cumulative effect)
 - #26 - I-215 NB Ramps at McCall Boulevard (Cumulative effect)

- Under Opening Year 2024 Cumulative Plus Project conditions, the following study roadway segments would operate at an unacceptable Level of Service on a daily basis:
 - Goetz Road: Mapes Road to Ethanac Road - LOS F
 - Murrieta Road: Ethanac Road to Rouse Road - LOS F
 - Ethanac Road: Murrieta Road to Evans Road - LOS E
 - Ethanac Road: Case Road to I-215 SB Ramps - LOS F
 - Ethanac Road: I-215 SB Ramps to I-215 NB Ramps - LOS F
 - Ethanac Road: I-215 NB Ramps to Trumble Road - LOS F
 - McCall Boulevard: Bradley Road to I-215 SB Ramps - LOS F
 - McCall Boulevard: I-215 SB Ramps to I-215 NB Ramps - LOS F
 - McCall Boulevard: I-215 NB Ramps to Encanto Drive - LOS F

- Recommended improvements under applicable Opening Year 2024 Cumulative Plus Project conditions were provided to address the project's effect at study intersections and roadway segments.

- Recommended improvements may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair-share contribution toward future improvements, or a combination of these approaches.

APPENDIX A

APPROVED SCOPING AGREEMENT



CITY OF MENIFEE ENGINEERING DEPARTMENT

<i>FOR USE BY STAFF</i>
Permit#: _____
Received Date: _____

TRAFFIC SCOPING/STUDY

APPLICATION

SUBMITTAL REQUIREMENTS

THIS FORM MUST BE SUBMITTED WITH FIRST PLAN CHECK:

Project No: CADO Warehouse Project Schedule: _____ (if applicable)

Project Description: 700,037 square foot warehouse/industrial building with 389 vehicular parking stalls and 234 trailer stalls.

Name of Owner: _____

Signature: _____ Phone #: _____

Mailing Address: _____ FAX number: _____

_____ Email Address: _____

Name of Applicant: _____ Contact: _____

Authorized Signature: _____ Phone #: _____

Mailing Address: _____ FAX number: _____

_____ Email Address: _____

Submittal Requirements

- | | | | |
|----|-------|--------|-----------------------|
| 1. | _____ | 2 Sets | Site Plan |
| 2. | _____ | 2 Sets | Traffic/Scoping Study |
| 3. | _____ | 1 | \$1,000.00 – Deposit |

FIRST SUBMITTAL REQUIRMENTS

- A. The City reserves the right to reject the submitted plan package without performing any plan checks if any of the required plans or information items are missing.

I, the undersigned engineer, do verify that all the items necessary for this project and checked above are attached.



Signature

05-10-2022

Date

Civil Engineer's Stamp

Trevor Briggs, P.E.

Printed Name

Kimley-Horn and Associates, Inc

Firm Name

3880 Lemon Street, Suite 420, Riverside, CA 92501

Address

714-786-6117

Phone Number

Fax

trevor.briggs@kimley-horn.com

Email Address



ATTACHMENT A

SCOPING AGREEMENT FOR TRAFFIC IMPACT ANALYSIS

This letter acknowledges the City Menifee Engineering Department requirements for the traffic impact analysis of the following project. The analysis must follow the latest City Traffic Impact Analysis Guidelines dated January 2019

Case No. _____
 Related Cases -
 SP No. _____
 EIR No. _____
 GPA No. _____
 CZ No. _____

Project Name: CADO Warehouse Project
 Project Location: City of Menifee
 Project Description: 700,037 square foot warehouse/industrial building with 389 vehicular parking stalls and 234 trailer stalls.

	<u>Consultant</u>	<u>Developer</u>
Name:	<u>Kimley-Horn and Associates, Inc.</u>	_____
Address:	<u>3880 Lemon St Suite 420, Riverside, CA 92501</u>	_____
Telephone:	<u>714-786-6117</u>	_____

A. Trip Generation Source: ITE Trip Generation Manual, most recent edition (11th Edition)

Existing Land Use	<u>Vacant</u>	Proposed Land Use	<u>Warehouse/Industrial</u>
Existing Zoning	<u>EDC</u>	Proposed Zoning	<u>EDC</u>
Total Daily Trips	<u>N/A</u>		<u>4,716 Daily PCE trips</u>

	In	Out	Total
AM Trips	<u>517</u>	<u>122</u>	<u>639</u>
PM Trips	<u>343</u>	<u>536</u>	<u>879</u>

Internal Trip Allowance Yes No (_____ % Trip Discount)
 Pass-By Trip Allowance Yes No (_____ % Trip Discount)

(Attach additional sheet if this is a multi-use site with a breakdown of trips generated)

B. Trip Geographic Distribution: PC N 40% S 38% E 20% W 12%
 (See attached exhibit for detailed assignment) Truck 60% 40% 0% 0%

C. Background Traffic

Project Completion Year: 2023 Annual Ambient Growth Rate: 2%
 Other area projects to be included: _____

Please contact the Engineering Department or use the most recently provided data

Model/Forecast methodology if required Existing + Ambient Growth + Cumulative Projects + Project

D. Horizon Year Analysis: Does this project require a Horizon Year Analysis?

Yes No

E. Study intersections: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)

- 1. - **See Attachment C**
- 2. -
- 3. -
- 4. -

- 5. -
- 6. -
- 7. -
- 8. _____

F. Study Roadway Segments:

- 1. - **See Attachment C**
- 2. -
- 3. -
- 4. -

- 5. -
- 6. -
- 7. -
- 8. _____

G. Other Jurisdictional Impacts

Is this project within any other Agency's Sphere of Influence or one-mile radius of boundaries? Yes No

If so, name of Jurisdiction: Perris

H. Site Plan (please attach a legible 11'X17' copy) **See Attachment A**

I. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (To be filled out by Engineering Department)

Analyze all project driveways for required intersection geometry and lane configurations, storage for truck queuing, traffic control, sight distance, and operations. Will include site access and internal circulation, including truck turning movements, turning radius, roadway widths, and parking. VMT Analysis study will be performed.

Recommended by:

Trevor Briggs, P.E.
Consultant's Representative

5/10/2022
Date

Scoping Agreement Submitted on

5/10/2022
Date

Scoping Agreement Resubmitted on

Date

Approved Scoping Agreement:

City of Menifee
Engineering Department

Date

**ATTACHMENT B:
ROADWAY SEGMENT CAPACITY THRESHOLDS**

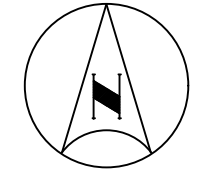
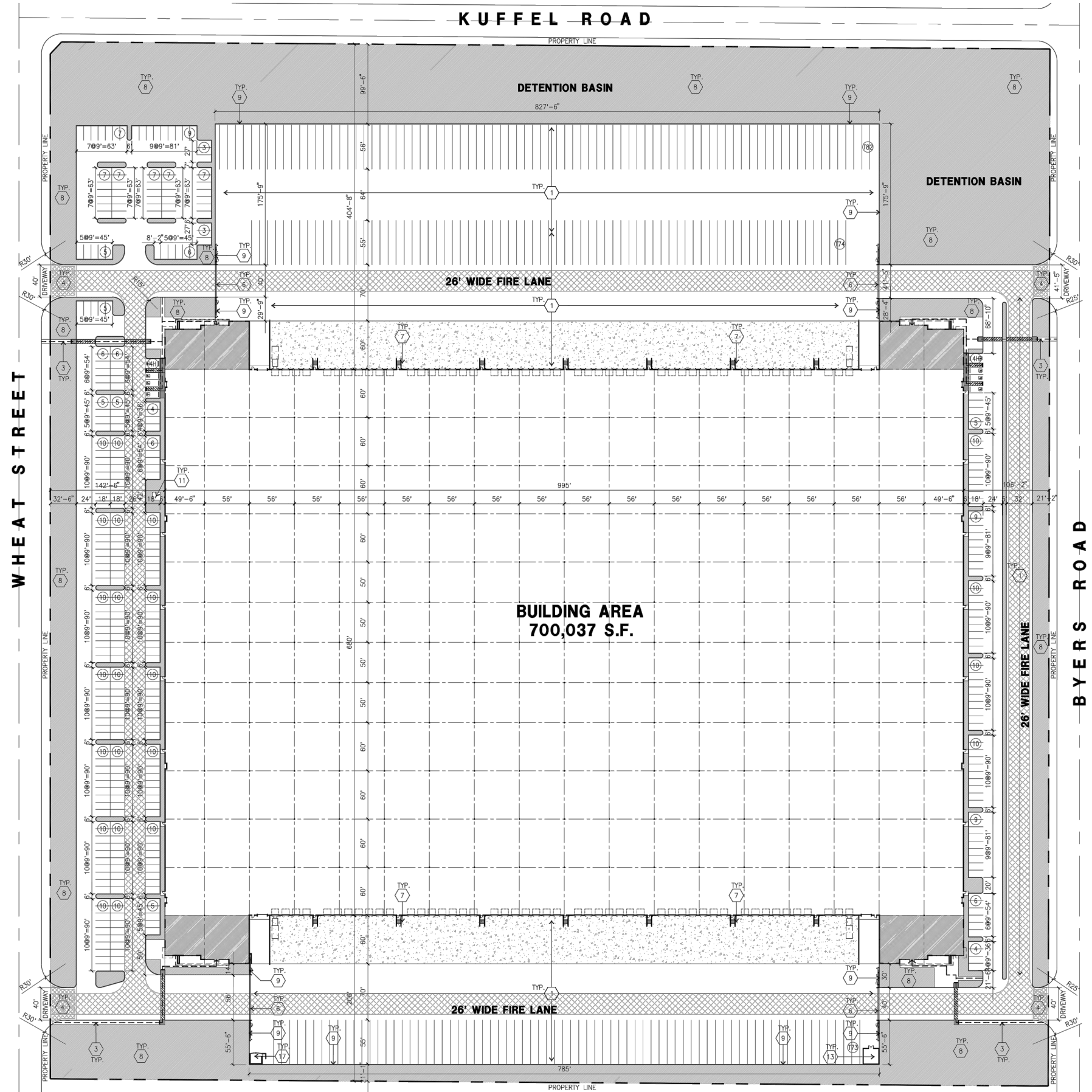
Roadway Classification	Number of Lanes	Maximum Two-Way Average Daily Traffic (ADT) Volume		
		LOS C	LOS D	LOS E
Collector	2	10,400	11,700	13,000
Secondary	4	20,700	23,300	25,900
Major	4	27,300	30,700	34,100
Arterial	4	29,600	33,400	37,000
Mountain Arterial	2	12,900	14,500	16,100
Mountain Arterial	4	25,500	28,700	31,900
Urban Arterial	6	45,000	50,600	56,300
Urban Arterial	8	69,000	78,000	87,000
Expressway	4	53,000	58,000	64,000
Expressway	6	79,000	87,000	95,000
Expressway	8	106,000	119,000	132,000
Freeway	4	80,000	91,000	100,000
Freeway	6	102,000	123,000	132,000
Freeway	8	136,000	164,000	176,000
Freeway	10	169,000	205,000	220,000
Ramp ⁽¹⁾	1	16,000	18,000	20,000

Footnotes:

1. Ramp Capacity is given as a one-way traffic volume.

Source: Riverside County Transportation Department

KUFFEL ROAD



NOT TO SCALE

ATTACHMENT A
SITE PLAN



ATTACHMENT B
SUMMARY OF PROJECT TRIP GENERATION
CADO WAREHOUSE PROJECT

TRIP GENERATION RATES

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Warehousing	150	KSF	1.710	0.131	0.039	0.170	0.050	0.130	0.180
High-Cube Fulfillment Center - Sort	155b	KSF	6.440	0.705	0.165	0.870	0.468	0.732	1.200

PROJECT TRIP GENERATION

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
High-Cube Fulfillment Center - Sort	700.037	KSF	4,508	494	116	610	328	512	840
Passenger Vehicles	97.00%		4,373	479	113	592	318	497	815
Trucks	3.00%		135	15	3	18	10	15	25

PROJECT TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

Vehicle Type	Vehicle Mix ^{1,2}	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	97.00%	4,373	1.0	4,373	479	113	592	318	497	815
2-Axle Trucks	0.51%	23	1.5	35	4	1	5	3	4	7
3-Axle Trucks	0.68%	31	2.0	62	7	2	9	4	7	11
4+ Axle Trucks	1.81%	82	3.0	246	27	6	33	18	28	46
Total Truck PCE Trips				343	38	9	47	25	39	64
Total Project PCE Trips				4,716	517	122	639	343	536	879

Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition

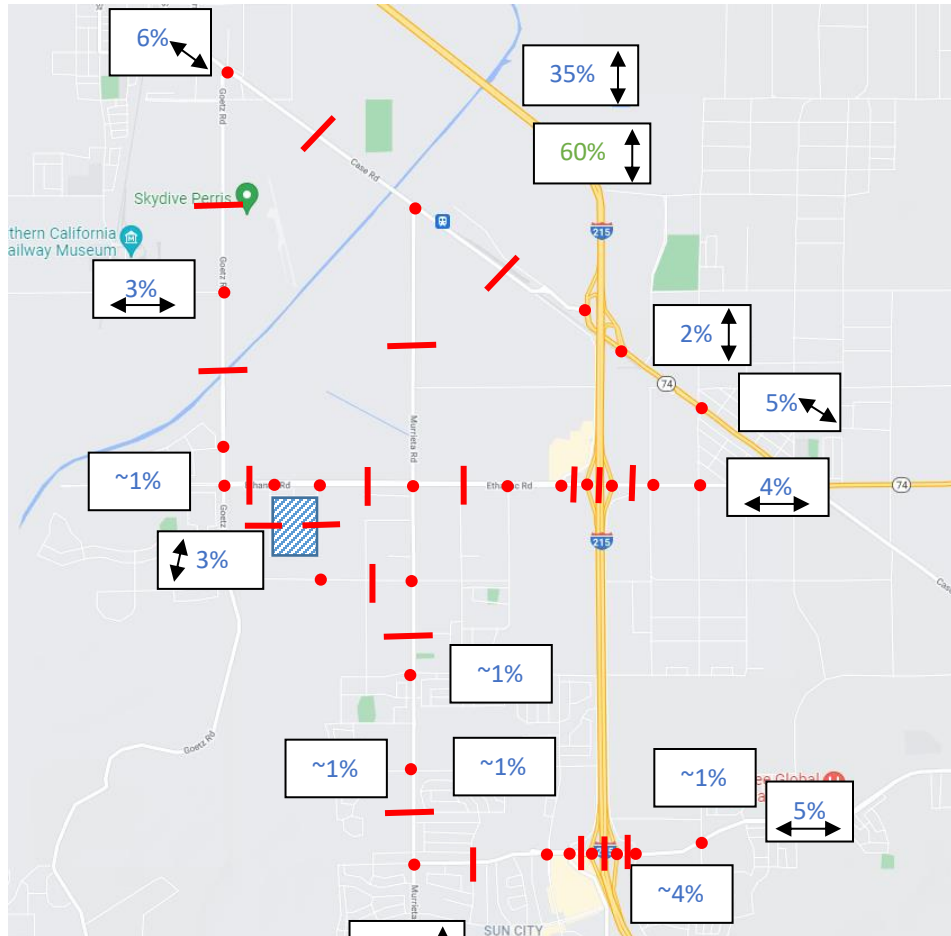
¹ Passenger Vehicle and Truck splits taken from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition Supplement.

² Truck mix percentages were calculated based on a ratio between the ITE truck splits and the Truck Trip Generation Study - City of Fontana, August 2003

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

ATTACHMENT C PROJECT STUDY AREA



PROJECT SITE



STUDY INTERSECTION



STUDY ROADWAY SEGMENT



PASSENGER CAR TRIP DISTRIBUTION



TRUCK TRIP DISTRIBUTION

ATTACHMENT C PROJECT STUDY AREA

Study Intersections

1. Goetz Road at Case Road
2. Murrieta Road at Case Road
3. Goetz Road at Mapes Road
4. I-215 SB Ramps/SR-74 at Bonnie Drive
5. I-215 NB Ramps at SR-74
6. Sherman Road at SR-74
7. Goetz Road at Fieldstone Drive
8. Goetz Road at Ethanac Road
9. Wheat Street at Ethanac Road
10. Byers Road at Ethanac Road
11. Murrieta Road at Ethanac Road
12. Evans Road at Ethanac Road
13. Barnet Road/Case Road at Ethanac Road
14. I-215 SB Ramps at Ethanac Road
15. I-215 NB Ramps at Ethanac Road
16. Trumble Road at Ethanac Road
17. Sherman Road at Ethanac Road
18. Byers Road at McLaughlin Road
19. Murrieta Road at McLaughlin Road
20. Murrieta Road at Rouse Road
21. Murrieta Road at Chambers Avenue
22. Murrieta Road at McCall Boulevard
23. Sun City Boulevard at McCall Boulevard
24. Bradley Road at McCall Boulevard
25. I-215 SB Ramps at McCall Boulevard
26. I-215 NB Ramps at McCall Boulevard
27. Encanto Drive at McCall Boulevard
28. Sherman Road at McCall Boulevard

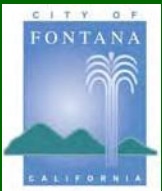
ATTACHMENT C PROJECT STUDY AREA

Study Roadway Segments

1. Case Road: Goetz Road to Murrieta Road
2. Case Road: Murrieta Road to Mapes Road
3. Goetz Road: Case Road to Mapes Road
4. Goetz Road: Mapes Road to Ethanac Road
5. Murrieta Road: Case Road to Ethanac Road
6. Murrieta Road: Ethanac Road to Rouse Road
7. Murrieta Road: Chambers Avenue to McCall Boulevard
8. Ethanac Road: Goetz Road to Wheat Street
9. Ethanac Road: Wheat Street to Murrieta Road
10. Ethanac Road: Murrieta Road to Evans Road
11. Ethanac Road: Case Road to I-215 SB Ramps
12. Ethanac Road: I-215 SB Ramps to I-215 NB Ramps
13. Ethanac Road: I-215 NB Ramps to Trumble Road
14. McLaughlin Road: Byers Road to Murrieta Road
15. Byers Road: Ethanac Road to McLaughlin Road
16. Evans Road: Ethanac Road to McLaughlin Road
17. McCall Boulevard: Murrieta Road to Sun City Boulevard
18. McCall Boulevard: Bradley Road to I-215 SB Ramps
19. McCall Boulevard: I-215 SB Ramps to I-215 NB Ramps
20. McCall Boulevard: I-215 NB Ramps to Encanto Drive

ATTACHMENT D

Truck Trip Generation Study



**City of Fontana
County of San Bernardino
State of California**

August 2003

6. VEHICLE MIX AND ENTER/EXIT SPLITS BY LAND USE CATEGORY





VEHICLE MIX AND ENTER/EXIT SPLITS BY LAND USE CATEGORY (Cont'd)

Classification: Heavy Warehouse

Recommended Large Truck Mix (%)								
		Lge 2 Ax	3 Axle	4+ Axle	Total			
		16.95	22.71	60.34	100			
		Pass Veh	Lge 2 Ax	3 Axle	4+ Axle	Total		
		79.57	3.46	4.64	12.33	100		
Site Entering & Exiting								
a.m.					p.m.			
Split	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit
	85.66	14.34	46.38	53.62	46.01	53.99	56.58	43.42
Street Entering & Exiting								
a.m.					p.m.			
Split	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit
	50.94	49.06	45.00	55.00	30.72	69.28	45.76	54.24

C | Appendix: Truck Trips as Percent of Total Vehicle Trips

Land Use Code, Land Use Name, and Time Period	Truck Trips as Percentage of Total Vehicle Trips				
	# Sites	Wtd Avg	Lowest	Highest	Std Dev
110 General Light Industrial					
Weekday	28	8%	0%	29%	8%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	27	3%	0%	50%	12%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	27	2%	0%	20%	4%
Weekday, AM Peak Hour of Generator	28	4%	0%	100%	21%
Weekday, PM Peak Hour of Generator	27	7%	0%	29%	9%
130 Industrial Park					
Weekday	3	15%	10%	16%	3%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	3	12%	10%	13%	1%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	3	10%	3%	13%	5%
Weekday, AM Peak Hour of Generator	3	6%	4%	8%	2%
Weekday, PM Peak Hour of Generator	3	10%	7%	13%	3%
140 Manufacturing					
Weekday	17	10%	0%	35%	10%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	17	8%	0%	50%	17%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	16	7%	0%	80%	24%
Weekday, AM Peak Hour of Generator	17	2%	0%	37%	9%
Weekday, PM Peak Hour of Generator	17	6%	0%	42%	14%

Truck Trips as Percentage of Total Vehicle Trips

Land Use Code, Land Use Name, and Time Period	# Sites	Wtd Avg	Lowest	Highest	Std Dev
150 Warehousing					
Weekday	12	27%	0%	65%	21%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	21	13%	0%	71%	22%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	23	15%	0%	87%	20%
Weekday, AM Peak Hour of Generator	24	22%	0%	100%	26%
151 Mini-Warehouse					
Weekday	6	6%	0%	8%	3%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	5	0%	0%	0%	0%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	6	0%	0%	0%	0%
Weekday, AM Peak Hour of Generator	6	4%	0%	15%	6%
Weekday, PM Peak Hour of Generator	6	5%	0%	50%	20%
154 High-Cube Transload and Short-Term Storage Warehouse					
Weekday	57	16%	3%	52%	11%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	90	20%	0%	90%	21%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	91	16%	0%	65%	17%
Weekday, AM Peak Hour of Generator	12	12%	4%	39%	12%
Weekday, PM Peak Hour of Generator	13	14%	2%	25%	7%
155 High-Cube Fulfillment Center Warehouse (Non-Sort)					
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	11	9%	1%	49%	18%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	11	7%	2%	100%	31%

Truck Trips as Percentage of Total Vehicle Trips

Land Use Code, Land Use Name, and Time Period	# Sites	Wtd Avg	Lowest	Highest	Std Dev
155 High-Cube Fulfillment Center Warehouse (Sort)					
Weekday	1	3%	—	—	N.A.
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	2	2%	1%	2%	N.A.
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	2	2%	1%	6%	N.A.
156 High-Cube Parcel Hub Warehouse					
Weekday	1	9%	—	—	N.A.
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	1	5%	—	—	N.A.
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	1	1%	—	—	N.A.
157 High-Cube Cold Storage Warehouse					
Weekday	4	35%	32%	39%	3%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	5	27%	18%	46%	13%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	5	23%	0%	45%	16%
170 Utility					
Weekday	13	2%	0%	17%	5%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	12	0%	0%	0%	0%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	12	1%	0%	2%	1%
Weekday, AM Peak Hour of Generator	13	1%	0%	22%	6%
Weekday, PM Peak Hour of Generator	13	2%	0%	50%	16%

**Attachment E
SUMMARY OF CUMULATIVE PROJECTS**

Proj #	Location	Land Use	Quantity	Units	Trip Generation Estimates							
					AM Peak Hour			PM Peak Hour				
					Daily	In	Out	Total	In	Out	Total	
1	Industrial Warehouse Building	Warehousing	2,300.000	KSF	4,002	301	90	391	117	320	437	
2	Green Valley	Single-Family Detached Housing	623	DU	5,881	115	346	461	389	228	617	
		Multifamily Housing (Mid-Rise)	842	DU	4,580	79	224	303	226	145	371	
3	On-Deck Hotel	Hotel	120	Room	1,003	33	23	56	37	35	72	
4	Paragon Framing	High-Cube Transload and Short-Term Storage	5.000	KSF	7	0	0	0	0	0	0	
		General Office Building	5.454	KSF	53	5	1	6	1	5	6	
5	Perris Travel Center	Gasoline Station w/ Conv. Mkt.	16	FP	3,286	102	98	200	114	110	224	
6	MR-27 LLC	Single-Family Detached Housing	172	DU	1,624	32	95	127	107	63	170	
7	Motte Country Plaza	Shopping Center	4.888	KSF	185	3	2	5	9	10	19	
		Pass-by Trips (PM:34%)								-3	-3	-6
		Sub Total				185	3	2	5	6	7	13
8	Ethanac Square	Automated Car Wash	2.080	KSF	339	12	7	19	15	15	30	
9	Menifee Commerce Center	Warehousing	1,640.130	KSF	2,854	215	64	279	84	228	312	
10	Forterra Pipe	General Office Building	4.200	KSF	41	4	1	5	1	4	5	
11	Cimarron Ridge	Single-Family Detached Housing	756	DU	7,137	140	420	560	472	277	749	
12	Valley Blvd Tract Map	Single-Family Detached Housing	68	DU	642	13	38	51	42	25	67	
13	Sagewood (DR Horton)	Single-Family Detached Housing	174	DU	1,643	32	97	129	109	64	173	
14	McLaughlin Village	Single-Family Detached Housing	126	DU	1,189	23	70	93	79	46	125	
15	RV SuperCenter	Recreational Vehicle Sales	17.600	KSF	88	7	1	8	4	9	13	
16	Talavera (KB Homes)	Single-Family Detached Housing	173	DU	1,633	32	96	128	108	63	171	
17	Legado	Single-Family Detached Housing	1,022	DU	9,648	189	567	756	638	374	1,012	
18	Underwood (KB Homes)	Single-Family Detached Housing	543	DU	5,126	100	301	401	339	199	538	
19	Remington/McCall Mesa	Single-Family Detached Housing	264	DU	2,492	49	147	196	165	97	262	
20	Stonegate (Enclave)	Single-Family Detached Housing	177	DU	1,671	33	98	131	110	65	175	
21	Skyview (Woodside Homes)	Single-Family Detached Housing	246	DU	2,322	46	137	183	154	90	244	
22	McCall-Encanto Gas Station	Gasoline Station w/ Conv. Mkt.	12	FP	2,464	76	73	149	86	82	168	
23	McCall Square	Convenience Market w/ Gasoline Pumps	2	FP	645	21	21	42	23	23	46	
		Pass-by Trips (AM: 63%, PM:66%)					-13	-13	-26	-15	-15	-30
		Shopping Center	1	KSF	38	1	0	1	2	2	4	
		Quality Restaurant	3.100	KSF	260	2	0	2	16	8	24	
		Pass-by Trips (PM:44%)								-7	-4	-11
		Fast-Food Restaurant w/o Drive-thru	3.2	KSF	1,108	48	32	80	45	45	90	
		Automated Car Wash	2.080	KSF	339	12	7	19	15	15	30	
Sub Total				2,390	71	47	118	79	74	153		
24	Quail Hills	Single-Family Detached Housing	152	DU	1,435	28	84	112	95	56	151	
25	Goetz/Ethanac Commercial	Convenience Market w/ Gasoline Pumps	8	FP	2,580	83	83	166	92	92	184	
		Pass-by Trips (AM: 63%, PM:66%)					-52	-52	-105	-61	-61	-121
		Bed and Linen Superstore	3	KSF	471	16	10	26	21	21	42	
		Shopping Center	7.040	KSF	266	4	3	7	13	14	27	
		Pass-by Trips (PM:34%) Retail Only								-4	-5	-9
Sub Total				3,317	51	44	94	61	62	122		
26	Barnett Warehouse	Warehousing	251.780	KSF	438	33	10	43	13	35	48	
27	Planning Area 9	Single-Family Detached Housing	173	DU	1,633	32	96	128	108	63	171	
28	Vista Ridge Apartments	Multifamily Housing (Mid-Rise)	30	DU	163	3	8	11	8	5	13	
29	Northern Gateway Commerce Centers	Warehousing	1,316.754	KSF	3,229	243	71	314	95	258	353	
		High-Cube Fulfillment Center - Sort	1,170.871	KSF	7,884	862	201	1,063	573	897	1,470	
Total Project Trips					80,399	2,963	3,556	6,520	4,435	4,000	8,435	
DU = Dwelling Unit, KSF = 1,000 square feet, FP = Fueling Position												

APPENDIX B

TRAFFIC COUNT DATA SHEETS

APPENDIX B-1

**TRAFFIC COUNT DATA
SHEETS-
INTERSECTION COUNTS**

City of Perris
 N/S: Goetz Road
 E/W: Case Road
 Weather: Clear

File Name : 02_PER_Goetz_Case AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Case Road Westbound			Goetz Road Northbound			Case Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	30	37	67	43	44	87	38	11	49	203
07:15 AM	29	35	64	63	40	103	39	18	57	224
07:30 AM	38	29	67	87	64	151	39	29	68	286
07:45 AM	68	29	97	53	66	119	31	27	58	274
Total	165	130	295	246	214	460	147	85	232	987
08:00 AM	47	37	84	23	59	82	41	33	74	240
08:15 AM	32	40	72	31	32	63	31	21	52	187
08:30 AM	18	27	45	21	24	45	25	23	48	138
08:45 AM	28	31	59	28	27	55	39	16	55	169
Total	125	135	260	103	142	245	136	93	229	734
Grand Total	290	265	555	349	356	705	283	178	461	1721
Apprch %	52.3	47.7		49.5	50.5		61.4	38.6		
Total %	16.9	15.4	32.2	20.3	20.7	41	16.4	10.3	26.8	
Passenger Vehicles	273	248	521	331	315	646	272	164	436	1603
% Passenger Vehicles	94.1	93.6	93.9	94.8	88.5	91.6	96.1	92.1	94.6	93.1
Large 2 Axle Vehicles	12	10	22	13	19	32	10	7	17	71
% Large 2 Axle Vehicles	4.1	3.8	4	3.7	5.3	4.5	3.5	3.9	3.7	4.1
3 Axle Vehicles	5	1	6	3	13	16	1	4	5	27
% 3 Axle Vehicles	1.7	0.4	1.1	0.9	3.7	2.3	0.4	2.2	1.1	1.6
4+ Axle Trucks	0	6	6	2	9	11	0	3	3	20
% 4+ Axle Trucks	0	2.3	1.1	0.6	2.5	1.6	0	1.7	0.7	1.2

Start Time	Case Road Westbound			Goetz Road Northbound			Case Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	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 07:15 AM										
07:15 AM	29	35	64	63	40	103	39	18	57	224
07:30 AM	38	29	67	87	64	151	39	29	68	286
07:45 AM	68	29	97	53	66	119	31	27	58	274
08:00 AM	47	37	84	23	59	82	41	33	74	240
Total Volume	182	130	312	226	229	455	150	107	257	1024
% App. Total	58.3	41.7		49.7	50.3		58.4	41.6		
PHF	.669	.878	.804	.649	.867	.753	.915	.811	.868	.895

City of Perris
 N/S: Goetz Road
 E/W: Case Road
 Weather: Clear

File Name : 02_PER_Goetz_Case PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Case Road Westbound			Goetz Road Northbound			Case Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	55	77	132	36	38	74	44	47	91	297
04:15 PM	51	65	116	36	31	67	43	43	86	269
04:30 PM	44	51	95	26	46	72	58	50	108	275
04:45 PM	39	49	88	30	37	67	50	29	79	234
Total	189	242	431	128	152	280	195	169	364	1075
05:00 PM	48	53	101	36	36	72	56	34	90	263
05:15 PM	51	47	98	41	36	77	44	48	92	267
05:30 PM	54	47	101	38	34	72	30	33	63	236
05:45 PM	43	48	91	25	27	52	40	29	69	212
Total	196	195	391	140	133	273	170	144	314	978
Grand Total	385	437	822	268	285	553	365	313	678	2053
Apprch %	46.8	53.2		48.5	51.5		53.8	46.2		
Total %	18.8	21.3	40	13.1	13.9	26.9	17.8	15.2	33	
Passenger Vehicles	340	417	757	262	275	537	354	288	642	1936
% Passenger Vehicles	88.3	95.4	92.1	97.8	96.5	97.1	97	92	94.7	94.3
Large 2 Axle Vehicles	20	4	24	5	4	9	10	6	16	49
% Large 2 Axle Vehicles	5.2	0.9	2.9	1.9	1.4	1.6	2.7	1.9	2.4	2.4
3 Axle Vehicles	25	0	25	0	4	4	0	12	12	41
% 3 Axle Vehicles	6.5	0	3	0	1.4	0.7	0	3.8	1.8	2
4+ Axle Trucks	0	16	16	1	2	3	1	7	8	27
% 4+ Axle Trucks	0	3.7	1.9	0.4	0.7	0.5	0.3	2.2	1.2	1.3

Start Time	Case Road Westbound			Goetz Road Northbound			Case Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	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	55	77	132	36	38	74	44	47	91	297
04:15 PM	51	65	116	36	31	67	43	43	86	269
04:30 PM	44	51	95	26	46	72	58	50	108	275
04:45 PM	39	49	88	30	37	67	50	29	79	234
Total Volume	189	242	431	128	152	280	195	169	364	1075
% App. Total	43.9	56.1		45.7	54.3		53.6	46.4		
PHF	.859	.786	.816	.889	.826	.946	.841	.845	.843	.905

City of Perris
 N/S: Goetz Road
 E/W: Murrieta Road
 Weather: Clear

File Name : 03_PER_Murrieta_Case AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Case Road Westbound			Murrieta Road Northbound			Case Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	2	32	34	36	4	40	42	5	47	121
07:15 AM	1	31	32	36	5	41	45	5	50	123
07:30 AM	5	42	47	24	2	26	41	13	54	127
07:45 AM	5	32	37	25	6	31	37	11	48	116
Total	13	137	150	121	17	138	165	34	199	487
08:00 AM	6	49	55	14	4	18	40	8	48	121
08:15 AM	2	41	43	20	1	21	42	15	57	121
08:30 AM	5	22	27	19	1	20	42	15	57	104
08:45 AM	8	42	50	17	3	20	34	17	51	121
Total	21	154	175	70	9	79	158	55	213	467
Grand Total	34	291	325	191	26	217	323	89	412	954
Apprch %	10.5	89.5		88	12		78.4	21.6		
Total %	3.6	30.5	34.1	20	2.7	22.7	33.9	9.3	43.2	
Passenger Vehicles	33	273	306	185	23	208	292	85	377	891
% Passenger Vehicles	97.1	93.8	94.2	96.9	88.5	95.9	90.4	95.5	91.5	93.4
Large 2 Axle Vehicles	1	12	13	6	3	9	24	3	27	49
% Large 2 Axle Vehicles	2.9	4.1	4	3.1	11.5	4.1	7.4	3.4	6.6	5.1
3 Axle Vehicles	0	2	2	0	0	0	7	1	8	10
% 3 Axle Vehicles	0	0.7	0.6	0	0	0	2.2	1.1	1.9	1
4+ Axle Trucks	0	4	4	0	0	0	0	0	0	4
% 4+ Axle Trucks	0	1.4	1.2	0	0	0	0	0	0	0.4

Start Time	Case Road Westbound			Murrieta Road Northbound			Case Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	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	2	32	34	36	4	40	42	5	47	121
07:15 AM	1	31	32	36	5	41	45	5	50	123
07:30 AM	5	42	47	24	2	26	41	13	54	127
07:45 AM	5	32	37	25	6	31	37	11	48	116
Total Volume	13	137	150	121	17	138	165	34	199	487
% App. Total	8.7	91.3		87.7	12.3		82.9	17.1		
PHF	.650	.815	.798	.840	.708	.841	.917	.654	.921	.959

City of Perris
 N/S: Goetz Road
 E/W: Murrieta Road
 Weather: Clear

File Name : 03_PER_Murrieta_Case PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Case Road Westbound			Murrieta Road Northbound			Case Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	4	67	71	25	5	30	66	29	95	196
04:15 PM	4	48	52	28	3	31	51	24	75	158
04:30 PM	4	56	60	33	0	33	75	25	100	193
04:45 PM	2	41	43	17	1	18	73	26	99	160
Total	14	212	226	103	9	112	265	104	369	707
05:00 PM	1	55	56	22	2	24	77	24	101	181
05:15 PM	4	62	66	22	1	23	56	23	79	168
05:30 PM	6	59	65	31	0	31	53	19	72	168
05:45 PM	3	46	49	22	2	24	40	17	57	130
Total	14	222	236	97	5	102	226	83	309	647
Grand Total	28	434	462	200	14	214	491	187	678	1354
Apprch %	6.1	93.9		93.5	6.5		72.4	27.6		
Total %	2.1	32.1	34.1	14.8	1	15.8	36.3	13.8	50.1	
Passenger Vehicles	28	394	422	199	13	212	476	186	662	1296
% Passenger Vehicles	100	90.8	91.3	99.5	92.9	99.1	96.9	99.5	97.6	95.7
Large 2 Axle Vehicles	0	14	14	1	1	2	12	0	12	28
% Large 2 Axle Vehicles	0	3.2	3	0.5	7.1	0.9	2.4	0	1.8	2.1
3 Axle Vehicles	0	26	26	0	0	0	3	1	4	30
% 3 Axle Vehicles	0	6	5.6	0	0	0	0.6	0.5	0.6	2.2
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0

Start Time	Case Road Westbound			Murrieta Road Northbound			Case Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	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	4	67	71	25	5	30	66	29	95	196
04:15 PM	4	48	52	28	3	31	51	24	75	158
04:30 PM	4	56	60	33	0	33	75	25	100	193
04:45 PM	2	41	43	17	1	18	73	26	99	160
Total Volume	14	212	226	103	9	112	265	104	369	707
% App. Total	6.2	93.8		92	8		71.8	28.2		
PHF	.875	.791	.796	.780	.450	.848	.883	.897	.923	.902

City of Perris
 N/S: Goetz Road
 E/W: Mapes Road
 Weather: Clear

File Name : 04_PER_Goetz_Mapes AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Goetz Road Southbound				Mapes Road Westbound				Goetz Road Northbound				Mapes 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	7	21	10	38	0	0	1	1	72	86	0	158	2	0	27	29	226
07:15 AM	1	32	20	53	0	0	1	1	66	82	0	148	10	0	33	43	245
07:30 AM	1	27	47	75	0	0	0	0	66	88	0	154	39	0	39	78	307
07:45 AM	1	39	56	96	0	0	0	0	66	55	11	132	54	0	63	117	345
Total	10	119	133	262	0	0	2	2	270	311	11	592	105	0	162	267	1123
08:00 AM	0	27	29	56	0	0	0	0	58	42	3	103	41	0	44	85	244
08:15 AM	0	31	18	49	0	0	0	0	33	31	1	65	23	0	31	54	168
08:30 AM	1	20	8	29	0	0	0	0	30	48	1	79	24	0	11	35	143
08:45 AM	0	21	11	32	0	0	0	0	22	35	2	59	6	1	34	41	132
Total	1	99	66	166	0	0	0	0	143	156	7	306	94	1	120	215	687
Grand Total	11	218	199	428	0	0	2	2	413	467	18	898	199	1	282	482	1810
Apprch %	2.6	50.9	46.5		0	0	100		46	52	2		41.3	0.2	58.5		
Total %	0.6	12	11	23.6	0	0	0.1	0.1	22.8	25.8	1	49.6	11	0.1	15.6	26.6	
Passenger Vehicles	11	189	180	380	0	0	2	2	390	446	18	854	189	1	261	451	1687
% Passenger Vehicles	100	86.7	90.5	88.8	0	0	100	100	94.4	95.5	100	95.1	95	100	92.6	93.6	93.2
Large 2 Axle Vehicles	0	14	6	20	0	0	0	0	18	11	0	29	8	0	16	24	73
% Large 2 Axle Vehicles	0	6.4	3	4.7	0	0	0	0	4.4	2.4	0	3.2	4	0	5.7	5	4
3 Axle Vehicles	0	12	2	14	0	0	0	0	1	7	0	8	1	0	3	4	26
% 3 Axle Vehicles	0	5.5	1	3.3	0	0	0	0	0.2	1.5	0	0.9	0.5	0	1.1	0.8	1.4
4+ Axle Trucks	0	3	11	14	0	0	0	0	4	3	0	7	1	0	2	3	24
% 4+ Axle Trucks	0	1.4	5.5	3.3	0	0	0	0	1	0.6	0	0.8	0.5	0	0.7	0.6	1.3

Start Time	Goetz Road Southbound				Mapes Road Westbound				Goetz Road Northbound				Mapes 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 07:15 AM																	
07:15 AM	1	32	20	53	0	0	1	1	66	82	0	148	10	0	33	43	245
07:30 AM	1	27	47	75	0	0	0	0	66	88	0	154	39	0	39	78	307
07:45 AM	1	39	56	96	0	0	0	0	66	55	11	132	54	0	63	117	345
08:00 AM	0	27	29	56	0	0	0	0	58	42	3	103	41	0	44	85	244
Total Volume	3	125	152	280	0	0	1	1	256	267	14	537	144	0	179	323	1141
% App. Total	1.1	44.6	54.3		0	0	100		47.7	49.7	2.6		44.6	0	55.4		
PHF	.750	.801	.679	.729	.000	.000	.250	.250	.970	.759	.318	.872	.667	.000	.710	.690	.827

City of Perris
 N/S: Goetz Road
 E/W: Mapes Road
 Weather: Clear

File Name : 04_PER_Goetz_Mapes PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Goetz Road Southbound				Mapes Road Westbound				Goetz Road Northbound				Mapes 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	2	93	16	111	0	0	0	0	53	33	0	86	15	0	71	86	283
04:15 PM	1	87	14	102	0	0	0	0	53	40	0	93	12	0	90	102	297
04:30 PM	0	73	10	83	0	0	0	0	48	43	0	91	11	0	76	87	261
04:45 PM	0	68	8	76	0	0	0	0	48	36	0	84	12	0	71	83	243
Total	3	321	48	372	0	0	0	0	202	152	0	354	50	0	308	358	1084
05:00 PM	2	83	14	99	0	1	0	1	41	35	1	77	11	0	75	86	263
05:15 PM	0	78	11	89	3	1	0	4	39	47	0	86	10	0	81	91	270
05:30 PM	1	76	20	97	2	0	0	2	51	49	1	101	7	0	61	68	268
05:45 PM	1	69	11	81	4	0	1	5	52	42	0	94	4	0	65	69	249
Total	4	306	56	366	9	2	1	12	183	173	2	358	32	0	282	314	1050
Grand Total	7	627	104	738	9	2	1	12	385	325	2	712	82	0	590	672	2134
Apprch %	0.9	85	14.1		75	16.7	8.3		54.1	45.6	0.3		12.2	0	87.8		
Total %	0.3	29.4	4.9	34.6	0.4	0.1	0	0.6	18	15.2	0.1	33.4	3.8	0	27.6	31.5	
Passenger Vehicles	7	623	83	713	9	2	1	12	375	302	2	679	63	0	566	629	2033
% Passenger Vehicles	100	99.4	79.8	96.6	100	100	100	100	97.4	92.9	100	95.4	76.8	0	95.9	93.6	95.3
Large 2 Axle Vehicles	0	4	3	7	0	0	0	0	6	12	0	18	2	0	21	23	48
% Large 2 Axle Vehicles	0	0.6	2.9	0.9	0	0	0	0	1.6	3.7	0	2.5	2.4	0	3.6	3.4	2.2
3 Axle Vehicles	0	0	1	1	0	0	0	0	2	3	0	5	4	0	3	7	13
% 3 Axle Vehicles	0	0	1	0.1	0	0	0	0	0.5	0.9	0	0.7	4.9	0	0.5	1	0.6
4+ Axle Trucks	0	0	17	17	0	0	0	0	2	8	0	10	13	0	0	13	40
% 4+ Axle Trucks	0	0	16.3	2.3	0	0	0	0	0.5	2.5	0	1.4	15.9	0	0	1.9	1.9

Start Time	Goetz Road Southbound				Mapes Road Westbound				Goetz Road Northbound				Mapes 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	2	93	16	111	0	0	0	0	53	33	0	86	15	0	71	86	283
04:15 PM	1	87	14	102	0	0	0	0	53	40	0	93	12	0	90	102	297
04:30 PM	0	73	10	83	0	0	0	0	48	43	0	91	11	0	76	87	261
04:45 PM	0	68	8	76	0	0	0	0	48	36	0	84	12	0	71	83	243
Total Volume	3	321	48	372	0	0	0	0	202	152	0	354	50	0	308	358	1084
% App. Total	0.8	86.3	12.9		0	0	0		57.1	42.9	0		14	0	86		
PHF	.375	.863	.750	.838	.000	.000	.000	.000	.953	.884	.000	.952	.833	.000	.856	.877	.912

City of Perris
 N/S: I-215 SB Ramps/SR-74
 E/W: Bonnie Drive
 Weather: Clear

File Name : 05_PER_215S_Bonnie AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	121	5	126	33	73	106	8	27	35	267
07:15 AM	117	4	121	32	76	108	10	38	48	277
07:30 AM	114	5	119	41	101	142	6	24	30	291
07:45 AM	107	3	110	50	96	146	6	34	40	296
Total	459	17	476	156	346	502	30	123	153	1131
08:00 AM	101	2	103	56	87	143	6	30	36	282
08:15 AM	105	7	112	36	67	103	7	29	36	251
08:30 AM	124	9	133	36	74	110	3	16	19	262
08:45 AM	121	10	131	43	60	103	5	24	29	263
Total	451	28	479	171	288	459	21	99	120	1058
Grand Total	910	45	955	327	634	961	51	222	273	2189
Apprch %	95.3	4.7		34	66		18.7	81.3		
Total %	41.6	2.1	43.6	14.9	29	43.9	2.3	10.1	12.5	
Passenger Vehicles	826	40	866	315	583	898	50	194	244	2008
% Passenger Vehicles	90.8	88.9	90.7	96.3	92	93.4	98	87.4	89.4	91.7
Large 2 Axle Vehicles	32	1	33	8	39	47	1	20	21	101
% Large 2 Axle Vehicles	3.5	2.2	3.5	2.4	6.2	4.9	2	9	7.7	4.6
3 Axle Vehicles	19	0	19	4	5	9	0	8	8	36
% 3 Axle Vehicles	2.1	0	2	1.2	0.8	0.9	0	3.6	2.9	1.6
4+ Axle Trucks	33	4	37	0	7	7	0	0	0	44
% 4+ Axle Trucks	3.6	8.9	3.9	0	1.1	0.7	0	0	0	2

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	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 07:15 AM										
07:15 AM	117	4	121	32	76	108	10	38	48	277
07:30 AM	114	5	119	41	101	142	6	24	30	291
07:45 AM	107	3	110	50	96	146	6	34	40	296
08:00 AM	101	2	103	56	87	143	6	30	36	282
Total Volume	439	14	453	179	360	539	28	126	154	1146
% App. Total	96.9	3.1		33.2	66.8		18.2	81.8		
PHF	.938	.700	.936	.799	.891	.923	.700	.829	.802	.968

City of Perris
 N/S: I-215 SB Ramps/SR-74
 E/W: Bonnie Drive
 Weather: Clear

File Name : 05_PER_215S_Bonnie PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	175	9	184	59	90	149	5	58	63	396
04:15 PM	176	12	188	37	64	101	10	73	83	372
04:30 PM	172	8	180	54	89	143	9	54	63	386
04:45 PM	175	14	189	33	73	106	13	64	77	372
Total	698	43	741	183	316	499	37	249	286	1526
05:00 PM	175	10	185	50	90	140	6	66	72	397
05:15 PM	172	4	176	45	75	120	7	48	55	351
05:30 PM	173	6	179	59	48	107	4	35	39	325
05:45 PM	166	11	177	50	54	104	6	39	45	326
Total	686	31	717	204	267	471	23	188	211	1399
Grand Total	1384	74	1458	387	583	970	60	437	497	2925
Apprch %	94.9	5.1		39.9	60.1		12.1	87.9		
Total %	47.3	2.5	49.8	13.2	19.9	33.2	2.1	14.9	17	
Passenger Vehicles	1349	74	1423	351	571	922	60	423	483	2828
% Passenger Vehicles	97.5	100	97.6	90.7	97.9	95.1	100	96.8	97.2	96.7
Large 2 Axle Vehicles	24	0	24	12	8	20	0	10	10	54
% Large 2 Axle Vehicles	1.7	0	1.6	3.1	1.4	2.1	0	2.3	2	1.8
3 Axle Vehicles	6	0	6	24	2	26	0	4	4	36
% 3 Axle Vehicles	0.4	0	0.4	6.2	0.3	2.7	0	0.9	0.8	1.2
4+ Axle Trucks	5	0	5	0	2	2	0	0	0	7
% 4+ Axle Trucks	0.4	0	0.3	0	0.3	0.2	0	0	0	0.2

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	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	176	12	188	37	64	101	10	73	83	372
04:30 PM	172	8	180	54	89	143	9	54	63	386
04:45 PM	175	14	189	33	73	106	13	64	77	372
05:00 PM	175	10	185	50	90	140	6	66	72	397
Total Volume	698	44	742	174	316	490	38	257	295	1527
% App. Total	94.1	5.9		35.5	64.5		12.9	87.1		
PHF	.991	.786	.981	.806	.878	.857	.731	.880	.889	.962

City of Perris
 N/S: I-215 Northbound Ramps
 E/W: SR-74
 Weather: Clear

File Name : 06_PER_215N_SR-74 AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	I-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	25	2	27	111	161	272	3	146	149	448
07:15 AM	37	2	39	104	133	237	1	147	148	424
07:30 AM	30	3	33	138	168	306	1	135	136	475
07:45 AM	34	4	38	143	170	313	2	140	142	493
Total	126	11	137	496	632	1128	7	568	575	1840
08:00 AM	26	5	31	131	149	280	5	127	132	443
08:15 AM	34	0	34	103	138	241	2	127	129	404
08:30 AM	35	4	39	98	132	230	2	141	143	412
08:45 AM	32	2	34	96	138	234	5	138	143	411
Total	127	11	138	428	557	985	14	533	547	1670
Grand Total	253	22	275	924	1189	2113	21	1101	1122	3510
Apprch %	92	8		43.7	56.3		1.9	98.1		
Total %	7.2	0.6	7.8	26.3	33.9	60.2	0.6	31.4	32	
Passenger Vehicles	231	21	252	863	1118	1981	20	974	994	3227
% Passenger Vehicles	91.3	95.5	91.6	93.4	94	93.8	95.2	88.5	88.6	91.9
Large 2 Axle Vehicles	16	0	16	46	36	82	1	68	69	167
% Large 2 Axle Vehicles	6.3	0	5.8	5	3	3.9	4.8	6.2	6.1	4.8
3 Axle Vehicles	2	1	3	10	9	19	0	18	18	40
% 3 Axle Vehicles	0.8	4.5	1.1	1.1	0.8	0.9	0	1.6	1.6	1.1
4+ Axle Trucks	4	0	4	5	26	31	0	41	41	76
% 4+ Axle Trucks	1.6	0	1.5	0.5	2.2	1.5	0	3.7	3.7	2.2

Start Time	I-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	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	25	2	27	111	161	272	3	146	149	448
07:15 AM	37	2	39	104	133	237	1	147	148	424
07:30 AM	30	3	33	138	168	306	1	135	136	475
07:45 AM	34	4	38	143	170	313	2	140	142	493
Total Volume	126	11	137	496	632	1128	7	568	575	1840
% App. Total	92	8		44	56		1.2	98.8		
PHF	.851	.688	.878	.867	.929	.901	.583	.966	.965	.933

City of Perris
 N/S: I-215 Northbound Ramps
 E/W: SR-74
 Weather: Clear

File Name : 06_PER_215N_SR-74 PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	I-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	46	8	54	138	164	302	3	230	233	589
04:15 PM	40	4	44	94	135	229	3	241	244	517
04:30 PM	47	7	54	135	151	286	3	228	231	571
04:45 PM	54	3	57	103	140	243	4	228	232	532
Total	187	22	209	470	590	1060	13	927	940	2209
05:00 PM	53	7	60	141	151	292	4	241	245	597
05:15 PM	47	12	59	104	117	221	1	221	222	502
05:30 PM	56	10	66	97	135	232	0	210	210	508
05:45 PM	55	12	67	93	116	209	0	206	206	482
Total	211	41	252	435	519	954	5	878	883	2089
Grand Total	398	63	461	905	1109	2014	18	1805	1823	4298
Apprch %	86.3	13.7		44.9	55.1		1	99		
Total %	9.3	1.5	10.7	21.1	25.8	46.9	0.4	42	42.4	
Passenger Vehicles	354	61	415	859	1068	1927	18	1744	1762	4104
% Passenger Vehicles	88.9	96.8	90	94.9	96.3	95.7	100	96.6	96.7	95.5
Large 2 Axle Vehicles	40	0	40	16	17	33	0	47	47	120
% Large 2 Axle Vehicles	10.1	0	8.7	1.8	1.5	1.6	0	2.6	2.6	2.8
3 Axle Vehicles	1	1	2	20	14	34	0	8	8	44
% 3 Axle Vehicles	0.3	1.6	0.4	2.2	1.3	1.7	0	0.4	0.4	1
4+ Axle Trucks	3	1	4	10	10	20	0	6	6	30
% 4+ Axle Trucks	0.8	1.6	0.9	1.1	0.9	1	0	0.3	0.3	0.7

Start Time	I-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	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	40	4	44	94	135	229	3	241	244	517
04:30 PM	47	7	54	135	151	286	3	228	231	571
04:45 PM	54	3	57	103	140	243	4	228	232	532
05:00 PM	53	7	60	141	151	292	4	241	245	597
Total Volume	194	21	215	473	577	1050	14	938	952	2217
% App. Total	90.2	9.8		45	55		1.5	98.5		
PHF	.898	.750	.896	.839	.955	.899	.875	.973	.971	.928

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

File Name : 28_MEN_Sherman_SR-74 AM
 Site Code : 10822005
 Start Date : 1/13/2022
 Page No : 1

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

Start Time	California Ranch 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	1	1	3	18	159	0	177	10	0	56	66	1	132	4	137	383
07:15 AM	0	0	0	0	46	214	0	260	7	0	87	94	1	154	2	157	511
07:30 AM	0	2	0	2	61	219	0	280	10	0	57	67	2	148	4	154	503
07:45 AM	0	2	1	3	85	213	1	299	11	1	53	65	0	134	6	140	507
Total	1	5	2	8	210	805	1	1016	38	1	253	292	4	568	16	588	1904
08:00 AM	0	0	0	0	38	181	0	219	16	0	39	55	2	110	3	115	389
08:15 AM	0	0	0	0	28	163	0	191	14	0	32	46	2	130	7	139	376
08:30 AM	1	0	1	2	23	145	0	168	18	0	26	44	0	99	5	104	318
08:45 AM	0	0	0	0	27	135	0	162	14	0	29	43	2	134	5	141	346
Total	1	0	1	2	116	624	0	740	62	0	126	188	6	473	20	499	1429
Grand Total	2	5	3	10	326	1429	1	1756	100	1	379	480	10	1041	36	1087	3333
Apprch %	20	50	30		18.6	81.4	0.1		20.8	0.2	79		0.9	95.8	3.3		
Total %	0.1	0.2	0.1	0.3	9.8	42.9	0	52.7	3	0	11.4	14.4	0.3	31.2	1.1	32.6	
Passenger Vehicles	2	5	3	10	314	1358	1	1673	96	1	352	449	9	908	32	949	3081
% Passenger Vehicles	100	100	100	100	96.3	95	100	95.3	96	100	92.9	93.5	90	87.2	88.9	87.3	92.4
Large 2 Axle Vehicles	0	0	0	0	6	34	0	40	3	0	21	24	1	60	0	61	125
% Large 2 Axle Vehicles	0	0	0	0	1.8	2.4	0	2.3	3	0	5.5	5	10	5.8	0	5.6	3.8
3 Axle Vehicles	0	0	0	0	3	6	0	9	1	0	1	2	0	17	0	17	28
% 3 Axle Vehicles	0	0	0	0	0.9	0.4	0	0.5	1	0	0.3	0.4	0	1.6	0	1.6	0.8
4+ Axle Trucks	0	0	0	0	3	31	0	34	0	0	5	5	0	56	4	60	99
% 4+ Axle Trucks	0	0	0	0	0.9	2.2	0	1.9	0	0	1.3	1	0	5.4	11.1	5.5	3

Start Time	California Ranch 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	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	46	214	0	260	7	0	87	94	1	154	2	157	511
07:30 AM	0	2	0	2	61	219	0	280	10	0	57	67	2	148	4	154	503
07:45 AM	0	2	1	3	85	213	1	299	11	1	53	65	0	134	6	140	507
08:00 AM	0	0	0	0	38	181	0	219	16	0	39	55	2	110	3	115	389
Total Volume	0	4	1	5	230	827	1	1058	44	1	236	281	5	546	15	566	1910
% App. Total	0	80	20		21.7	78.2	0.1		15.7	0.4	84		0.9	96.5	2.7		
PHF	.000	.500	.250	.417	.676	.944	.250	.885	.688	.250	.678	.747	.625	.886	.625	.901	.934

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

File Name : 28_MEN_Sherman_SR-74 PM
 Site Code : 10822005
 Start Date : 1/13/2022
 Page No : 1

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

Start Time	California Ranch 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	0	0	1	1	33	151	0	184	17	0	49	66	2	220	10	232	483
04:15 PM	0	0	0	0	48	180	1	229	24	0	58	82	5	229	12	246	557
04:30 PM	1	2	0	3	45	145	1	191	15	0	68	83	3	227	8	238	515
04:45 PM	1	0	0	1	48	176	0	224	21	0	50	71	9	232	2	243	539
Total	2	2	1	5	174	652	2	828	77	0	225	302	19	908	32	959	2094
05:00 PM	0	0	2	2	35	156	0	191	12	0	64	76	2	229	14	245	514
05:15 PM	0	0	0	0	35	178	0	213	20	0	72	92	0	214	6	220	525
05:30 PM	0	1	0	1	36	167	0	203	23	0	60	83	1	217	9	227	514
05:45 PM	1	0	0	1	41	163	1	205	18	0	45	63	6	217	9	232	501
Total	1	1	2	4	147	664	1	812	73	0	241	314	9	877	38	924	2054
Grand Total	3	3	3	9	321	1316	3	1640	150	0	466	616	28	1785	70	1883	4148
Apprch %	33.3	33.3	33.3		19.6	80.2	0.2		24.4	0	75.6		1.5	94.8	3.7		
Total %	0.1	0.1	0.1	0.2	7.7	31.7	0.1	39.5	3.6	0	11.2	14.9	0.7	43	1.7	45.4	
Passenger Vehicles	3	3	3	9	313	1264	3	1580	147	0	457	604	27	1756	69	1852	4045
% Passenger Vehicles	100	100	100	100	97.5	96	100	96.3	98	0	98.1	98.1	96.4	98.4	98.6	98.4	97.5
Large 2 Axle Vehicles	0	0	0	0	3	27	0	30	0	0	9	9	0	18	0	18	57
% Large 2 Axle Vehicles	0	0	0	0	0.9	2.1	0	1.8	0	0	1.9	1.5	0	1	0	1	1.4
3 Axle Vehicles	0	0	0	0	2	14	0	16	1	0	0	1	0	0	0	0	17
% 3 Axle Vehicles	0	0	0	0	0.6	1.1	0	1	0.7	0	0	0.2	0	0	0	0	0.4
4+ Axle Trucks	0	0	0	0	3	11	0	14	2	0	0	2	1	11	1	13	29
% 4+ Axle Trucks	0	0	0	0	0.9	0.8	0	0.9	1.3	0	0	0.3	3.6	0.6	1.4	0.7	0.7

Start Time	California Ranch 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	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	48	180	1	229	24	0	58	82	5	229	12	246	557
04:30 PM	1	2	0	3	45	145	1	191	15	0	68	83	3	227	8	238	515
04:45 PM	1	0	0	1	48	176	0	224	21	0	50	71	9	232	2	243	539
05:00 PM	0	0	2	2	35	156	0	191	12	0	64	76	2	229	14	245	514
Total Volume	2	2	2	6	176	657	2	835	72	0	240	312	19	917	36	972	2125
% App. Total	33.3	33.3	33.3		21.1	78.7	0.2		23.1	0	76.9		2	94.3	3.7		
PHF	.500	.250	.250	.500	.917	.913	.500	.912	.750	.000	.882	.940	.528	.988	.643	.988	.954

City of Perris
 N/S: Goetz Road
 E/W: Fieldstone Drive
 Weather: Clear

File Name : 07_PER_Goetz_Fieldstone AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Goetz Road Southbound				Fieldstone Drive Westbound				Goetz Road Northbound				Fieldstone Drive 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	2	39	2	43	0	0	4	4	3	121	1	125	22	0	20	42	214
07:15 AM	0	63	1	64	0	0	5	5	2	144	0	146	20	3	10	33	248
07:30 AM	5	65	5	75	1	0	2	3	4	118	1	123	14	1	20	35	236
07:45 AM	3	83	8	94	1	0	4	5	8	115	4	127	12	0	9	21	247
Total	10	250	16	276	2	0	15	17	17	498	6	521	68	4	59	131	945
08:00 AM	4	61	8	73	1	3	1	5	10	86	3	99	10	0	4	14	191
08:15 AM	2	60	3	65	2	0	5	7	4	53	3	60	5	0	9	14	146
08:30 AM	0	42	0	42	0	1	1	2	5	68	1	74	10	0	3	13	131
08:45 AM	1	51	1	53	1	0	1	2	6	48	2	56	8	0	4	12	123
Total	7	214	12	233	4	4	8	16	25	255	9	289	33	0	20	53	591
Grand Total	17	464	28	509	6	4	23	33	42	753	15	810	101	4	79	184	1536
Apprch %	3.3	91.2	5.5		18.2	12.1	69.7		5.2	93	1.9		54.9	2.2	42.9		
Total %	1.1	30.2	1.8	33.1	0.4	0.3	1.5	2.1	2.7	49	1	52.7	6.6	0.3	5.1	12	
Passenger Vehicles	13	426	26	465	4	4	22	30	39	714	13	766	100	4	78	182	1443
% Passenger Vehicles	76.5	91.8	92.9	91.4	66.7	100	95.7	90.9	92.9	94.8	86.7	94.6	99	100	98.7	98.9	
Large 2 Axle Vehicles	3	19	2	24	1	0	1	2	2	26	2	30	0	0	0	0	56
% Large 2 Axle Vehicles	17.6	4.1	7.1	4.7	16.7	0	4.3	6.1	4.8	3.5	13.3	3.7	0	0	0	0	3.6
3 Axle Vehicles	1	14	0	15	1	0	0	1	1	8	0	9	1	0	1	2	27
% 3 Axle Vehicles	5.9	3	0	2.9	16.7	0	0	3	2.4	1.1	0	1.1	1	0	1.3	1.1	1.8
4+ Axle Trucks	0	5	0	5	0	0	0	0	0	5	0	5	0	0	0	0	10
% 4+ Axle Trucks	0	1.1	0	1	0	0	0	0	0	0.7	0	0.6	0	0	0	0	0.7

Start Time	Goetz Road Southbound				Fieldstone Drive Westbound				Goetz Road Northbound				Fieldstone Drive 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	2	39	2	43	0	0	4	4	3	121	1	125	22	0	20	42	214
07:15 AM	0	63	1	64	0	0	5	5	2	144	0	146	20	3	10	33	248
07:30 AM	5	65	5	75	1	0	2	3	4	118	1	123	14	1	20	35	236
07:45 AM	3	83	8	94	1	0	4	5	8	115	4	127	12	0	9	21	247
Total Volume	10	250	16	276	2	0	15	17	17	498	6	521	68	4	59	131	945
% App. Total	3.6	90.6	5.8		11.8	0	88.2		3.3	95.6	1.2		51.9	3.1	45		
PHF	.500	.753	.500	.734	.500	.000	.750	.850	.531	.865	.375	.892	.773	.333	.738	.780	.953

City of Perris
 N/S: Goetz Road
 E/W: Fieldstone Drive
 Weather: Clear

File Name : 07_PER_Goetz_Fieldstone PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Goetz Road Southbound				Fieldstone Drive Westbound				Goetz Road Northbound				Fieldstone Drive 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	4	138	16	158	0	0	2	2	12	82	0	94	6	1	7	14	268
04:15 PM	6	149	14	169	0	1	4	5	8	86	0	94	8	0	8	16	284
04:30 PM	1	136	14	151	0	1	3	4	5	73	2	80	11	0	5	16	251
04:45 PM	5	123	20	148	0	1	3	4	5	68	0	73	9	0	5	14	239
Total	16	546	64	626	0	3	12	15	30	309	2	341	34	1	25	60	1042
05:00 PM	4	129	19	152	1	2	2	5	11	75	1	87	3	0	4	7	251
05:15 PM	8	135	13	156	0	0	4	4	7	77	5	89	12	1	5	18	267
05:30 PM	8	113	24	145	1	3	3	7	11	93	4	108	3	0	6	9	269
05:45 PM	4	125	15	144	1	0	5	6	9	79	0	88	9	0	7	16	254
Total	24	502	71	597	3	5	14	22	38	324	10	372	27	1	22	50	1041
Grand Total	40	1048	135	1223	3	8	26	37	68	633	12	713	61	2	47	110	2083
Apprch %	3.3	85.7	11		8.1	21.6	70.3		9.5	88.8	1.7		55.5	1.8	42.7		
Total %	1.9	50.3	6.5	58.7	0.1	0.4	1.2	1.8	3.3	30.4	0.6	34.2	2.9	0.1	2.3	5.3	
Passenger Vehicles	39	1037	134	1210	3	8	25	36	67	604	12	683	60	2	47	109	2038
% Passenger Vehicles	97.5	99	99.3	98.9	100	100	96.2	97.3	98.5	95.4	100	95.8	98.4	100	100	99.1	97.8
Large 2 Axle Vehicles	1	8	1	10	0	0	1	1	1	13	0	14	1	0	0	1	26
% Large 2 Axle Vehicles	2.5	0.8	0.7	0.8	0	0	3.8	2.7	1.5	2.1	0	2	1.6	0	0	0.9	1.2
3 Axle Vehicles	0	3	0	3	0	0	0	0	0	15	0	15	0	0	0	0	18
% 3 Axle Vehicles	0	0.3	0	0.2	0	0	0	0	0	2.4	0	2.1	0	0	0	0	0.9
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0.2	0	0.1	0	0	0	0	0

Start Time	Goetz Road Southbound				Fieldstone Drive Westbound				Goetz Road Northbound				Fieldstone Drive 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	4	138	16	158	0	0	2	2	12	82	0	94	6	1	7	14	268
04:15 PM	6	149	14	169	0	1	4	5	8	86	0	94	8	0	8	16	284
04:30 PM	1	136	14	151	0	1	3	4	5	73	2	80	11	0	5	16	251
04:45 PM	5	123	20	148	0	1	3	4	5	68	0	73	9	0	5	14	239
Total Volume	16	546	64	626	0	3	12	15	30	309	2	341	34	1	25	60	1042
% App. Total	2.6	87.2	10.2		0	20	80		8.8	90.6	0.6		56.7	1.7	41.7		
PHF	.667	.916	.800	.926	.000	.750	.750	.750	.625	.898	.250	.907	.773	.250	.781	.938	.917

City of Perris
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 08_PER_Goetz_Ethanac AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac 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	52	16	0	68	28	3	62	93	0	61	97	158	6	33	1	40	359
07:15 AM	40	26	1	67	26	6	63	95	0	86	106	192	4	34	3	41	395
07:30 AM	65	21	2	88	31	15	47	93	1	65	106	172	6	24	1	31	384
07:45 AM	52	34	4	90	44	20	83	147	0	42	72	114	5	15	1	21	372
Total	209	97	7	313	129	44	255	428	1	254	381	636	21	106	6	133	1510
08:00 AM	45	27	1	73	65	27	63	155	1	32	85	118	1	15	1	17	363
08:15 AM	43	17	4	64	52	12	29	93	1	28	65	94	4	9	2	15	266
08:30 AM	24	24	2	50	64	8	37	109	0	34	43	77	3	15	0	18	254
08:45 AM	44	10	0	54	32	7	26	65	0	25	49	74	2	8	0	10	203
Total	156	78	7	241	213	54	155	422	2	119	242	363	10	47	3	60	1086
Grand Total	365	175	14	554	342	98	410	850	3	373	623	999	31	153	9	193	2596
Apprch %	65.9	31.6	2.5		40.2	11.5	48.2		0.3	37.3	62.4		16.1	79.3	4.7		
Total %	14.1	6.7	0.5	21.3	13.2	3.8	15.8	32.7	0.1	14.4	24	38.5	1.2	5.9	0.3	7.4	
Passenger Vehicles	328	169	14	511	333	97	375	805	3	365	616	984	29	153	9	191	2491
% Passenger Vehicles	89.9	96.6	100	92.2	97.4	99	91.5	94.7	100	97.9	98.9	98.5	93.5	100	100	99	96
Large 2 Axle Vehicles	16	4	0	20	6	0	24	30	0	7	6	13	1	0	0	1	64
% Large 2 Axle Vehicles	4.4	2.3	0	3.6	1.8	0	5.9	3.5	0	1.9	1	1.3	3.2	0	0	0.5	2.5
3 Axle Vehicles	18	2	0	20	3	0	6	9	0	0	1	1	0	0	0	0	30
% 3 Axle Vehicles	4.9	1.1	0	3.6	0.9	0	1.5	1.1	0	0	0.2	0.1	0	0	0	0	1.2
4+ Axle Trucks	3	0	0	3	0	1	5	6	0	1	0	1	1	0	0	1	11
% 4+ Axle Trucks	0.8	0	0	0.5	0	1	1.2	0.7	0	0.3	0	0.1	3.2	0	0	0.5	0.4

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac 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 07:15 AM																	
07:15 AM	40	26	1	67	26	6	63	95	0	86	106	192	4	34	3	41	395
07:30 AM	65	21	2	88	31	15	47	93	1	65	106	172	6	24	1	31	384
07:45 AM	52	34	4	90	44	20	83	147	0	42	72	114	5	15	1	21	372
08:00 AM	45	27	1	73	65	27	63	155	1	32	85	118	1	15	1	17	363
Total Volume	202	108	8	318	166	68	256	490	2	225	369	596	16	88	6	110	1514
% App. Total	63.5	34	2.5		33.9	13.9	52.2		0.3	37.8	61.9		14.5	80	5.5		
PHF	.777	.794	.500	.883	.638	.630	.771	.790	.500	.654	.870	.776	.667	.647	.500	.671	.958

City of Perris
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 08_PER_Goetz_Ethanac PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac 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	74	58	10	142	78	16	57	151	1	33	47	81	6	7	0	13	387
04:15 PM	79	75	7	161	59	12	62	133	0	30	53	83	6	9	0	15	392
04:30 PM	66	62	10	138	80	24	50	154	1	24	51	76	4	9	3	16	384
04:45 PM	61	65	7	133	73	12	50	135	0	27	45	72	3	12	0	15	355
Total	280	260	34	574	290	64	219	573	2	114	196	312	19	37	3	59	1518
05:00 PM	64	58	5	127	84	21	52	157	2	33	58	93	2	14	0	16	393
05:15 PM	62	77	9	148	52	18	46	116	2	39	56	97	6	18	1	25	386
05:30 PM	62	43	6	111	60	15	75	150	0	28	52	80	5	16	3	24	365
05:45 PM	65	65	10	140	79	13	46	138	3	34	58	95	4	15	1	20	393
Total	253	243	30	526	275	67	219	561	7	134	224	365	17	63	5	85	1537
Grand Total	533	503	64	1100	565	131	438	1134	9	248	420	677	36	100	8	144	3055
Apprch %	48.5	45.7	5.8		49.8	11.6	38.6		1.3	36.6	62		25	69.4	5.6		
Total %	17.4	16.5	2.1	36	18.5	4.3	14.3	37.1	0.3	8.1	13.7	22.2	1.2	3.3	0.3	4.7	
Passenger Vehicles	522	498	64	1084	562	130	413	1105	9	244	415	668	35	100	8	143	3000
% Passenger Vehicles	97.9	99	100	98.5	99.5	99.2	94.3	97.4	100	98.4	98.8	98.7	97.2	100	100	99.3	98.2
Large 2 Axle Vehicles	8	5	0	13	3	1	9	13	0	2	5	7	1	0	0	1	34
% Large 2 Axle Vehicles	1.5	1	0	1.2	0.5	0.8	2.1	1.1	0	0.8	1.2	1	2.8	0	0	0.7	1.1
3 Axle Vehicles	3	0	0	3	0	0	6	6	0	2	0	2	0	0	0	0	11
% 3 Axle Vehicles	0.6	0	0	0.3	0	0	1.4	0.5	0	0.8	0	0.3	0	0	0	0	0.4
4+ Axle Trucks	0	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	10
% 4+ Axle Trucks	0	0	0	0	0	0	2.3	0.9	0	0	0	0	0	0	0	0	0.3

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac 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 05:00 PM																	
05:00 PM	64	58	5	127	84	21	52	157	2	33	58	93	2	14	0	16	393
05:15 PM	62	77	9	148	52	18	46	116	2	39	56	97	6	18	1	25	386
05:30 PM	62	43	6	111	60	15	75	150	0	28	52	80	5	16	3	24	365
05:45 PM	65	65	10	140	79	13	46	138	3	34	58	95	4	15	1	20	393
Total Volume	253	243	30	526	275	67	219	561	7	134	224	365	17	63	5	85	1537
% App. Total	48.1	46.2	5.7		49	11.9	39		1.9	36.7	61.4		20	74.1	5.9		
PHF	.973	.789	.750	.889	.818	.798	.730	.893	.583	.859	.966	.941	.708	.875	.417	.850	.978

City of Perris
 N/S: Byers Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 09_PER_Byers_Ethanac AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Ethanac Road Westbound			Byers Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	92	92	0	1	1	175	0	175	268
07:15 AM	2	99	101	0	2	2	192	0	192	295
07:30 AM	1	104	105	0	3	3	184	2	186	294
07:45 AM	2	142	144	0	1	1	137	0	137	282
Total	5	437	442	0	7	7	688	2	690	1139
08:00 AM	1	149	150	0	0	0	150	0	150	300
08:15 AM	0	100	100	0	2	2	125	2	127	229
08:30 AM	0	102	102	0	0	0	82	0	82	184
08:45 AM	0	64	64	0	0	0	101	0	101	165
Total	1	415	416	0	2	2	458	2	460	878
Grand Total	6	852	858	0	9	9	1146	4	1150	2017
Apprch %	0.7	99.3		0	100		99.7	0.3		
Total %	0.3	42.2	42.5	0	0.4	0.4	56.8	0.2	57	
Passenger Vehicles	6	808	814	0	9	9	1086	4	1090	1913
% Passenger Vehicles	100	94.8	94.9	0	100	100	94.8	100	94.8	94.8
Large 2 Axle Vehicles	0	29	29	0	0	0	39	0	39	68
% Large 2 Axle Vehicles	0	3.4	3.4	0	0	0	3.4	0	3.4	3.4
3 Axle Vehicles	0	10	10	0	0	0	18	0	18	28
% 3 Axle Vehicles	0	1.2	1.2	0	0	0	1.6	0	1.6	1.4
4+ Axle Trucks	0	5	5	0	0	0	3	0	3	8
% 4+ Axle Trucks	0	0.6	0.6	0	0	0	0.3	0	0.3	0.4

Start Time	Ethanac Road Westbound			Byers Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	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 07:15 AM										
07:15 AM	2	99	101	0	2	2	192	0	192	295
07:30 AM	1	104	105	0	3	3	184	2	186	294
07:45 AM	2	142	144	0	1	1	137	0	137	282
08:00 AM	1	149	150	0	0	0	150	0	150	300
Total Volume	6	494	500	0	6	6	663	2	665	1171
% App. Total	1.2	98.8		0	100		99.7	0.3		
PHF	.750	.829	.833	.000	.500	.500	.863	.250	.866	.976

City of Perris
 N/S: Byers Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 09_PER_Byers_Ethanac PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Ethanac Road Westbound			Byers Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	138	138	0	0	0	129	0	129	267
04:15 PM	0	142	142	0	0	0	134	0	134	276
04:30 PM	3	152	155	0	0	0	129	1	130	285
04:45 PM	0	138	138	0	0	0	117	0	117	255
Total	3	570	573	0	0	0	509	1	510	1083
05:00 PM	0	157	157	2	1	3	133	0	133	293
05:15 PM	1	126	127	0	0	0	132	0	132	259
05:30 PM	2	144	146	1	0	1	135	1	136	283
05:45 PM	1	152	153	2	1	3	133	0	133	289
Total	4	579	583	5	2	7	533	1	534	1124
Grand Total	7	1149	1156	5	2	7	1042	2	1044	2207
Apprch %	0.6	99.4		71.4	28.6		99.8	0.2		
Total %	0.3	52.1	52.4	0.2	0.1	0.3	47.2	0.1	47.3	
Passenger Vehicles	7	1121	1128	5	2	7	1024	2	1026	2161
% Passenger Vehicles	100	97.6	97.6	100	100	100	98.3	100	98.3	97.9
Large 2 Axle Vehicles	0	12	12	0	0	0	15	0	15	27
% Large 2 Axle Vehicles	0	1	1	0	0	0	1.4	0	1.4	1.2
3 Axle Vehicles	0	9	9	0	0	0	3	0	3	12
% 3 Axle Vehicles	0	0.8	0.8	0	0	0	0.3	0	0.3	0.5
4+ Axle Trucks	0	7	7	0	0	0	0	0	0	7
% 4+ Axle Trucks	0	0.6	0.6	0	0	0	0	0	0	0.3

Start Time	Ethanac Road Westbound			Byers Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	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 05:00 PM										
05:00 PM	0	157	157	2	1	3	133	0	133	293
05:15 PM	1	126	127	0	0	0	132	0	132	259
05:30 PM	2	144	146	1	0	1	135	1	136	283
05:45 PM	1	152	153	2	1	3	133	0	133	289
Total Volume	4	579	583	5	2	7	533	1	534	1124
% App. Total	0.7	99.3		71.4	28.6		99.8	0.2		
PHF	.500	.922	.928	.625	.500	.583	.987	.250	.982	.959

City of Perris
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 10_PER_Murrieta_Ethanac AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac 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	17	4	0	21	14	65	12	91	22	25	45	92	2	171	11	184	388
07:15 AM	15	7	4	26	13	76	11	100	23	30	30	83	2	181	12	195	404
07:30 AM	20	12	4	36	15	78	7	100	22	15	43	80	0	166	14	180	396
07:45 AM	15	11	1	27	26	122	16	164	28	19	39	86	2	124	13	139	416
Total	67	34	9	110	68	341	46	455	95	89	157	341	6	642	50	698	1604
08:00 AM	8	8	2	18	19	119	16	154	26	17	23	66	2	128	17	147	385
08:15 AM	4	11	0	15	12	86	16	114	13	14	31	58	2	117	8	127	314
08:30 AM	11	15	1	27	21	82	8	111	14	19	55	88	2	75	7	84	310
08:45 AM	13	13	5	31	25	47	5	77	11	14	38	63	0	83	17	100	271
Total	36	47	8	91	77	334	45	456	64	64	147	275	6	403	49	458	1280
Grand Total	103	81	17	201	145	675	91	911	159	153	304	616	12	1045	99	1156	2884
Apprch %	51.2	40.3	8.5		15.9	74.1	10		25.8	24.8	49.4		1	90.4	8.6		
Total %	3.6	2.8	0.6	7	5	23.4	3.2	31.6	5.5	5.3	10.5	21.4	0.4	36.2	3.4	40.1	
Passenger Vehicles	103	80	16	199	130	638	81	849	154	149	290	593	12	1006	98	1116	2757
% Passenger Vehicles	100	98.8	94.1	99	89.7	94.5	89	93.2	96.9	97.4	95.4	96.3	100	96.3	99	96.5	95.6
Large 2 Axle Vehicles	0	0	1	1	10	22	5	37	5	4	10	19	0	18	1	19	76
% Large 2 Axle Vehicles	0	0	5.9	0.5	6.9	3.3	5.5	4.1	3.1	2.6	3.3	3.1	0	1.7	1	1.6	2.6
3 Axle Vehicles	0	0	0	0	4	11	4	19	0	0	3	3	0	18	0	18	40
% 3 Axle Vehicles	0	0	0	0	2.8	1.6	4.4	2.1	0	0	1	0.5	0	1.7	0	1.6	1.4
4+ Axle Trucks	0	1	0	1	1	4	1	6	0	0	1	1	0	3	0	3	11
% 4+ Axle Trucks	0	1.2	0	0.5	0.7	0.6	1.1	0.7	0	0	0.3	0.2	0	0.3	0	0.3	0.4

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac 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	17	4	0	21	14	65	12	91	22	25	45	92	2	171	11	184	388
07:15 AM	15	7	4	26	13	76	11	100	23	30	30	83	2	181	12	195	404
07:30 AM	20	12	4	36	15	78	7	100	22	15	43	80	0	166	14	180	396
07:45 AM	15	11	1	27	26	122	16	164	28	19	39	86	2	124	13	139	416
Total Volume	67	34	9	110	68	341	46	455	95	89	157	341	6	642	50	698	1604
% App. Total	60.9	30.9	8.2		14.9	74.9	10.1		27.9	26.1	46		0.9	92	7.2		
PHF	.838	.708	.563	.764	.654	.699	.719	.694	.848	.742	.872	.927	.750	.887	.893	.895	.964

City of Perris
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 10_PER_Murrieta_Ethanac PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac 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	23	6	37	38	119	8	165	21	28	37	86	0	111	20	131	419
04:15 PM	5	15	3	23	53	105	6	164	25	16	34	75	2	106	24	132	394
04:30 PM	14	25	4	43	63	124	13	200	29	24	37	90	2	94	25	121	454
04:45 PM	12	16	2	30	47	112	15	174	26	14	39	79	2	96	32	130	413
Total	39	79	15	133	201	460	42	703	101	82	147	330	6	407	101	514	1680
05:00 PM	13	19	4	36	47	130	8	185	26	22	31	79	0	99	27	126	426
05:15 PM	6	20	2	28	37	100	13	150	19	14	39	72	1	109	29	139	389
05:30 PM	13	18	3	34	43	113	19	175	25	25	37	87	1	109	28	138	434
05:45 PM	9	5	3	17	45	120	10	175	25	20	37	82	0	101	24	125	399
Total	41	62	12	115	172	463	50	685	95	81	144	320	2	418	108	528	1648
Grand Total	80	141	27	248	373	923	92	1388	196	163	291	650	8	825	209	1042	3328
Apprch %	32.3	56.9	10.9		26.9	66.5	6.6		30.2	25.1	44.8		0.8	79.2	20.1		
Total %	2.4	4.2	0.8	7.5	11.2	27.7	2.8	41.7	5.9	4.9	8.7	19.5	0.2	24.8	6.3	31.3	
Passenger Vehicles	77	141	27	245	370	896	89	1355	196	162	287	645	8	810	209	1027	3272
% Passenger Vehicles	96.2	100	100	98.8	99.2	97.1	96.7	97.6	100	99.4	98.6	99.2	100	98.2	100	98.6	98.3
Large 2 Axle Vehicles	3	0	0	3	3	12	1	16	0	1	3	4	0	12	0	12	35
% Large 2 Axle Vehicles	3.8	0	0	1.2	0.8	1.3	1.1	1.2	0	0.6	1	0.6	0	1.5	0	1.2	1.1
3 Axle Vehicles	0	0	0	0	0	10	1	11	0	0	0	0	0	3	0	3	14
% 3 Axle Vehicles	0	0	0	0	0	1.1	1.1	0.8	0	0	0	0	0	0.4	0	0.3	0.4
4+ Axle Trucks	0	0	0	0	0	5	1	6	0	0	1	1	0	0	0	0	7
% 4+ Axle Trucks	0	0	0	0	0	0.5	1.1	0.4	0	0	0.3	0.2	0	0	0	0	0.2

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac 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 04:15 PM																	
04:15 PM	5	15	3	23	53	105	6	164	25	16	34	75	2	106	24	132	394
04:30 PM	14	25	4	43	63	124	13	200	29	24	37	90	2	94	25	121	454
04:45 PM	12	16	2	30	47	112	15	174	26	14	39	79	2	96	32	130	413
05:00 PM	13	19	4	36	47	130	8	185	26	22	31	79	0	99	27	126	426
Total Volume	44	75	13	132	210	471	42	723	106	76	141	323	6	395	108	509	1687
% App. Total	33.3	56.8	9.8		29	65.1	5.8		32.8	23.5	43.7		1.2	77.6	21.2		
PHF	.786	.750	.813	.767	.833	.906	.700	.904	.914	.792	.904	.897	.750	.932	.844	.964	.929

City of Perris
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 12_PER_Evans_Ethanac AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Evans Road Southbound				Ethanac Road Westbound				Evans Road Northbound				Ethanac 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	89	0	89	0	0	0	0	0	225	0	225	314
07:15 AM	0	0	0	0	0	99	0	99	0	0	0	0	0	231	1	232	331
07:30 AM	0	0	0	0	0	99	0	99	0	0	0	0	0	228	0	228	327
07:45 AM	0	0	0	0	0	160	0	160	0	0	2	2	0	195	0	195	357
Total	0	0	0	0	0	447	0	447	0	0	2	2	0	879	1	880	1329
08:00 AM	0	0	0	0	0	165	0	165	0	0	0	0	0	165	0	165	330
08:15 AM	0	0	0	0	2	109	0	111	0	0	0	0	0	155	0	155	266
08:30 AM	0	0	0	0	0	115	0	115	0	0	0	0	0	134	0	134	249
08:45 AM	0	0	0	0	2	81	0	83	0	0	0	0	0	130	0	130	213
Total	0	0	0	0	4	470	0	474	0	0	0	0	0	584	0	584	1058
Grand Total	0	0	0	0	4	917	0	921	0	0	2	2	0	1463	1	1464	2387
Apprch %	0	0	0		0.4	99.6	0		0	0	100		0	99.9	0.1		
Total %	0	0	0	0	0.2	38.4	0	38.6	0	0	0.1	0.1	0	61.3	0	61.3	
Passenger Vehicles	0	0	0	0	4	856	0	860	0	0	2	2	0	1398	1	1399	2261
% Passenger Vehicles	0	0	0	0	100	93.3	0	93.4	0	0	100	100	0	95.6	100	95.6	94.7
Large 2 Axle Vehicles	0	0	0	0	0	40	0	40	0	0	0	0	0	36	0	36	76
% Large 2 Axle Vehicles	0	0	0	0	0	4.4	0	4.3	0	0	0	0	0	2.5	0	2.5	3.2
3 Axle Vehicles	0	0	0	0	0	14	0	14	0	0	0	0	0	20	0	20	34
% 3 Axle Vehicles	0	0	0	0	0	1.5	0	1.5	0	0	0	0	0	1.4	0	1.4	1.4
4+ Axle Trucks	0	0	0	0	0	7	0	7	0	0	0	0	0	9	0	9	16
% 4+ Axle Trucks	0	0	0	0	0	0.8	0	0.8	0	0	0	0	0	0.6	0	0.6	0.7

Start Time	Evans Road Southbound				Ethanac Road Westbound				Evans Road Northbound				Ethanac 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 07:15 AM																	
07:15 AM	0	0	0	0	0	99	0	99	0	0	0	0	0	231	1	232	331
07:30 AM	0	0	0	0	0	99	0	99	0	0	0	0	0	228	0	228	327
07:45 AM	0	0	0	0	0	160	0	160	0	0	2	2	0	195	0	195	357
08:00 AM	0	0	0	0	0	165	0	165	0	0	0	0	0	165	0	165	330
Total Volume	0	0	0	0	0	523	0	523	0	0	2	2	0	819	1	820	1345
% App. Total	0	0	0		0	100	0		0	0	100		0	99.9	0.1		
PHF	.000	.000	.000	.000	.000	.792	.000	.792	.000	.000	.250	.250	.000	.886	.250	.884	.942

City of Perris
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 12_PER_Evans_Ethanac PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Evans Road Southbound				Ethanac Road Westbound				Evans Road Northbound				Ethanac 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	1	164	0	165	0	0	1	1	0	154	0	154	320
04:15 PM	0	0	0	0	0	166	0	166	0	0	0	0	0	155	0	155	321
04:30 PM	0	0	0	0	1	204	0	205	0	0	0	0	0	139	1	140	345
04:45 PM	0	0	0	0	1	172	0	173	0	0	0	0	0	155	2	157	330
Total	0	0	0	0	3	706	0	709	0	0	1	1	0	603	3	606	1316
05:00 PM	0	0	0	0	2	195	0	197	0	0	2	2	0	142	0	142	341
05:15 PM	0	0	0	0	3	152	0	155	0	0	0	0	0	156	0	156	311
05:30 PM	0	0	0	0	0	180	0	180	0	0	0	0	0	163	0	163	343
05:45 PM	0	0	0	0	2	172	0	174	0	0	0	0	0	147	0	147	321
Total	0	0	0	0	7	699	0	706	0	0	2	2	0	608	0	608	1316
Grand Total	0	0	0	0	10	1405	0	1415	0	0	3	3	0	1211	3	1214	2632
Apprch %	0	0	0		0.7	99.3	0		0	0	100		0	99.8	0.2		
Total %	0	0	0	0	0.4	53.4	0	53.8	0	0	0.1	0.1	0	46	0.1	46.1	
Passenger Vehicles	0	0	0	0	10	1368	0	1378	0	0	3	3	0	1182	3	1185	2566
% Passenger Vehicles	0	0	0	0	100	97.4	0	97.4	0	0	100	100	0	97.6	100	97.6	97.5
Large 2 Axle Vehicles	0	0	0	0	0	21	0	21	0	0	0	0	0	25	0	25	46
% Large 2 Axle Vehicles	0	0	0	0	0	1.5	0	1.5	0	0	0	0	0	2.1	0	2.1	1.7
3 Axle Vehicles	0	0	0	0	0	7	0	7	0	0	0	0	0	3	0	3	10
% 3 Axle Vehicles	0	0	0	0	0	0.5	0	0.5	0	0	0	0	0	0.2	0	0.2	0.4
4+ Axle Trucks	0	0	0	0	0	9	0	9	0	0	0	0	0	1	0	1	10
% 4+ Axle Trucks	0	0	0	0	0	0.6	0	0.6	0	0	0	0	0	0.1	0	0.1	0.4

Start Time	Evans Road Southbound				Ethanac Road Westbound				Evans Road Northbound				Ethanac 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 04:15 PM																	
04:15 PM	0	0	0	0	0	166	0	166	0	0	0	0	0	155	0	155	321
04:30 PM	0	0	0	0	1	204	0	205	0	0	0	0	0	139	1	140	345
04:45 PM	0	0	0	0	1	172	0	173	0	0	0	0	0	155	2	157	330
05:00 PM	0	0	0	0	2	195	0	197	0	0	2	2	0	142	0	142	341
Total Volume	0	0	0	0	4	737	0	741	0	0	2	2	0	591	3	594	1337
% App. Total	0	0	0	0	0.5	99.5	0		0	0	100		0	99.5	0.5		
PHF	.000	.000	.000	.000	.500	.903	.000	.904	.000	.000	.250	.250	.000	.953	.375	.946	.969

City of Perris
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 13_PER_Case_Ethanac AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac 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	63	2	14	79	22	80	47	149	2	2	19	23	18	189	9	216	467
07:15 AM	59	1	8	68	16	82	51	149	12	0	14	26	30	188	8	226	469
07:30 AM	74	1	3	78	11	100	57	168	7	2	15	24	28	196	5	229	499
07:45 AM	63	1	17	81	14	133	86	233	13	0	15	28	40	158	8	206	548
Total	259	5	42	306	63	395	241	699	34	4	63	101	116	731	30	877	1983
08:00 AM	78	1	18	97	11	130	94	235	2	1	11	14	39	115	5	159	505
08:15 AM	88	2	19	109	7	91	99	197	2	3	17	22	40	110	3	153	481
08:30 AM	85	1	31	117	4	65	80	149	4	2	15	21	34	94	5	133	420
08:45 AM	85	2	26	113	5	52	85	142	2	0	6	8	42	82	6	130	393
Total	336	6	94	436	27	338	358	723	10	6	49	65	155	401	19	575	1799
Grand Total	595	11	136	742	90	733	599	1422	44	10	112	166	271	1132	49	1452	3782
Apprch %	80.2	1.5	18.3		6.3	51.5	42.1		26.5	6	67.5		18.7	78	3.4		
Total %	15.7	0.3	3.6	19.6	2.4	19.4	15.8	37.6	1.2	0.3	3	4.4	7.2	29.9	1.3	38.4	
Passenger Vehicles	554	9	125	688	42	685	569	1296	27	9	60	96	262	1078	38	1378	3458
% Passenger Vehicles	93.1	81.8	91.9	92.7	46.7	93.5	95	91.1	61.4	90	53.6	57.8	96.7	95.2	77.6	94.9	91.4
Large 2 Axle Vehicles	29	1	10	40	28	28	22	78	14	1	22	37	8	30	9	47	202
% Large 2 Axle Vehicles	4.9	9.1	7.4	5.4	31.1	3.8	3.7	5.5	31.8	10	19.6	22.3	3	2.7	18.4	3.2	5.3
3 Axle Vehicles	6	1	1	8	10	12	4	26	3	0	14	17	0	14	2	16	67
% 3 Axle Vehicles	1	9.1	0.7	1.1	11.1	1.6	0.7	1.8	6.8	0	12.5	10.2	0	1.2	4.1	1.1	1.8
4+ Axle Trucks	6	0	0	6	10	8	4	22	0	0	16	16	1	10	0	11	55
% 4+ Axle Trucks	1	0	0	0.8	11.1	1.1	0.7	1.5	0	0	14.3	9.6	0.4	0.9	0	0.8	1.5

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac 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 07:30 AM																	
07:30 AM	74	1	3	78	11	100	57	168	7	2	15	24	28	196	5	229	499
07:45 AM	63	1	17	81	14	133	86	233	13	0	15	28	40	158	8	206	548
08:00 AM	78	1	18	97	11	130	94	235	2	1	11	14	39	115	5	159	505
08:15 AM	88	2	19	109	7	91	99	197	2	3	17	22	40	110	3	153	481
Total Volume	303	5	57	365	43	454	336	833	24	6	58	88	147	579	21	747	2033
% App. Total	83	1.4	15.6		5.2	54.5	40.3		27.3	6.8	65.9		19.7	77.5	2.8		
PHF	.861	.625	.750	.837	.768	.853	.848	.886	.462	.500	.853	.786	.919	.739	.656	.816	.927

City of Perris
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 13_PER_Case_Ethanac PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac 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	85	1	39	125	7	100	108	215	1	7	14	22	50	109	2	161	523
04:15 PM	92	1	31	124	2	122	90	214	4	2	14	20	37	108	9	154	512
04:30 PM	96	1	44	141	7	131	95	233	4	1	10	15	43	92	7	142	531
04:45 PM	103	0	31	134	7	125	97	229	6	6	9	21	47	103	6	156	540
Total	376	3	145	524	23	478	390	891	15	16	47	78	177	412	24	613	2106
05:00 PM	105	6	32	143	7	140	106	253	7	0	7	14	34	105	7	146	556
05:15 PM	109	0	30	139	9	113	87	209	4	4	8	16	42	112	2	156	520
05:30 PM	99	4	37	140	10	112	92	214	9	3	11	23	48	103	1	152	529
05:45 PM	110	0	40	150	13	107	108	228	5	2	11	18	42	112	8	162	558
Total	423	10	139	572	39	472	393	904	25	9	37	71	166	432	18	616	2163
Grand Total	799	13	284	1096	62	950	783	1795	40	25	84	149	343	844	42	1229	4269
Apprch %	72.9	1.2	25.9		3.5	52.9	43.6		26.8	16.8	56.4		27.9	68.7	3.4		
Total %	18.7	0.3	6.7	25.7	1.5	22.3	18.3	42	0.9	0.6	2	3.5	8	19.8	1	28.8	
Passenger Vehicles	789	13	278	1080	46	915	779	1740	37	24	69	130	337	813	42	1192	4142
% Passenger Vehicles	98.7	100	97.9	98.5	74.2	96.3	99.5	96.9	92.5	96	82.1	87.2	98.3	96.3	100	97	97
Large 2 Axle Vehicles	10	0	5	15	5	21	3	29	2	1	7	10	4	29	0	33	87
% Large 2 Axle Vehicles	1.3	0	1.8	1.4	8.1	2.2	0.4	1.6	5	4	8.3	6.7	1.2	3.4	0	2.7	2
3 Axle Vehicles	0	0	1	1	1	4	1	6	1	0	1	2	1	2	0	3	12
% 3 Axle Vehicles	0	0	0.4	0.1	1.6	0.4	0.1	0.3	2.5	0	1.2	1.3	0.3	0.2	0	0.2	0.3
4+ Axle Trucks	0	0	0	0	10	10	0	20	0	0	7	7	1	0	0	1	28
% 4+ Axle Trucks	0	0	0	0	16.1	1.1	0	1.1	0	0	8.3	4.7	0.3	0	0	0.1	0.7

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac 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 05:00 PM																	
05:00 PM	105	6	32	143	7	140	106	253	7	0	7	14	34	105	7	146	556
05:15 PM	109	0	30	139	9	113	87	209	4	4	8	16	42	112	2	156	520
05:30 PM	99	4	37	140	10	112	92	214	9	3	11	23	48	103	1	152	529
05:45 PM	110	0	40	150	13	107	108	228	5	2	11	18	42	112	8	162	558
Total Volume	423	10	139	572	39	472	393	904	25	9	37	71	166	432	18	616	2163
% App. Total	74	1.7	24.3		4.3	52.2	43.5		35.2	12.7	52.1		26.9	70.1	2.9		
PHF	.961	.417	.869	.953	.750	.843	.910	.893	.694	.563	.841	.772	.865	.964	.563	.951	.969

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 215 SB Ramps & Ethanac Rd
City: Perris
Control: Signalized

Project ID: 21-030079-001
Date: 9/29/2021

Data - Total

NS/EW Streets:	SR 215 SB Ramps				SR 215 SB Ramps				Ethanac Rd				Ethanac Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	0.5	0.5	1	0	0	1	1	0	1	2	0	0	
7:15 AM	0	0	0	0	37	0	48	0	0	157	132	0	24	96	0	0	514
7:30 AM	0	0	0	0	31	0	45	0	0	177	133	0	29	137	0	0	552
7:45 AM	0	0	0	0	24	0	35	0	0	167	126	0	27	143	0	0	522
8:00 AM	0	0	0	0	27	0	67	0	0	159	105	0	23	170	0	0	551
8:15 AM	0	0	0	0	30	0	66	0	0	155	89	0	16	193	0	0	549
8:30 AM	0	0	0	0	30	0	57	0	0	118	92	0	28	139	0	0	464
8:45 AM	0	0	0	0	18	0	49	0	0	116	68	0	21	117	0	0	389
	0	0	0	0	22	0	52	0	0	101	69	0	23	119	0	0	386
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	219	0	439	0	0	1150	814	0	191	1114	0	0	3927
					33.28%	0.00%	66.72%	0.00%	0.00%	58.55%	41.45%	0.00%	14.64%	85.36%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	112	0	213	0	0	658	453	0	95	643	0	0	2174
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.903	0.000	0.795	0.000	0.000	0.929	0.852	0.000	0.819	0.833	0.000	0.000	0.985
							0.846				0.896				0.883		
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0.5	0.5	1	0	0	1	1	0	1	2	0	0	
4:15 PM	0	0	0	0	58	0	73	0	0	125	81	0	27	151	0	0	515
4:30 PM	0	0	0	0	32	0	66	0	0	139	86	0	43	156	0	0	522
4:45 PM	0	0	0	0	45	0	77	0	0	130	76	0	31	153	0	0	512
5:00 PM	0	0	0	0	50	0	91	0	0	152	97	0	42	173	0	0	605
5:15 PM	0	0	0	0	51	0	88	0	0	154	78	0	23	179	0	0	573
5:30 PM	0	0	0	0	40	0	100	0	0	133	110	0	32	166	0	0	581
5:45 PM	0	0	0	0	40	0	68	0	0	135	96	0	21	170	0	0	530
	0	0	0	0	44	0	94	0	0	139	94	0	18	139	0	0	528
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	360	0	657	0	0	1107	718	0	237	1287	0	0	4366
					35.40%	0.00%	64.60%	0.00%	0.00%	60.66%	39.34%	0.00%	15.55%	84.45%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	181	0	347	0	0	574	381	0	118	688	0	0	2289
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.887	0.000	0.868	0.000	0.000	0.932	0.866	0.000	0.702	0.961	0.000	0.000	0.946
							0.936				0.959				0.937		

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 215 NB Ramps & Ethanac Rd
City: Perris
Control: Signalized

Project ID: 21-030079-002
Date: 9/29/2021

Data - Total

NS/EW Streets:	SR 215 NB Ramps				SR 215 NB Ramps				Ethanac Rd				Ethanac Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	0.5	0.5	1	0	0	0	0	0	1	1	0	0	0	1	0	0	
7:00 AM	50	0	34	0	0	0	0	0	47	141	0	0	0	72	30	0	374
7:15 AM	76	0	35	0	0	0	0	0	56	158	0	0	0	88	30	0	443
7:30 AM	80	0	24	0	0	0	0	0	47	136	0	0	0	94	38	0	419
7:45 AM	89	0	28	0	0	0	0	0	76	116	0	0	0	102	23	0	434
8:00 AM	93	0	35	0	0	0	0	0	58	125	0	0	0	119	23	0	453
8:15 AM	72	0	33	0	0	0	0	0	33	111	0	0	0	92	32	0	373
8:30 AM	59	0	31	0	0	0	0	0	61	78	0	0	0	82	24	0	335
8:45 AM	65	0	33	0	0	0	0	0	52	69	0	0	0	74	16	0	309
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	584	0	253	0	0	0	0	0	430	934	0	0	0	723	216	0	3140
APPROACH %'s :	69.77%	0.00%	30.23%	0.00%					31.52%	68.48%	0.00%	0.00%	0.00%	77.00%	23.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	338	0	122	0	0	0	0	0	237	535	0	0	0	403	114	0	1749
PEAK HR FACTOR :	0.909	0.000	0.871	0.000	0.000	0.000	0.000	0.000	0.780	0.847	0.000	0.000	0.000	0.847	0.750	0.000	0.965
	0.898								0.902				0.910				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	0.5	0.5	1	0	0	0	0	0	1	1	0	0	0	1	0	0	
4:00 PM	98	1	55	0	0	0	0	0	47	140	0	0	0	84	32	0	457
4:15 PM	91	2	53	0	0	0	0	0	42	116	0	0	0	106	40	0	450
4:30 PM	81	1	42	0	0	0	0	0	61	126	0	0	0	105	49	0	465
4:45 PM	119	0	51	0	0	0	0	0	58	140	0	0	0	94	36	0	498
5:00 PM	104	0	37	0	0	0	0	0	67	143	0	0	0	102	51	0	504
5:15 PM	97	1	50	0	0	0	0	0	45	122	0	0	0	98	49	0	462
5:30 PM	88	0	43	0	0	0	0	0	55	125	0	0	0	107	23	0	441
5:45 PM	89	2	30	0	0	0	0	0	42	140	0	0	0	63	26	0	392
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	767	7	361	0	0	0	0	0	417	1052	0	0	0	759	306	0	3669
APPROACH %'s :	67.58%	0.62%	31.81%	0.00%					28.39%	71.61%	0.00%	0.00%	0.00%	71.27%	28.73%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	401	2	180	0	0	0	0	0	231	531	0	0	0	399	185	0	1929
PEAK HR FACTOR :	0.842	0.500	0.882	0.000	0.000	0.000	0.000	0.000	0.862	0.928	0.000	0.000	0.000	0.950	0.907	0.000	0.957
	0.857								0.907				0.948				

National Data & Surveying Services Intersection Turning Movement Count

Location: Trumble Rd & Ethanac Rd
City: Perris
Control: Signalized

Project ID: 21-030079-004
Date: 9/29/2021

Data - Total

NS/EW Streets:	Trumble Rd				Trumble Rd				Ethanac Rd				Ethanac Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	22	3	12	0	2	1	19	0	23	143	3	0	8	52	2	0	290
7:15 AM	19	0	10	0	2	2	20	0	18	154	4	0	19	75	2	0	325
7:30 AM	23	1	4	0	2	2	14	0	13	136	5	0	10	83	2	0	295
7:45 AM	17	4	7	0	0	1	15	0	16	90	7	0	7	92	1	0	257
8:00 AM	22	5	11	0	3	8	15	0	17	96	2	0	11	90	0	0	280
8:15 AM	20	1	12	0	1	2	17	0	15	85	5	0	13	66	2	0	239
8:30 AM	14	0	5	0	4	0	23	0	17	82	2	0	7	57	3	0	214
8:45 AM	12	2	5	0	2	2	10	0	11	73	5	0	9	66	3	0	200
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	149	16	66	0	16	18	133	0	130	859	33	0	84	581	15	0	2100
	64.50%	6.93%	28.57%	0.00%	9.58%	10.78%	79.64%	0.00%	12.72%	84.05%	3.23%	0.00%	12.35%	85.44%	2.21%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	81	8	33	0	6	6	68	0	70	523	19	0	44	302	7	0	1167
PEAK HR FACTOR :	0.880	0.500	0.688	0.000	0.750	0.750	0.850	0.000	0.761	0.849	0.679	0.000	0.579	0.821	0.875	0.000	0.898
	0.824																
	0.833																
	0.869																
	0.883																
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	15	1	17	0	6	3	32	0	16	151	6	0	10	67	2	0	326
4:15 PM	30	0	8	0	4	1	19	0	17	135	8	0	16	94	3	0	335
4:30 PM	20	0	5	0	2	1	40	0	23	128	7	0	5	83	1	0	315
4:45 PM	14	2	12	0	3	5	21	0	18	139	9	1	14	91	0	0	329
5:00 PM	18	3	10	0	17	7	52	0	11	155	8	0	8	82	0	0	371
5:15 PM	17	3	6	0	2	1	31	0	11	126	9	0	5	73	1	0	285
5:30 PM	19	1	10	0	3	2	20	0	9	131	10	0	7	79	2	0	293
5:45 PM	13	1	13	0	5	1	15	0	8	129	11	0	4	49	0	0	249
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	146	11	81	0	42	21	230	0	113	1094	68	1	69	618	9	0	2503
	61.34%	4.62%	34.03%	0.00%	14.33%	7.17%	78.50%	0.00%	8.86%	85.74%	5.33%	0.08%	9.91%	88.79%	1.29%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	82	5	35	0	26	14	132	0	69	557	32	1	43	350	4	0	1350
PEAK HR FACTOR :	0.683	0.417	0.729	0.000	0.382	0.500	0.635	0.000	0.750	0.898	0.889	0.250	0.672	0.931	0.333	0.000	0.910
	0.803																
	0.566																
	0.947																
	0.878																

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

File Name : 31_MEN_Sherman_Ethanac AM
 Site Code : 10822005
 Start Date : 1/13/2022
 Page No : 1

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

Start Time	Sherman Road Southbound				Ethanac Road Westbound				Sherman Road Northbound				Ethanac 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	1	2	16	19	0	32	0	32	1	2	1	4	50	58	2	110	165
07:15 AM	0	1	43	44	0	46	2	48	1	0	0	1	69	52	3	124	217
07:30 AM	1	1	45	47	0	48	3	51	0	1	1	2	61	58	5	124	224
07:45 AM	1	3	82	86	0	71	2	73	0	0	0	0	43	45	4	92	251
Total	3	7	186	196	0	197	7	204	2	3	2	7	223	213	14	450	857
08:00 AM	2	1	38	41	0	41	3	44	1	0	0	1	43	25	1	69	155
08:15 AM	3	0	22	25	0	17	0	17	0	0	0	0	40	19	5	64	106
08:30 AM	0	4	24	28	0	16	0	16	1	0	0	1	41	23	0	64	109
08:45 AM	0	1	29	30	0	20	0	20	2	0	0	2	33	29	0	62	114
Total	5	6	113	124	0	94	3	97	4	0	0	4	157	96	6	259	484
Grand Total	8	13	299	320	0	291	10	301	6	3	2	11	380	309	20	709	1341
Apprch %	2.5	4.1	93.4		0	96.7	3.3		54.5	27.3	18.2		53.6	43.6	2.8		
Total %	0.6	1	22.3	23.9	0	21.7	0.7	22.4	0.4	0.2	0.1	0.8	28.3	23	1.5	52.9	
Passenger Vehicles	6	13	287	306	0	237	8	245	5	3	2	10	359	292	19	670	1231
% Passenger Vehicles	75	100	96	95.6	0	81.4	80	81.4	83.3	100	100	90.9	94.5	94.5	95	94.5	91.8
Large 2 Axle Vehicles	0	0	6	6	0	22	2	24	0	0	0	0	16	2	0	18	48
% Large 2 Axle Vehicles	0	0	2	1.9	0	7.6	20	8	0	0	0	0	4.2	0.6	0	2.5	3.6
3 Axle Vehicles	0	0	2	2	0	13	0	13	0	0	0	0	2	0	1	3	18
% 3 Axle Vehicles	0	0	0.7	0.6	0	4.5	0	4.3	0	0	0	0	0.5	0	5	0.4	1.3
4+ Axle Trucks	2	0	4	6	0	19	0	19	1	0	0	1	3	15	0	18	44
% 4+ Axle Trucks	25	0	1.3	1.9	0	6.5	0	6.3	16.7	0	0	9.1	0.8	4.9	0	2.5	3.3

Start Time	Sherman Road Southbound				Ethanac Road Westbound				Sherman Road Northbound				Ethanac 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	1	2	16	19	0	32	0	32	1	2	1	4	50	58	2	110	165
07:15 AM	0	1	43	44	0	46	2	48	1	0	0	1	69	52	3	124	217
07:30 AM	1	1	45	47	0	48	3	51	0	1	1	2	61	58	5	124	224
07:45 AM	1	3	82	86	0	71	2	73	0	0	0	0	43	45	4	92	251
Total Volume	3	7	186	196	0	197	7	204	2	3	2	7	223	213	14	450	857
% App. Total	1.5	3.6	94.9		0	96.6	3.4		28.6	42.9	28.6		49.6	47.3	3.1		
PHF	.750	.583	.567	.570	.000	.694	.583	.699	.500	.375	.500	.438	.808	.918	.700	.907	.854

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

File Name : 31_MEN_Sherman_Ethanac PM
 Site Code : 10822005
 Start Date : 1/13/2022
 Page No : 1

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

Start Time	Sherman Road Southbound				Ethanac Road Westbound				Sherman Road Northbound				Ethanac 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	1	1	30	32	0	38	0	38	7	1	0	8	59	32	3	94	172
04:15 PM	1	0	52	53	0	18	1	19	1	0	1	2	74	39	0	113	187
04:30 PM	0	0	45	45	0	38	1	39	5	0	1	6	70	52	4	126	216
04:45 PM	0	1	41	42	1	23	1	25	3	2	0	5	52	41	6	99	171
Total	2	2	168	172	1	117	3	121	16	3	2	21	255	164	13	432	746
05:00 PM	3	1	45	49	1	14	0	15	8	3	0	11	73	30	5	108	183
05:15 PM	1	1	31	33	2	30	2	34	3	1	0	4	65	41	4	110	181
05:30 PM	1	0	38	39	0	21	2	23	3	0	0	3	66	36	2	104	169
05:45 PM	0	2	31	33	2	17	1	20	2	1	1	4	61	42	3	106	163
Total	5	4	145	154	5	82	5	92	16	5	1	22	265	149	14	428	696
Grand Total	7	6	313	326	6	199	8	213	32	8	3	43	520	313	27	860	1442
Apprch %	2.1	1.8	96		2.8	93.4	3.8		74.4	18.6	7		60.5	36.4	3.1		
Total %	0.5	0.4	21.7	22.6	0.4	13.8	0.6	14.8	2.2	0.6	0.2	3	36.1	21.7	1.9	59.6	
Passenger Vehicles	6	5	305	316	6	194	8	208	29	8	3	40	510	291	24	825	1389
% Passenger Vehicles	85.7	83.3	97.4	96.9	100	97.5	100	97.7	90.6	100	100	93	98.1	93	88.9	95.9	96.3
Large 2 Axle Vehicles	0	0	4	4	0	2	0	2	1	0	0	1	9	13	0	22	29
% Large 2 Axle Vehicles	0	0	1.3	1.2	0	1	0	0.9	3.1	0	0	2.3	1.7	4.2	0	2.6	2
3 Axle Vehicles	0	0	2	2	0	3	0	3	0	0	0	0	0	3	0	3	8
% 3 Axle Vehicles	0	0	0.6	0.6	0	1.5	0	1.4	0	0	0	0	0	1	0	0.3	0.6
4+ Axle Trucks	1	1	2	4	0	0	0	0	2	0	0	2	1	6	3	10	16
% 4+ Axle Trucks	14.3	16.7	0.6	1.2	0	0	0	0	6.2	0	0	4.7	0.2	1.9	11.1	1.2	1.1

Start Time	Sherman Road Southbound				Ethanac Road Westbound				Sherman Road Northbound				Ethanac 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 04:15 PM																	
04:15 PM	1	0	52	53	0	18	1	19	1	0	1	2	74	39	0	113	187
04:30 PM	0	0	45	45	0	38	1	39	5	0	1	6	70	52	4	126	216
04:45 PM	0	1	41	42	1	23	1	25	3	2	0	5	52	41	6	99	171
05:00 PM	3	1	45	49	1	14	0	15	8	3	0	11	73	30	5	108	183
Total Volume	4	2	183	189	2	93	3	98	17	5	2	24	269	162	15	446	757
% App. Total	2.1	1.1	96.8		2	94.9	3.1		70.8	20.8	8.3		60.3	36.3	3.4		
PHF	.333	.500	.880	.892	.500	.612	.750	.628	.531	.417	.500	.545	.909	.779	.625	.885	.876

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

File Name : 25_MEN_Murrieta_McLaughlin AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

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	3	27	1	31	0	0	10	10	0	79	0	79	3	0	1	4	124
07:15 AM	3	30	0	33	0	0	10	10	0	69	0	69	1	0	1	2	114
07:30 AM	1	41	0	42	0	0	6	6	1	73	1	75	2	0	0	2	125
07:45 AM	5	44	1	50	0	0	5	5	0	68	1	69	0	0	1	1	125
Total	12	142	2	156	0	0	31	31	1	289	2	292	6	0	3	9	488
08:00 AM	3	43	0	46	2	0	3	5	0	50	0	50	0	0	1	1	102
08:15 AM	0	28	3	31	0	0	1	1	0	58	0	58	0	0	3	3	93
08:30 AM	2	42	1	45	0	0	1	1	0	84	0	84	2	0	0	2	132
08:45 AM	4	49	0	53	1	0	0	1	1	55	1	57	1	0	1	2	113
Total	9	162	4	175	3	0	5	8	1	247	1	249	3	0	5	8	440
Grand Total	21	304	6	331	3	0	36	39	2	536	3	541	9	0	8	17	928
Apprch %	6.3	91.8	1.8		7.7	0	92.3		0.4	99.1	0.6		52.9	0	47.1		
Total %	2.3	32.8	0.6	35.7	0.3	0	3.9	4.2	0.2	57.8	0.3	58.3	1	0	0.9	1.8	

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	
07:00 AM	3	27	1	31	0	0	10	10	0	79	0	79	3	0	1	4	124
07:15 AM	3	30	0	33	0	0	10	10	0	69	0	69	1	0	1	2	114
07:30 AM	1	41	0	42	0	0	6	6	1	73	1	75	2	0	0	2	125
07:45 AM	5	44	1	50	0	0	5	5	0	68	1	69	0	0	1	1	125
Total Volume	12	142	2	156	0	0	31	31	1	289	2	292	6	0	3	9	488
% App. Total	7.7	91	1.3		0	0	100		0.3	99	0.7		66.7	0	33.3		
PHF	.600	.807	.500	.780	.000	.000	.775	.775	.250	.915	.500	.924	.500	.000	.750	.563	.976

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: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 25_MEN_Murrieta_McLaughlin PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

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	1	77	1	79	0	0	4	4	2	80	0	82	1	1	2	4	169
04:15 PM	5	80	2	87	1	0	6	7	1	64	1	66	0	0	1	1	161
04:30 PM	8	103	2	113	4	0	5	9	0	80	1	81	0	0	1	1	204
04:45 PM	6	84	1	91	2	0	6	8	1	70	0	71	3	0	1	4	174
Total	20	344	6	370	7	0	21	28	4	294	2	300	4	1	5	10	708
05:00 PM	6	90	2	98	0	0	6	6	0	74	1	75	3	0	0	3	182
05:15 PM	7	78	1	86	0	0	4	4	0	65	1	66	0	0	1	1	157
05:30 PM	7	81	1	89	1	0	7	8	0	79	0	79	1	0	1	2	178
05:45 PM	10	67	0	77	0	0	3	3	1	71	0	72	0	0	2	2	154
Total	30	316	4	350	1	0	20	21	1	289	2	292	4	0	4	8	671
Grand Total	50	660	10	720	8	0	41	49	5	583	4	592	8	1	9	18	1379
Apprch %	6.9	91.7	1.4		16.3	0	83.7		0.8	98.5	0.7		44.4	5.6	50		
Total %	3.6	47.9	0.7	52.2	0.6	0	3	3.6	0.4	42.3	0.3	42.9	0.6	0.1	0.7	1.3	

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	
04:15 PM	5	80	2	87	1	0	6	7	1	64	1	66	0	0	1	1	161
04:30 PM	8	103	2	113	4	0	5	9	0	80	1	81	0	0	1	1	204
04:45 PM	6	84	1	91	2	0	6	8	1	70	0	71	3	0	1	4	174
05:00 PM	6	90	2	98	0	0	6	6	0	74	1	75	3	0	0	3	182
Total Volume	25	357	7	389	7	0	23	30	2	288	3	293	6	0	3	9	721
% App. Total	6.4	91.8	1.8		23.3	0	76.7		0.7	98.3	1		66.7	0	33.3		
PHF	.781	.867	.875	.861	.438	.000	.958	.833	.500	.900	.750	.904	.500	.000	.750	.563	.884

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

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

File Name : 21_MEN_Murrieta_Rouse AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

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	6	26	0	32	2	0	7	9	0	56	2	58	6	4	3	13	112
07:15 AM	8	26	0	34	3	2	5	10	0	52	0	52	5	3	1	9	105
07:30 AM	6	33	3	42	3	0	14	17	1	59	3	63	2	7	2	11	133
07:45 AM	8	32	1	41	2	1	14	17	2	59	2	63	1	4	0	5	126
Total	28	117	4	149	10	3	40	53	3	226	7	236	14	18	6	38	476
08:00 AM	4	35	2	41	1	1	12	14	1	44	1	46	2	2	0	4	105
08:15 AM	4	28	3	35	1	2	14	17	2	46	2	50	0	2	0	2	104
08:30 AM	2	29	3	34	2	2	15	19	0	52	4	56	8	2	0	10	119
08:45 AM	14	34	1	49	1	1	10	12	0	50	5	55	4	1	1	6	122
Total	24	126	9	159	5	6	51	62	3	192	12	207	14	7	1	22	450
Grand Total	52	243	13	308	15	9	91	115	6	418	19	443	28	25	7	60	926
Apprch %	16.9	78.9	4.2		13	7.8	79.1		1.4	94.4	4.3		46.7	41.7	11.7		
Total %	5.6	26.2	1.4	33.3	1.6	1	9.8	12.4	0.6	45.1	2.1	47.8	3	2.7	0.8	6.5	

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	6	26	0	32	2	0	7	9	0	56	2	58	6	4	3	13	112
07:15 AM	8	26	0	34	3	2	5	10	0	52	0	52	5	3	1	9	105
07:30 AM	6	33	3	42	3	0	14	17	1	59	3	63	2	7	2	11	133
07:45 AM	8	32	1	41	2	1	14	17	2	59	2	63	1	4	0	5	126
Total Volume	28	117	4	149	10	3	40	53	3	226	7	236	14	18	6	38	476
% App. Total	18.8	78.5	2.7		18.9	5.7	75.5		1.3	95.8	3		36.8	47.4	15.8		
PHF	.875	.886	.333	.887	.833	.375	.714	.779	.375	.958	.583	.937	.583	.643	.500	.731	.895

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: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 21_MEN_Murrieta_Rouse PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

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	13	56	4	73	1	2	12	15	0	67	6	73	3	2	1	6	167
04:15 PM	11	69	5	85	2	3	13	18	0	50	5	55	1	3	1	5	163
04:30 PM	22	75	6	103	1	4	16	21	1	58	0	59	4	3	0	7	190
04:45 PM	13	65	9	87	0	1	15	16	1	56	4	61	2	1	0	3	167
Total	59	265	24	348	4	10	56	70	2	231	15	248	10	9	2	21	687
05:00 PM	19	79	6	104	1	2	17	20	2	57	3	62	2	1	1	4	190
05:15 PM	13	65	1	79	2	3	7	12	0	50	4	54	5	3	2	10	155
05:30 PM	10	68	4	82	2	3	12	17	2	67	2	71	1	3	1	5	175
05:45 PM	11	49	6	66	2	3	10	15	3	67	5	75	0	0	1	1	157
Total	53	261	17	331	7	11	46	64	7	241	14	262	8	7	5	20	677
Grand Total	112	526	41	679	11	21	102	134	9	472	29	510	18	16	7	41	1364
Apprch %	16.5	77.5	6		8.2	15.7	76.1		1.8	92.5	5.7		43.9	39	17.1		
Total %	8.2	38.6	3	49.8	0.8	1.5	7.5	9.8	0.7	34.6	2.1	37.4	1.3	1.2	0.5	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	
04:15 PM	11	69	5	85	2	3	13	18	0	50	5	55	1	3	1	5	163
04:30 PM	22	75	6	103	1	4	16	21	1	58	0	59	4	3	0	7	190
04:45 PM	13	65	9	87	0	1	15	16	1	56	4	61	2	1	0	3	167
05:00 PM	19	79	6	104	1	2	17	20	2	57	3	62	2	1	1	4	190
Total Volume	65	288	26	379	4	10	61	75	4	221	12	237	9	8	2	19	710
% App. Total	17.2	76	6.9		5.3	13.3	81.3		1.7	93.2	5.1		47.4	42.1	10.5		
PHF	.739	.911	.722	.911	.500	.625	.897	.893	.500	.953	.600	.956	.563	.667	.500	.679	.934

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

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

File Name : 22_MEN_Murrieta_Chambers AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Murrieta Road Southbound				Chambers Avenue Westbound				Murrieta Road Northbound				Chambers Avenue 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	15	44	3	62	1	1	4	6	2	39	0	41	9	15	11	35	144
07:15 AM	7	52	1	60	2	2	3	7	10	44	0	54	5	15	17	37	158
07:30 AM	9	46	1	56	2	2	3	7	11	60	1	72	11	4	19	34	169
07:45 AM	5	40	3	48	2	5	5	12	13	62	1	76	3	8	4	15	151
Total	36	182	8	226	7	10	15	32	36	205	2	243	28	42	51	121	622
08:00 AM	7	34	4	45	0	5	5	10	8	47	1	56	0	15	6	21	132
08:15 AM	9	32	1	42	2	5	3	10	5	41	1	47	4	6	5	15	114
08:30 AM	10	32	5	47	3	3	2	8	2	58	0	60	2	9	3	14	129
08:45 AM	13	33	2	48	0	0	8	8	4	47	2	53	3	4	3	10	119
Total	39	131	12	182	5	13	18	36	19	193	4	216	9	34	17	60	494
Grand Total	75	313	20	408	12	23	33	68	55	398	6	459	37	76	68	181	1116
Apprch %	18.4	76.7	4.9		17.6	33.8	48.5		12	86.7	1.3		20.4	42	37.6		
Total %	6.7	28	1.8	36.6	1.1	2.1	3	6.1	4.9	35.7	0.5	41.1	3.3	6.8	6.1	16.2	

Start Time	Murrieta Road Southbound				Chambers Avenue Westbound				Murrieta Road Northbound				Chambers Avenue 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	15	44	3	62	1	1	4	6	2	39	0	41	9	15	11	35	144
07:15 AM	7	52	1	60	2	2	3	7	10	44	0	54	5	15	17	37	158
07:30 AM	9	46	1	56	2	2	3	7	11	60	1	72	11	4	19	34	169
07:45 AM	5	40	3	48	2	5	5	12	13	62	1	76	3	8	4	15	151
Total Volume	36	182	8	226	7	10	15	32	36	205	2	243	28	42	51	121	622
% App. Total	15.9	80.5	3.5		21.9	31.2	46.9		14.8	84.4	0.8		23.1	34.7	42.1		
PHF	.600	.875	.667	.911	.875	.500	.750	.667	.692	.827	.500	.799	.636	.700	.671	.818	.920

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: Murrieta Road
 E/W: Chambers Avenue
 Weather: Clear

File Name : 22_MEN_Murrieta_Chambers PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Murrieta Road Southbound				Chambers Avenue Westbound				Murrieta Road Northbound				Chambers Avenue 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	9	53	9	71	0	9	18	27	5	64	2	71	5	5	4	14	183
04:15 PM	13	51	7	71	3	5	12	20	13	58	1	72	1	7	5	13	176
04:30 PM	14	60	6	80	1	8	17	26	8	60	1	69	6	4	7	17	192
04:45 PM	8	52	10	70	1	9	9	19	17	67	3	87	3	5	5	13	189
Total	44	216	32	292	5	31	56	92	43	249	7	299	15	21	21	57	740
05:00 PM	9	53	15	77	1	7	19	27	12	63	4	79	1	8	7	16	199
05:15 PM	13	57	5	75	1	7	11	19	13	51	2	66	4	6	2	12	172
05:30 PM	9	56	7	72	1	5	15	21	14	66	1	81	5	5	12	22	196
05:45 PM	13	48	6	67	2	7	8	17	11	69	3	83	8	4	8	20	187
Total	44	214	33	291	5	26	53	84	50	249	10	309	18	23	29	70	754
Grand Total	88	430	65	583	10	57	109	176	93	498	17	608	33	44	50	127	1494
Apprch %	15.1	73.8	11.1		5.7	32.4	61.9		15.3	81.9	2.8		26	34.6	39.4		
Total %	5.9	28.8	4.4	39	0.7	3.8	7.3	11.8	6.2	33.3	1.1	40.7	2.2	2.9	3.3	8.5	

Start Time	Murrieta Road Southbound				Chambers Avenue Westbound				Murrieta Road Northbound				Chambers Avenue 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	13	51	7	71	3	5	12	20	13	58	1	72	1	7	5	13	176
04:30 PM	14	60	6	80	1	8	17	26	8	60	1	69	6	4	7	17	192
04:45 PM	8	52	10	70	1	9	9	19	17	67	3	87	3	5	5	13	189
05:00 PM	9	53	15	77	1	7	19	27	12	63	4	79	1	8	7	16	199
Total Volume	44	216	38	298	6	29	57	92	50	248	9	307	11	24	24	59	756
% App. Total	14.8	72.5	12.8		6.5	31.5	62		16.3	80.8	2.9		18.6	40.7	40.7		
PHF	.786	.900	.633	.931	.500	.806	.750	.852	.735	.925	.563	.882	.458	.750	.857	.868	.950

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

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

File Name : 16_MEN_Murrieta_McCall AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Murrieta Road Southbound				McCall Boulevard Westbound				Murrieta 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	14	18	27	59	8	39	3	50	0	35	23	58	9	15	0	24	191
07:15 AM	12	28	36	76	6	26	9	41	0	27	22	49	20	51	0	71	237
07:30 AM	8	24	29	61	3	22	11	36	0	39	24	63	31	41	0	72	232
07:45 AM	18	16	16	50	8	29	32	69	0	42	32	74	20	49	0	69	262
Total	52	86	108	246	25	116	55	196	0	143	101	244	80	156	0	236	922
08:00 AM	12	19	11	42	8	33	24	65	0	36	33	69	8	44	1	53	229
08:15 AM	22	25	4	51	12	36	26	74	0	13	14	27	4	33	1	38	190
08:30 AM	27	25	1	53	7	20	21	48	0	33	17	50	7	19	1	27	178
08:45 AM	30	17	7	54	9	21	20	50	0	26	21	47	8	22	0	30	181
Total	91	86	23	200	36	110	91	237	0	108	85	193	27	118	3	148	778
Grand Total	143	172	131	446	61	226	146	433	0	251	186	437	107	274	3	384	1700
Apprch %	32.1	38.6	29.4		14.1	52.2	33.7		0	57.4	42.6		27.9	71.4	0.8		
Total %	8.4	10.1	7.7	26.2	3.6	13.3	8.6	25.5	0	14.8	10.9	25.7	6.3	16.1	0.2	22.6	

Start Time	Murrieta Road Southbound				McCall Boulevard Westbound				Murrieta 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 07:15 AM

07:15 AM	12	28	36	76	6	26	9	41	0	27	22	49	20	51	0	71	237
07:30 AM	8	24	29	61	3	22	11	36	0	39	24	63	31	41	0	72	232
07:45 AM	18	16	16	50	8	29	32	69	0	42	32	74	20	49	0	69	262
08:00 AM	12	19	11	42	8	33	24	65	0	36	33	69	8	44	1	53	229
Total Volume	50	87	92	229	25	110	76	211	0	144	111	255	79	185	1	265	960
% App. Total	21.8	38	40.2		11.8	52.1	36		0	56.5	43.5		29.8	69.8	0.4		
PHF	.694	.777	.639	.753	.781	.833	.594	.764	.000	.857	.841	.861	.637	.907	.250	.920	.916

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

File Name : 16_MEN_Murrieta_McCall PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Murrieta Road Southbound				McCall Boulevard Westbound				Murrieta 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	20	27	13	60	16	44	24	84	0	43	28	71	8	26	0	34	249
04:15 PM	25	28	13	66	17	35	27	79	1	56	22	79	8	19	1	28	252
04:30 PM	31	33	12	76	17	42	21	80	0	47	34	81	7	33	1	41	278
04:45 PM	3	26	12	41	18	38	41	97	1	50	29	80	5	28	0	33	251
Total	79	114	50	243	68	159	113	340	2	196	113	311	28	106	2	136	1030
05:00 PM	22	24	10	56	26	38	31	95	1	46	30	77	11	28	0	39	267
05:15 PM	24	29	14	67	16	30	32	78	1	35	37	73	15	29	0	44	262
05:30 PM	23	33	14	70	16	42	34	92	0	42	25	67	6	16	0	22	251
05:45 PM	23	23	12	58	24	50	39	113	1	47	28	76	10	12	0	22	269
Total	92	109	50	251	82	160	136	378	3	170	120	293	42	85	0	127	1049
Grand Total	171	223	100	494	150	319	249	718	5	366	233	604	70	191	2	263	2079
Apprch %	34.6	45.1	20.2		20.9	44.4	34.7		0.8	60.6	38.6		26.6	72.6	0.8		
Total %	8.2	10.7	4.8	23.8	7.2	15.3	12	34.5	0.2	17.6	11.2	29.1	3.4	9.2	0.1	12.7	

Start Time	Murrieta Road Southbound				McCall Boulevard Westbound				Murrieta 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 04:30 PM																	
04:30 PM	31	33	12	76	17	42	21	80	0	47	34	81	7	33	1	41	278
04:45 PM	3	26	12	41	18	38	41	97	1	50	29	80	5	28	0	33	251
05:00 PM	22	24	10	56	26	38	31	95	1	46	30	77	11	28	0	39	267
05:15 PM	24	29	14	67	16	30	32	78	1	35	37	73	15	29	0	44	262
Total Volume	80	112	48	240	77	148	125	350	3	178	130	311	38	118	1	157	1058
% App. Total	33.3	46.7	20		22	42.3	35.7		1	57.2	41.8		24.2	75.2	0.6		
PHF	.645	.848	.857	.789	.740	.881	.762	.902	.750	.890	.878	.960	.633	.894	.250	.892	.951

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

File Name : 23_MEN_Sun City_McCall AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Sun City Boulevard Southbound				McCall Boulevard Westbound				Sun City Boulevard 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	9	7	0	16	20	55	2	77	2	3	10	15	1	72	2	75	183
07:15 AM	11	13	3	27	16	40	5	61	6	7	13	26	4	109	7	120	234
07:30 AM	13	5	2	20	26	47	6	79	5	6	8	19	1	88	3	92	210
07:45 AM	11	9	1	21	33	81	4	118	2	8	14	24	5	110	6	121	284
Total	44	34	6	84	95	223	17	335	15	24	45	84	11	379	18	408	911
08:00 AM	7	8	2	17	35	73	14	122	7	11	9	27	3	98	7	108	274
08:15 AM	13	11	4	28	33	79	14	126	16	14	20	50	10	79	6	95	299
08:30 AM	23	15	1	39	35	64	10	109	6	18	15	39	7	73	13	93	280
08:45 AM	25	17	5	47	32	52	4	88	10	13	20	43	8	77	14	99	277
Total	68	51	12	131	135	268	42	445	39	56	64	159	28	327	40	395	1130
Grand Total	112	85	18	215	230	491	59	780	54	80	109	243	39	706	58	803	2041
Apprch %	52.1	39.5	8.4		29.5	62.9	7.6		22.2	32.9	44.9		4.9	87.9	7.2		
Total %	5.5	4.2	0.9	10.5	11.3	24.1	2.9	38.2	2.6	3.9	5.3	11.9	1.9	34.6	2.8	39.3	

Start Time	Sun City Boulevard Southbound				McCall Boulevard Westbound				Sun City Boulevard 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	11	9	1	21	33	81	4	118	2	8	14	24	5	110	6	121	284
08:00 AM	7	8	2	17	35	73	14	122	7	11	9	27	3	98	7	108	274
08:15 AM	13	11	4	28	33	79	14	126	16	14	20	50	10	79	6	95	299
08:30 AM	23	15	1	39	35	64	10	109	6	18	15	39	7	73	13	93	280
Total Volume	54	43	8	105	136	297	42	475	31	51	58	140	25	360	32	417	1137
% App. Total	51.4	41	7.6		28.6	62.5	8.8		22.1	36.4	41.4		6	86.3	7.7		
PHF	.587	.717	.500	.673	.971	.917	.750	.942	.484	.708	.725	.700	.625	.818	.615	.862	.951

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

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

File Name : 23_MEN_Sun City_McCall PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Sun City Boulevard Southbound				McCall Boulevard Westbound				Sun City Boulevard 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	17	20	3	40	58	103	5	166	23	32	48	103	6	79	7	92	401
04:15 PM	15	21	1	37	58	109	22	189	15	36	35	86	4	60	22	86	398
04:30 PM	21	18	3	42	55	102	16	173	17	30	34	81	7	85	16	108	404
04:45 PM	12	16	3	31	57	90	24	171	25	20	31	76	8	91	14	113	391
Total	65	75	10	150	228	404	67	699	80	118	148	346	25	315	59	399	1594
05:00 PM	8	11	3	22	44	100	18	162	22	33	36	91	3	65	12	80	355
05:15 PM	14	13	1	28	53	98	13	164	20	18	32	70	3	93	10	106	368
05:30 PM	14	11	1	26	45	108	18	171	21	19	36	76	5	57	12	74	347
05:45 PM	9	20	0	29	53	109	22	184	20	20	31	71	5	64	16	85	369
Total	45	55	5	105	195	415	71	681	83	90	135	308	16	279	50	345	1439
Grand Total	110	130	15	255	423	819	138	1380	163	208	283	654	41	594	109	744	3033
Apprch %	43.1	51	5.9		30.7	59.3	10		24.9	31.8	43.3		5.5	79.8	14.7		
Total %	3.6	4.3	0.5	8.4	13.9	27	4.5	45.5	5.4	6.9	9.3	21.6	1.4	19.6	3.6	24.5	

Start Time	Sun City Boulevard Southbound				McCall Boulevard Westbound				Sun City Boulevard 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	17	20	3	40	58	103	5	166	23	32	48	103	6	79	7	92	401
04:15 PM	15	21	1	37	58	109	22	189	15	36	35	86	4	60	22	86	398
04:30 PM	21	18	3	42	55	102	16	173	17	30	34	81	7	85	16	108	404
04:45 PM	12	16	3	31	57	90	24	171	25	20	31	76	8	91	14	113	391
Total Volume	65	75	10	150	228	404	67	699	80	118	148	346	25	315	59	399	1594
% App. Total	43.3	50	6.7		32.6	57.8	9.6		23.1	34.1	42.8		6.3	78.9	14.8		
PHF	.774	.893	.833	.893	.983	.927	.698	.925	.800	.819	.771	.840	.781	.865	.670	.883	.986

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

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

File Name : 17_MEN_Bradley_McCall AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

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	49	8	0	57	67	74	3	144	2	5	44	51	0	83	9	92	344
07:15 AM	51	17	1	69	66	55	7	128	0	4	57	61	1	121	5	127	385
07:30 AM	51	9	1	61	84	82	23	189	7	8	63	78	2	98	13	113	441
07:45 AM	39	15	2	56	105	124	27	256	13	13	83	109	5	121	11	137	558
Total	190	49	4	243	322	335	60	717	22	30	247	299	8	423	38	469	1728
08:00 AM	37	14	0	51	137	117	27	281	8	13	88	109	4	108	11	123	564
08:15 AM	27	9	0	36	115	117	21	253	8	10	83	101	3	117	6	126	516
08:30 AM	38	11	2	51	123	92	19	234	12	6	83	101	5	106	20	131	517
08:45 AM	40	16	3	59	113	73	20	206	10	9	74	93	3	113	16	132	490
Total	142	50	5	197	488	399	87	974	38	38	328	404	15	444	53	512	2087
Grand Total	332	99	9	440	810	734	147	1691	60	68	575	703	23	867	91	981	3815
Apprch %	75.5	22.5	2		47.9	43.4	8.7		8.5	9.7	81.8		2.3	88.4	9.3		
Total %	8.7	2.6	0.2	11.5	21.2	19.2	3.9	44.3	1.6	1.8	15.1	18.4	0.6	22.7	2.4	25.7	

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 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	39	15	2	56	105	124	27	256	13	13	83	109	5	121	11	137	558
08:00 AM	37	14	0	51	137	117	27	281	8	13	88	109	4	108	11	123	564
08:15 AM	27	9	0	36	115	117	21	253	8	10	83	101	3	117	6	126	516
08:30 AM	38	11	2	51	123	92	19	234	12	6	83	101	5	106	20	131	517
Total Volume	141	49	4	194	480	450	94	1024	41	42	337	420	17	452	48	517	2155
% App. Total	72.7	25.3	2.1		46.9	43.9	9.2		9.8	10	80.2		3.3	87.4	9.3		
PHF	.904	.817	.500	.866	.876	.907	.870	.911	.788	.808	.957	.963	.850	.934	.600	.943	.955

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

File Name : 17_MEN_Bradley_McCall PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

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	31	23	0	54	148	161	25	334	21	25	126	172	1	119	13	133	693
04:15 PM	21	21	0	42	145	182	34	361	9	20	117	146	7	121	16	144	693
04:30 PM	29	25	1	55	125	143	28	296	14	22	143	179	10	125	16	151	681
04:45 PM	34	17	2	53	150	161	33	344	13	14	130	157	8	129	22	159	713
Total	115	86	3	204	568	647	120	1335	57	81	516	654	26	494	67	587	2780
05:00 PM	31	20	2	53	122	141	39	302	14	14	165	193	3	105	18	126	674
05:15 PM	30	25	0	55	127	153	28	308	15	17	123	155	5	138	17	160	678
05:30 PM	30	23	3	56	141	149	26	316	20	9	104	133	1	107	12	120	625
05:45 PM	22	13	4	39	153	171	23	347	15	11	121	147	5	105	17	127	660
Total	113	81	9	203	543	614	116	1273	64	51	513	628	14	455	64	533	2637
Grand Total	228	167	12	407	1111	1261	236	2608	121	132	1029	1282	40	949	131	1120	5417
Apprch %	56	41	2.9		42.6	48.4	9		9.4	10.3	80.3		3.6	84.7	11.7		
Total %	4.2	3.1	0.2	7.5	20.5	23.3	4.4	48.1	2.2	2.4	19	23.7	0.7	17.5	2.4	20.7	

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	
04:00 PM	31	23	0	54	148	161	25	334	21	25	126	172	1	119	13	133	693
04:15 PM	21	21	0	42	145	182	34	361	9	20	117	146	7	121	16	144	693
04:30 PM	29	25	1	55	125	143	28	296	14	22	143	179	10	125	16	151	681
04:45 PM	34	17	2	53	150	161	33	344	13	14	130	157	8	129	22	159	713
Total Volume	115	86	3	204	568	647	120	1335	57	81	516	654	26	494	67	587	2780
% App. Total	56.4	42.2	1.5		42.5	48.5	9		8.7	12.4	78.9		4.4	84.2	11.4		
PHF	.846	.860	.375	.927	.947	.889	.882	.925	.679	.810	.902	.913	.650	.957	.761	.923	.975

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

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: McCall Boulevard
 Weather: Clear

File Name : 18_MEN_215S_McCall AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	I-215 Southbound Off Ramp Southbound				McCall Boulevard Westbound				I-215 Southbound On Ramp 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	74	0	115	189	79	201	0	280	0	0	0	0	0	188	77	265	734
07:15 AM	83	1	139	223	65	215	0	280	0	0	0	0	0	185	70	255	758
07:30 AM	94	1	134	229	61	181	0	242	0	0	0	0	0	215	81	296	767
07:45 AM	86	1	114	201	73	214	0	287	0	0	0	0	0	204	83	287	775
Total	337	3	502	842	278	811	0	1089	0	0	0	0	0	792	311	1103	3034
08:00 AM	80	1	109	190	73	200	0	273	0	0	0	0	0	212	78	290	753
08:15 AM	96	0	110	206	78	206	0	284	0	0	0	0	0	203	74	277	767
08:30 AM	106	2	119	227	78	199	0	277	0	0	0	0	0	202	52	254	758
08:45 AM	101	2	126	229	71	229	0	300	0	0	0	0	0	172	66	238	767
Total	383	5	464	852	300	834	0	1134	0	0	0	0	0	789	270	1059	3045
Grand Total	720	8	966	1694	578	1645	0	2223	0	0	0	0	0	1581	581	2162	6079
Apprch %	42.5	0.5	57		26	74	0		0	0	0		0	73.1	26.9		
Total %	11.8	0.1	15.9	27.9	9.5	27.1	0	36.6	0	0	0	0	0	26	9.6	35.6	
Passenger Vehicles	703	6	946	1655	565	1623	0	2188	0	0	0	0	0	1558	569	2127	5970
% Passenger Vehicles	97.6	75	97.9	97.7	97.8	98.7	0	98.4	0	0	0	0	0	98.5	97.9	98.4	98.2
Large 2 Axle Vehicles	11	0	14	25	11	19	0	30	0	0	0	0	0	19	9	28	83
% Large 2 Axle Vehicles	1.5	0	1.4	1.5	1.9	1.2	0	1.3	0	0	0	0	0	1.2	1.5	1.3	1.4
3 Axle Vehicles	4	0	4	8	1	0	0	1	0	0	0	0	0	1	0	1	10
% 3 Axle Vehicles	0.6	0	0.4	0.5	0.2	0	0	0	0	0	0	0	0	0.1	0	0	0.2
4+ Axle Trucks	2	2	2	6	1	3	0	4	0	0	0	0	0	3	3	6	16
% 4+ Axle Trucks	0.3	25	0.2	0.4	0.2	0.2	0	0.2	0	0	0	0	0	0.2	0.5	0.3	0.3

Start Time	I-215 Southbound Off Ramp Southbound				McCall Boulevard Westbound				I-215 Southbound On Ramp 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 07:30 AM																	
07:30 AM	94	1	134	229	61	181	0	242	0	0	0	0	0	215	81	296	767
07:45 AM	86	1	114	201	73	214	0	287	0	0	0	0	0	204	83	287	775
08:00 AM	80	1	109	190	73	200	0	273	0	0	0	0	0	212	78	290	753
08:15 AM	96	0	110	206	78	206	0	284	0	0	0	0	0	203	74	277	767
Total Volume	356	3	467	826	285	801	0	1086	0	0	0	0	0	834	316	1150	3062
% App. Total	43.1	0.4	56.5		26.2	73.8	0		0	0	0		0	72.5	27.5		
PHF	.927	.750	.871	.902	.913	.936	.000	.946	.000	.000	.000	.000	.000	.970	.952	.971	.988

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: McCall Boulevard
 Weather: Clear

File Name : 18_MEN_215S_McCall PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	I-215 Southbound Off Ramp Southbound				McCall Boulevard Westbound				I-215 Southbound On Ramp 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	74	0	114	188	79	205	0	284	0	0	0	0	0	193	75	268	740
04:15 PM	84	1	140	225	63	220	0	283	0	0	0	0	0	189	68	257	765
04:30 PM	92	1	130	223	59	180	0	239	0	0	0	0	0	215	80	295	757
04:45 PM	83	1	110	194	73	214	0	287	0	0	0	0	0	204	83	287	768
Total	333	3	494	830	274	819	0	1093	0	0	0	0	0	801	306	1107	3030
05:00 PM	80	1	107	188	74	195	0	269	0	0	0	0	0	212	77	289	746
05:15 PM	98	0	110	208	78	202	0	280	0	0	0	0	0	204	74	278	766
05:30 PM	102	2	117	221	74	196	0	270	0	0	0	0	0	200	50	250	741
05:45 PM	98	0	125	223	70	228	0	298	0	0	0	0	0	171	64	235	756
Total	378	3	459	840	296	821	0	1117	0	0	0	0	0	787	265	1052	3009
Grand Total	711	6	953	1670	570	1640	0	2210	0	0	0	0	0	1588	571	2159	6039
Apprch %	42.6	0.4	57.1		25.8	74.2	0		0	0	0		0	73.6	26.4		
Total %	11.8	0.1	15.8	27.7	9.4	27.2	0	36.6	0	0	0	0	0	26.3	9.5	35.8	
Passenger Vehicles	703	6	946	1655	565	1623	0	2188	0	0	0	0	0	1558	569	2127	5970
% Passenger Vehicles	98.9	100	99.3	99.1	99.1	99	0	99	0	0	0	0	0	98.1	99.6	98.5	98.9
Large 2 Axle Vehicles	5	0	5	10	5	15	0	20	0	0	0	0	0	26	2	28	58
% Large 2 Axle Vehicles	0.7	0	0.5	0.6	0.9	0.9	0	0.9	0	0	0	0	0	1.6	0.4	1.3	1
3 Axle Vehicles	2	0	0	2	0	2	0	2	0	0	0	0	0	1	0	1	5
% 3 Axle Vehicles	0.3	0	0	0.1	0	0.1	0	0.1	0	0	0	0	0	0.1	0	0	0.1
4+ Axle Trucks	1	0	2	3	0	0	0	0	0	0	0	0	0	3	0	3	6
% 4+ Axle Trucks	0.1	0	0.2	0.2	0	0	0	0	0	0	0	0	0	0.2	0	0.1	0.1

Start Time	I-215 Southbound Off Ramp Southbound				McCall Boulevard Westbound				I-215 Southbound On Ramp 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 04:30 PM																	
04:30 PM	92	1	130	223	59	180	0	239	0	0	0	0	0	215	80	295	757
04:45 PM	83	1	110	194	73	214	0	287	0	0	0	0	0	204	83	287	768
05:00 PM	80	1	107	188	74	195	0	269	0	0	0	0	0	212	77	289	746
05:15 PM	98	0	110	208	78	202	0	280	0	0	0	0	0	204	74	278	766
Total Volume	353	3	457	813	284	791	0	1075	0	0	0	0	0	835	314	1149	3037
% App. Total	43.4	0.4	56.2		26.4	73.6	0		0	0	0		0	72.7	27.3		
PHF	.901	.750	.879	.911	.910	.924	.000	.936	.000	.000	.000	.000	.000	.971	.946	.974	.989

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: McCall Boulevard
 Weather: Clear

File Name : 19_MEN_215N_McCall AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	I-215 Northbound On Ramp Southbound				McCall Boulevard Westbound				I-215 Northbound Off Ramp 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	164	111	275	25	0	50	75	69	141	0	210	560
07:15 AM	0	0	0	0	0	185	137	322	19	0	59	78	61	154	0	215	615
07:30 AM	0	0	0	0	0	213	139	352	34	0	55	89	51	136	0	187	628
07:45 AM	0	0	0	0	0	238	131	369	58	0	69	127	61	163	0	224	720
Total	0	0	0	0	0	800	518	1318	136	0	233	369	242	594	0	836	2523
08:00 AM	0	0	0	0	0	253	119	372	48	0	59	107	56	138	0	194	673
08:15 AM	0	0	0	0	0	246	94	340	56	0	69	125	58	159	0	217	682
08:30 AM	0	0	0	0	0	205	69	274	48	0	49	97	52	122	0	174	545
08:45 AM	0	0	0	0	0	152	59	211	63	0	36	99	61	123	0	184	494
Total	0	0	0	0	0	856	341	1197	215	0	213	428	227	542	0	769	2394
Grand Total	0	0	0	0	0	1656	859	2515	351	0	446	797	469	1136	0	1605	4917
Apprch %	0	0	0	0	0	65.8	34.2		44	0	56		29.2	70.8	0		
Total %	0	0	0	0	0	33.7	17.5	51.1	7.1	0	9.1	16.2	9.5	23.1	0	32.6	
Passenger Vehicles	0	0	0	0	0	1636	841	2477	342	0	434	776	457	1112	0	1569	4822
% Passenger Vehicles	0	0	0	0	0	98.8	97.9	98.5	97.4	0	97.3	97.4	97.4	97.9	0	97.8	98.1
Large 2 Axle Vehicles	0	0	0	0	0	17	8	25	7	0	7	14	8	19	0	27	66
% Large 2 Axle Vehicles	0	0	0	0	0	1	0.9	1	2	0	1.6	1.8	1.7	1.7	0	1.7	1.3
3 Axle Vehicles	0	0	0	0	0	1	3	4	1	0	4	5	0	5	0	5	14
% 3 Axle Vehicles	0	0	0	0	0	0.1	0.3	0.2	0.3	0	0.9	0.6	0	0.4	0	0.3	0.3
4+ Axle Trucks	0	0	0	0	0	2	7	9	1	0	1	2	4	0	0	4	15
% 4+ Axle Trucks	0	0	0	0	0	0.1	0.8	0.4	0.3	0	0.2	0.3	0.9	0	0	0.2	0.3

Start Time	I-215 Northbound On Ramp Southbound				McCall Boulevard Westbound				I-215 Northbound Off Ramp 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 07:30 AM																	
07:30 AM	0	0	0	0	0	213	139	352	34	0	55	89	51	136	0	187	628
07:45 AM	0	0	0	0	0	238	131	369	58	0	69	127	61	163	0	224	720
08:00 AM	0	0	0	0	0	253	119	372	48	0	59	107	56	138	0	194	673
08:15 AM	0	0	0	0	0	246	94	340	56	0	69	125	58	159	0	217	682
Total Volume	0	0	0	0	0	950	483	1433	196	0	252	448	226	596	0	822	2703
% App. Total	0	0	0	0	0	66.3	33.7		43.8	0	56.2		27.5	72.5	0		
PHF	.000	.000	.000	.000	.000	.939	.869	.963	.845	.000	.913	.882	.926	.914	.000	.917	.939

City of Perris
 N/S: I-215 Northbound Ramps
 E/W: McCall Boulevard
 Weather: Clear

File Name : 19_MEN_215N_McCall PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

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

Start Time	I-215 Northbound On Ramp Southbound				McCall Boulevard Westbound				I-215 Northbound Off Ramp 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	202	65	267	81	1	95	177	79	188	0	267	711
04:15 PM	0	0	0	0	0	182	55	237	97	0	106	203	62	209	0	271	711
04:30 PM	0	0	0	0	0	139	62	201	91	0	93	184	70	234	0	304	689
04:45 PM	0	0	0	0	0	193	65	258	102	1	93	196	64	223	0	287	741
Total	0	0	0	0	0	716	247	963	371	2	387	760	275	854	0	1129	2852
05:00 PM	0	0	0	0	0	184	59	243	83	0	134	217	78	211	0	289	749
05:15 PM	0	0	0	0	0	191	68	259	96	0	111	207	66	232	0	298	764
05:30 PM	0	0	0	0	0	168	49	217	100	2	142	244	72	225	0	297	758
05:45 PM	0	0	0	0	0	196	57	253	100	0	111	211	54	216	0	270	734
Total	0	0	0	0	0	739	233	972	379	2	498	879	270	884	0	1154	3005
Grand Total	0	0	0	0	0	1455	480	1935	750	4	885	1639	545	1738	0	2283	5857
Apprch %	0	0	0	0	0	75.2	24.8		45.8	0.2	54		23.9	76.1	0		
Total %	0	0	0	0	0	24.8	8.2	33	12.8	0.1	15.1	28	9.3	29.7	0	39	
Passenger Vehicles	0	0	0	0	0	1441	458	1899	744	3	882	1629	533	1720	0	2253	5781
% Passenger Vehicles	0	0	0	0	0	99	95.4	98.1	99.2	75	99.7	99.4	97.8	99	0	98.7	98.7
Large 2 Axle Vehicles	0	0	0	0	0	13	14	27	4	0	3	7	10	14	0	24	58
% Large 2 Axle Vehicles	0	0	0	0	0	0.9	2.9	1.4	0.5	0	0.3	0.4	1.8	0.8	0	1.1	1
3 Axle Vehicles	0	0	0	0	0	1	6	7	2	1	0	3	2	3	0	5	15
% 3 Axle Vehicles	0	0	0	0	0	0.1	1.2	0.4	0.3	25	0	0.2	0.4	0.2	0	0.2	0.3
4+ Axle Trucks	0	0	0	0	0	0	2	2	0	0	0	0	0	1	0	1	3
% 4+ Axle Trucks	0	0	0	0	0	0	0.4	0.1	0	0	0	0	0	0.1	0	0	0.1

Start Time	I-215 Northbound On Ramp Southbound				McCall Boulevard Westbound				I-215 Northbound Off Ramp 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 04:45 PM																	
04:45 PM	0	0	0	0	0	193	65	258	102	1	93	196	64	223	0	287	741
05:00 PM	0	0	0	0	0	184	59	243	83	0	134	217	78	211	0	289	749
05:15 PM	0	0	0	0	0	191	68	259	96	0	111	207	66	232	0	298	764
05:30 PM	0	0	0	0	0	168	49	217	100	2	142	244	72	225	0	297	758
Total Volume	0	0	0	0	0	736	241	977	381	3	480	864	280	891	0	1171	3012
% App. Total	0	0	0	0	0	75.3	24.7		44.1	0.3	55.6		23.9	76.1	0		
PHF	.000	.000	.000	.000	.000	.953	.886	.943	.934	.375	.845	.885	.897	.960	.000	.982	.986

City of Menifee
 N/S: Encanto Drive
 E/W: McCall Boulevard
 Weather: Clear

File Name : 24_MEN_Encanto_McCall AM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Encanto Drive Southbound				McCall Boulevard Westbound				Encanto Drive 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	9	2	22	33	1	200	3	204	54	4	20	78	19	166	16	201	516
07:15 AM	11	5	21	37	6	251	1	258	54	5	33	92	12	186	16	214	601
07:30 AM	9	1	27	37	11	271	10	292	54	6	24	84	25	149	18	192	605
07:45 AM	9	7	27	43	24	283	10	317	51	8	12	71	30	165	24	219	650
Total	38	15	97	150	42	1005	24	1071	213	23	89	325	86	666	74	826	2372
08:00 AM	1	5	46	52	31	291	10	332	37	7	11	55	46	133	18	197	636
08:15 AM	10	1	67	78	4	242	5	251	40	3	11	54	28	159	31	218	601
08:30 AM	3	2	35	40	9	200	5	214	26	3	9	38	28	125	20	173	465
08:45 AM	4	2	24	30	6	155	4	165	35	0	4	39	12	127	26	165	399
Total	18	10	172	200	50	888	24	962	138	13	35	186	114	544	95	753	2101
Grand Total	56	25	269	350	92	1893	48	2033	351	36	124	511	200	1210	169	1579	4473
Apprch %	16	7.1	76.9		4.5	93.1	2.4		68.7	7	24.3		12.7	76.6	10.7		
Total %	1.3	0.6	6	7.8	2.1	42.3	1.1	45.5	7.8	0.8	2.8	11.4	4.5	27.1	3.8	35.3	

Start Time	Encanto Drive Southbound				McCall Boulevard Westbound				Encanto Drive 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	
07:15 AM	11	5	21	37	6	251	1	258	54	5	33	92	12	186	16	214	601
07:30 AM	9	1	27	37	11	271	10	292	54	6	24	84	25	149	18	192	605
07:45 AM	9	7	27	43	24	283	10	317	51	8	12	71	30	165	24	219	650
08:00 AM	1	5	46	52	31	291	10	332	37	7	11	55	46	133	18	197	636
Total Volume	30	18	121	169	72	1096	31	1199	196	26	80	302	113	633	76	822	2492
% App. Total	17.8	10.7	71.6		6	91.4	2.6		64.9	8.6	26.5		13.7	77	9.2		
PHF	.682	.643	.658	.813	.581	.942	.775	.903	.907	.813	.606	.821	.614	.851	.792	.938	.958

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Encanto Drive
 E/W: McCall Boulevard
 Weather: Clear

File Name : 24_MEN_Encanto_McCall PM
 Site Code : 10821622
 Start Date : 10/26/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Encanto Drive Southbound				McCall Boulevard Westbound				Encanto Drive 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	7	15	28	50	6	180	4	190	44	10	12	66	50	173	62	285	591
04:15 PM	7	10	33	50	9	156	10	175	44	4	4	52	31	229	67	327	604
04:30 PM	8	9	24	41	7	153	15	175	29	2	9	40	35	238	63	336	592
04:45 PM	11	8	38	57	9	167	3	179	44	6	6	56	40	223	49	312	604
Total	33	42	123	198	31	656	32	719	161	22	31	214	156	863	241	1260	2391
05:00 PM	8	3	38	49	5	154	3	162	44	6	13	63	57	202	79	338	612
05:15 PM	6	4	32	42	3	185	11	199	42	7	7	56	50	251	53	354	651
05:30 PM	7	5	32	44	13	146	3	162	38	2	8	48	53	237	67	357	611
05:45 PM	9	5	38	52	11	166	5	182	48	4	12	64	24	263	62	349	647
Total	30	17	140	187	32	651	22	705	172	19	40	231	184	953	261	1398	2521
Grand Total	63	59	263	385	63	1307	54	1424	333	41	71	445	340	1816	502	2658	4912
Apprch %	16.4	15.3	68.3		4.4	91.8	3.8		74.8	9.2	16		12.8	68.3	18.9		
Total %	1.3	1.2	5.4	7.8	1.3	26.6	1.1	29	6.8	0.8	1.4	9.1	6.9	37	10.2	54.1	

Start Time	Encanto Drive Southbound				McCall Boulevard Westbound				Encanto Drive 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	
05:00 PM	8	3	38	49	5	154	3	162	44	6	13	63	57	202	79	338	612
05:15 PM	6	4	32	42	3	185	11	199	42	7	7	56	50	251	53	354	651
05:30 PM	7	5	32	44	13	146	3	162	38	2	8	48	53	237	67	357	611
05:45 PM	9	5	38	52	11	166	5	182	48	4	12	64	24	263	62	349	647
Total Volume	30	17	140	187	32	651	22	705	172	19	40	231	184	953	261	1398	2521
% App. Total	16	9.1	74.9		4.5	92.3	3.1		74.5	8.2	17.3		13.2	68.2	18.7		
PHF	.833	.850	.921	.899	.615	.880	.500	.886	.896	.679	.769	.902	.807	.906	.826	.979	.968

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

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

File Name : 33_MEN_Sherman_McCall AM
 Site Code : 10822005
 Start Date : 1/13/2022
 Page No : 1

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

Start Time	Sherman Road Southbound				McCall Boulevard Westbound				Sherman 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	2	0	8	10	1	196	2	199	4	2	6	12	6	184	8	198	419
07:15 AM	2	2	8	12	2	248	11	261	8	0	4	12	18	176	5	199	484
07:30 AM	10	1	12	23	2	258	10	270	5	2	5	12	15	134	2	151	456
07:45 AM	22	4	24	50	6	280	19	305	6	0	2	8	40	130	5	175	538
Total	36	7	52	95	11	982	42	1035	23	4	17	44	79	624	20	723	1897
08:00 AM	19	3	36	58	5	203	13	221	5	4	6	15	39	100	5	144	438
08:15 AM	28	12	63	103	5	135	13	153	4	15	6	25	56	95	5	156	437
08:30 AM	17	6	28	51	4	146	9	159	9	4	6	19	16	93	10	119	348
08:45 AM	6	1	5	12	5	157	4	166	10	1	3	14	3	86	16	105	297
Total	70	22	132	224	19	641	39	699	28	24	21	73	114	374	36	524	1520
Grand Total	106	29	184	319	30	1623	81	1734	51	28	38	117	193	998	56	1247	3417
Apprch %	33.2	9.1	57.7		1.7	93.6	4.7		43.6	23.9	32.5		15.5	80	4.5		
Total %	3.1	0.8	5.4	9.3	0.9	47.5	2.4	50.7	1.5	0.8	1.1	3.4	5.6	29.2	1.6	36.5	
Passenger Vehicles	105	29	182	316	16	1577	80	1673	50	28	20	98	191	962	53	1206	3293
% Passenger Vehicles	99.1	100	98.9	99.1	53.3	97.2	98.8	96.5	98	100	52.6	83.8	99	96.4	94.6	96.7	96.4
Large 2 Axle Vehicles	1	0	2	3	0	18	0	18	0	0	0	0	1	13	0	14	35
% Large 2 Axle Vehicles	0.9	0	1.1	0.9	0	1.1	0	1	0	0	0	0	0.5	1.3	0	1.1	1
3 Axle Vehicles	0	0	0	0	14	7	1	22	0	0	16	16	0	4	2	6	44
% 3 Axle Vehicles	0	0	0	0	46.7	0.4	1.2	1.3	0	0	42.1	13.7	0	0.4	3.6	0.5	1.3
4+ Axle Trucks	0	0	0	0	0	21	0	21	1	0	2	3	1	19	1	21	45
% 4+ Axle Trucks	0	0	0	0	0	1.3	0	1.2	2	0	5.3	2.6	0.5	1.9	1.8	1.7	1.3

Start Time	Sherman Road Southbound				McCall Boulevard Westbound				Sherman 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 07:15 AM																	
07:15 AM	2	2	8	12	2	248	11	261	8	0	4	12	18	176	5	199	484
07:30 AM	10	1	12	23	2	258	10	270	5	2	5	12	15	134	2	151	456
07:45 AM	22	4	24	50	6	280	19	305	6	0	2	8	40	130	5	175	538
08:00 AM	19	3	36	58	5	203	13	221	5	4	6	15	39	100	5	144	438
Total Volume	53	10	80	143	15	989	53	1057	24	6	17	47	112	540	17	669	1916
% App. Total	37.1	7	55.9		1.4	93.6	5		51.1	12.8	36.2		16.7	80.7	2.5		
PHF	.602	.625	.556	.616	.625	.883	.697	.866	.750	.375	.708	.783	.700	.767	.850	.840	.890

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

File Name : 33_MEN_Sherman_McCall PM
 Site Code : 10822005
 Start Date : 1/13/2022
 Page No : 1

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

Start Time	Sherman Road Southbound				McCall Boulevard Westbound				Sherman 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	8	0	4	12	3	179	2	184	6	0	3	9	2	226	5	233	438
04:15 PM	8	1	5	14	3	142	5	150	1	0	2	3	1	227	3	231	398
04:30 PM	6	2	5	13	4	171	0	175	12	1	1	14	3	240	5	248	450
04:45 PM	10	0	4	14	4	125	6	135	6	0	2	8	6	210	10	226	383
Total	32	3	18	53	14	617	13	644	25	1	8	34	12	903	23	938	1669
05:00 PM	8	1	2	11	1	162	2	165	4	1	4	9	0	204	8	212	397
05:15 PM	1	0	3	4	0	148	9	157	6	1	2	9	6	218	7	231	401
05:30 PM	4	0	0	4	3	136	2	141	3	0	4	7	5	218	13	236	388
05:45 PM	2	2	1	5	1	153	3	157	9	1	3	13	2	225	9	236	411
Total	15	3	6	24	5	599	16	620	22	3	13	38	13	865	37	915	1597
Grand Total	47	6	24	77	19	1216	29	1264	47	4	21	72	25	1768	60	1853	3266
Apprch %	61	7.8	31.2		1.5	96.2	2.3		65.3	5.6	29.2		1.3	95.4	3.2		
Total %	1.4	0.2	0.7	2.4	0.6	37.2	0.9	38.7	1.4	0.1	0.6	2.2	0.8	54.1	1.8	56.7	
Passenger Vehicles	47	6	23	76	19	1206	29	1254	44	4	21	69	25	1756	60	1841	3240
% Passenger Vehicles	100	100	95.8	98.7	100	99.2	100	99.2	93.6	100	100	95.8	100	99.3	100	99.4	99.2
Large 2 Axle Vehicles	0	0	1	1	0	3	0	3	2	0	0	2	0	11	0	11	17
% Large 2 Axle Vehicles	0	0	4.2	1.3	0	0.2	0	0.2	4.3	0	0	2.8	0	0.6	0	0.6	0.5
3 Axle Vehicles	0	0	0	0	0	6	0	6	1	0	0	1	0	1	0	1	8
% 3 Axle Vehicles	0	0	0	0	0	0.5	0	0.5	2.1	0	0	1.4	0	0.1	0	0.1	0.2
4+ Axle Trucks	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% 4+ Axle Trucks	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0	0	0	0

Start Time	Sherman Road Southbound				McCall Boulevard Westbound				Sherman 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 04:00 PM																	
04:00 PM	8	0	4	12	3	179	2	184	6	0	3	9	2	226	5	233	438
04:15 PM	8	1	5	14	3	142	5	150	1	0	2	3	1	227	3	231	398
04:30 PM	6	2	5	13	4	171	0	175	12	1	1	14	3	240	5	248	450
04:45 PM	10	0	4	14	4	125	6	135	6	0	2	8	6	210	10	226	383
Total Volume	32	3	18	53	14	617	13	644	25	1	8	34	12	903	23	938	1669
% App. Total	60.4	5.7	34		2.2	95.8	2		73.5	2.9	23.5		1.3	96.3	2.5		
PHF	.800	.375	.900	.946	.875	.862	.542	.875	.521	.250	.667	.607	.500	.941	.575	.946	.927

APPENDIX B-2

**TRAFFIC COUNT DATA
SHEETS-
ROADWAY SEGMENT ADT COUNTS**

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

PER001

Site Code: 108-21622B

City of Perris
Case Road
B/ Goetz Road - Murrieta Road
24 Hour Directional Classification Count
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
10/26/21	0	36	0	0	0	0	0	0	0	0	0	0	0	36
01:00	0	28	0	1	0	0	0	0	0	0	0	0	0	29
02:00	0	24	1	0	1	0	0	0	0	0	0	0	0	26
03:00	0	32	2	0	0	0	0	0	0	0	0	0	0	34
04:00	0	94	5	1	0	1	0	0	0	0	0	0	0	101
05:00	1	134	32	6	2	14	0	0	0	0	1	0	0	190
06:00	2	212	55	6	16	19	0	3	4	0	0	0	0	317
07:00	1	330	97	15	10	5	0	2	0	0	0	0	0	460
08:00	3	290	92	13	10	2	0	2	7	0	0	0	0	419
09:00	0	236	85	7	7	5	0	1	3	0	0	0	0	344
10:00	0	228	78	6	7	3	1	1	1	0	0	0	0	325
11:00	0	293	97	10	11	2	5	3	2	0	0	0	0	423
12 PM	3	336	100	6	13	8	3	2	1	0	0	0	0	472
13:00	2	375	122	14	7	11	0	0	2	0	0	0	0	533
14:00	4	373	111	10	11	5	2	1	1	0	1	0	0	519
15:00	0	479	163	7	16	5	0	2	1	0	0	0	0	673
16:00	0	489	157	9	11	12	5	4	0	0	0	0	0	687
17:00	1	467	129	8	8	8	4	2	0	0	0	0	0	627
18:00	5	384	106	2	5	2	4	0	0	0	0	0	0	508
19:00	1	288	36	4	3	2	0	0	1	0	0	0	0	335
20:00	1	214	11	7	4	1	0	1	0	0	0	0	0	239
21:00	0	172	12	2	3	1	0	0	0	0	0	0	0	190
22:00	1	78	8	0	0	0	0	0	0	0	0	0	0	87
23:00	0	64	3	1	0	0	0	0	0	0	0	0	0	68
Total	25	5656	1502	135	145	106	24	24	23	0	2	0	0	7642
Percent	0.3%	74.0%	19.7%	1.8%	1.9%	1.4%	0.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	07:00	07:00	07:00	06:00	06:00	11:00	06:00	08:00		05:00			07:00
Vol.	3	330	97	15	16	19	5	3	7		1			460
PM Peak	18:00	16:00	15:00	13:00	15:00	16:00	16:00	16:00	13:00		14:00			16:00
Vol.	5	489	163	14	16	12	5	4	2		1			687
Grand Total	25	5656	1502	135	145	106	24	24	23	0	2	0	0	7642
Percent	0.3%	74.0%	19.7%	1.8%	1.9%	1.4%	0.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
 Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Perris
 Case Road
 B/ Murrieta Road - Mapes Road
 24 Hour Directional Classification Count
 Eastbound, Westbound

PER002
 Site Code: 108-21622B

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
10/26/21	0	30	0	0	0	0	0	0	0	0	0	0	0	30
01:00	0	20	0	1	0	0	0	0	0	0	0	0	0	21
02:00	0	19	1	0	1	0	0	0	0	0	0	0	0	21
03:00	0	27	2	0	0	0	0	0	0	0	0	0	0	29
04:00	0	83	3	1	0	1	0	0	0	0	0	0	0	88
05:00	1	112	27	5	2	14	0	0	0	0	1	0	0	162
06:00	1	168	41	6	16	20	0	3	4	0	0	0	0	259
07:00	1	232	70	16	7	5	0	1	0	0	0	0	0	332
08:00	1	218	76	12	11	2	0	0	6	0	0	0	0	326
09:00	0	176	66	6	5	4	0	1	2	0	0	0	0	260
10:00	0	170	57	6	5	3	1	1	1	0	0	0	0	244
11:00	0	226	79	10	10	2	5	2	2	0	0	0	0	336
12 PM	2	249	74	7	10	6	3	2	1	0	0	0	0	354
13:00	0	261	96	10	7	10	0	0	2	0	0	0	0	386
14:00	2	258	104	7	12	5	2	1	1	0	1	0	0	393
15:00	2	350	140	7	16	5	0	2	1	0	0	0	0	523
16:00	0	340	123	8	9	12	5	4	0	0	0	0	0	501
17:00	1	324	109	8	7	7	4	2	0	0	0	0	0	462
18:00	2	277	90	2	5	2	4	0	0	0	0	0	0	382
19:00	1	217	28	4	3	2	0	0	1	0	0	0	0	256
20:00	1	176	7	7	4	1	0	1	0	0	0	0	0	197
21:00	0	125	5	2	3	1	0	0	0	0	0	0	0	136
22:00	0	59	4	0	0	0	0	0	0	0	0	0	0	63
23:00	0	51	2	1	0	0	0	0	0	0	0	0	0	54
Total	15	4168	1204	126	133	102	24	20	21	0	2	0	0	5815
Percent	0.3%	71.7%	20.7%	2.2%	2.3%	1.8%	0.4%	0.3%	0.4%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	07:00	11:00	07:00	06:00	06:00	11:00	06:00	08:00		05:00			11:00
Vol.	1	232	79	16	16	20	5	3	6		1			336
PM Peak	12:00	15:00	15:00	13:00	15:00	16:00	16:00	16:00	13:00		14:00			15:00
Vol.	2	350	140	10	16	12	5	4	2		1			523
Grand Total	15	4168	1204	126	133	102	24	20	21	0	2	0	0	5815
Percent	0.3%	71.7%	20.7%	2.2%	2.3%	1.8%	0.4%	0.3%	0.4%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

PER003

Site Code: 108-21622B

City of Perris
Goetz Road
B/ Case Road - Mapes Road
24 Hour Directional Classification Count
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
10/26/21	0	39	1	0	2	0	0	0	0	0	0	0	0	42
01:00	0	26	1	1	4	0	0	1	0	0	0	0	0	33
02:00	0	25	2	0	1	0	0	0	1	0	0	0	0	29
03:00	0	53	4	0	3	1	0	0	1	0	0	0	0	62
04:00	0	96	14	1	3	1	0	0	3	1	0	0	0	119
05:00	0	166	23	3	15	24	0	2	3	0	0	0	0	236
06:00	2	263	56	10	31	25	0	7	3	0	0	0	0	397
07:00	0	522	103	6	24	19	0	0	6	0	0	0	0	680
08:00	0	291	79	7	12	5	1	0	12	0	0	0	0	407
09:00	0	194	68	4	18	8	1	1	11	1	0	0	0	306
10:00	1	224	56	3	12	15	7	0	12	1	0	0	0	331
11:00	0	287	66	2	27	20	5	1	13	1	0	0	0	422
12 PM	1	298	62	3	16	20	3	3	18	0	2	0	0	426
13:00	0	359	82	5	15	12	2	4	14	0	0	0	0	493
14:00	0	382	103	15	15	14	1	3	15	1	0	0	0	549
15:00	1	430	121	5	26	7	0	0	16	0	0	0	0	606
16:00	7	425	109	6	10	3	2	0	14	0	0	0	0	576
17:00	3	427	106	2	8	11	4	1	15	0	0	0	0	577
18:00	1	379	85	1	12	5	6	0	6	0	0	0	0	495
19:00	0	255	38	3	2	3	5	0	10	0	0	0	0	316
20:00	2	204	18	6	4	1	0	0	4	0	0	0	0	239
21:00	0	141	15	3	2	0	0	0	0	0	0	0	0	161
22:00	0	84	9	0	5	0	0	0	1	0	0	0	0	99
23:00	0	58	5	2	2	0	0	1	0	0	0	0	0	68
Total	18	5628	1226	88	269	194	37	24	178	5	2	0	0	7669
Percent	0.2%	73.4%	16.0%	1.1%	3.5%	2.5%	0.5%	0.3%	2.3%	0.1%	0.0%	0.0%	0.0%	
AM Peak	06:00	07:00	07:00	06:00	06:00	06:00	10:00	06:00	11:00	04:00				07:00
Vol.	2	522	103	10	31	25	7	7	13	1				680
PM Peak	16:00	15:00	15:00	14:00	15:00	12:00	18:00	13:00	12:00	14:00	12:00			15:00
Vol.	7	430	121	15	26	20	6	4	18	1	2			606
Grand Total	18	5628	1226	88	269	194	37	24	178	5	2	0	0	7669
Percent	0.2%	73.4%	16.0%	1.1%	3.5%	2.5%	0.5%	0.3%	2.3%	0.1%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Perris
Goetz Road
B/ Mapes Road - Ethanac Road
24 Hour Directional Classification Count
Northbound, Southbound

PER004
Site Code: 108-21622B

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
10/26/21	1	65	6	0	0	0	0	0	0	0	0	0	0	72
01:00	0	39	4	1	2	0	0	1	0	0	0	0	0	47
02:00	0	37	4	0	0	0	0	0	0	0	0	0	0	41
03:00	0	85	5	0	5	1	0	0	1	0	0	0	0	97
04:00	0	164	33	1	5	3	0	0	1	1	0	0	0	208
05:00	0	254	55	2	13	22	0	1	5	0	0	0	0	352
06:00	2	418	87	12	23	20	0	9	1	0	0	1	0	573
07:00	0	670	137	6	31	18	0	5	5	0	0	0	0	872
08:00	0	404	102	5	20	6	1	2	3	0	0	0	0	543
09:00	1	317	107	5	20	9	1	1	4	1	0	0	0	466
10:00	2	346	95	2	20	15	6	0	6	1	0	0	0	493
11:00	0	408	100	2	29	11	5	1	5	1	0	0	0	562
12 PM	1	447	110	1	20	16	3	2	7	0	0	0	0	607
13:00	0	492	131	5	14	11	2	5	8	0	0	0	0	668
14:00	1	556	183	12	20	12	0	3	8	1	0	0	0	796
15:00	2	713	199	8	29	5	0	0	5	0	1	0	0	962
16:00	6	721	224	6	16	4	4	1	1	0	0	0	0	983
17:00	6	753	179	2	15	5	4	1	0	0	0	0	0	965
18:00	4	603	153	1	9	0	6	0	3	0	0	0	0	779
19:00	1	420	74	3	6	1	5	0	1	0	0	0	0	511
20:00	3	326	29	6	6	1	1	0	1	0	0	0	0	373
21:00	0	222	24	3	2	0	0	0	0	0	0	0	0	251
22:00	0	144	16	0	3	0	0	0	0	0	0	0	0	163
23:00	0	90	7	2	4	0	0	0	0	0	0	0	0	103
Total	30	8694	2064	85	312	160	38	32	65	5	1	1	0	11487
Percent	0.3%	75.7%	18.0%	0.7%	2.7%	1.4%	0.3%	0.3%	0.6%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	07:00	07:00	06:00	07:00	05:00	10:00	06:00	10:00	04:00		06:00		07:00
Vol.	2	670	137	12	31	22	6	9	6	1		1		872
PM Peak	16:00	17:00	16:00	14:00	15:00	12:00	18:00	13:00	13:00	14:00	15:00			16:00
Vol.	6	753	224	12	29	16	6	5	8	1	1			983
Grand Total	30	8694	2064	85	312	160	38	32	65	5	1	1	0	11487
Percent	0.3%	75.7%	18.0%	0.7%	2.7%	1.4%	0.3%	0.3%	0.6%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Perris
Ethanac Road
B/ Goetz Road - Byers Road
24 Hour Directional Classification Count
Eastbound, Westbound

PER006
Site Code: 108-21622B

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
10/26/21	0	86	8	0	0	0	0	0	0	0	0	0	0	94
01:00	0	52	5	1	3	0	0	1	0	0	0	0	0	62
02:00	0	47	7	0	1	0	0	0	0	0	0	0	0	55
03:00	0	72	6	0	2	0	0	1	1	0	0	0	0	82
04:00	0	199	26	1	3	3	0	0	1	0	0	0	0	233
05:00	0	286	62	3	4	25	3	2	5	0	1	0	0	391
06:00	0	482	97	15	25	14	0	9	3	0	0	0	0	645
07:00	1	888	177	10	16	18	0	10	5	0	0	0	0	1125
08:00	1	669	164	4	16	5	3	3	4	0	0	0	0	869
09:00	0	413	147	5	18	10	1	2	3	1	0	0	0	600
10:00	1	428	132	1	18	11	6	0	4	0	0	0	0	601
11:00	1	461	146	6	21	12	5	3	6	0	0	0	0	661
12 PM	0	550	160	0	13	15	3	3	10	0	0	0	0	754
13:00	1	752	167	2	15	11	2	8	7	0	0	0	0	965
14:00	4	836	208	11	16	8	0	5	7	2	0	0	0	1097
15:00	4	836	233	13	16	4	2	3	7	0	1	0	0	1119
16:00	6	809	240	3	16	4	2	5	0	1	0	0	0	1086
17:00	8	877	205	1	15	4	6	5	1	0	0	0	0	1122
18:00	4	809	107	0	2	0	5	0	1	0	0	0	0	928
19:00	3	585	46	4	7	2	2	0	1	0	0	0	0	650
20:00	1	447	37	6	11	0	0	2	1	0	0	0	0	505
21:00	0	295	34	1	5	0	0	0	0	0	0	0	0	335
22:00	0	215	25	0	6	0	0	0	0	0	0	0	0	246
23:00	0	104	17	0	3	0	0	0	0	0	0	0	0	124
Total	35	11198	2456	87	252	146	40	62	67	4	2	0	0	14349
Percent	0.2%	78.0%	17.1%	0.6%	1.8%	1.0%	0.3%	0.4%	0.5%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	06:00	06:00	05:00	10:00	07:00	11:00	09:00	05:00			07:00
Vol.	1	888	177	15	25	25	6	10	6	1	1			1125
PM Peak	17:00	17:00	16:00	15:00	14:00	12:00	17:00	13:00	12:00	14:00	15:00			17:00
Vol.	8	877	240	13	16	15	6	8	10	2	1			1122
Grand Total	35	11198	2456	87	252	146	40	62	67	4	2	0	0	14349
Percent	0.2%	78.0%	17.1%	0.6%	1.8%	1.0%	0.3%	0.4%	0.5%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Perris
Ethanac Road
B/ Byers Road - Murrieta Road
24 Hour Directional Classification Count
Eastbound, Westbound

PER007
Site Code: 108-21622B

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
10/26/21	0	88	8	0	0	0	0	0	0	0	0	0	0	96
01:00	0	52	5	1	3	0	0	1	0	0	0	0	0	62
02:00	0	46	7	0	1	0	0	0	0	0	0	0	0	54
03:00	0	72	8	0	2	0	0	1	1	0	0	0	0	84
04:00	0	200	26	1	3	3	0	0	1	0	0	0	0	234
05:00	0	289	62	3	4	25	3	2	5	0	1	0	0	394
06:00	0	482	99	15	25	14	0	9	3	0	0	0	0	647
07:00	1	895	181	10	16	18	0	10	5	0	0	0	0	1136
08:00	1	670	165	4	16	5	3	3	4	0	0	0	0	871
09:00	0	413	150	5	18	10	1	2	3	1	0	0	0	603
10:00	1	425	131	1	18	11	6	0	4	0	0	0	0	597
11:00	1	462	147	6	21	12	5	3	6	0	0	0	0	663
12 PM	0	551	159	1	13	15	3	3	10	0	0	0	0	755
13:00	1	755	171	2	15	13	2	8	7	0	0	0	0	974
14:00	4	837	210	11	17	8	0	5	7	2	0	0	0	1101
15:00	4	840	233	13	16	4	2	3	7	0	1	0	0	1123
16:00	6	805	241	3	16	4	2	5	0	1	0	0	0	1083
17:00	8	876	205	1	15	4	6	5	1	0	0	0	0	1121
18:00	5	810	107	0	2	0	5	0	1	0	0	0	0	930
19:00	3	585	48	4	7	2	2	0	1	0	0	0	0	652
20:00	1	448	38	6	11	0	0	2	1	0	0	0	0	507
21:00	0	296	34	1	5	0	0	0	0	0	0	0	0	336
22:00	0	213	25	0	6	0	0	0	0	0	0	0	0	244
23:00	0	105	17	0	2	0	0	0	0	0	0	0	0	124
Total	36	11215	2477	88	252	148	40	62	67	4	2	0	0	14391
Percent	0.3%	77.9%	17.2%	0.6%	1.8%	1.0%	0.3%	0.4%	0.5%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	06:00	06:00	05:00	10:00	07:00	11:00	09:00	05:00			07:00
Vol.	1	895	181	15	25	25	6	10	6	1	1			1136
PM Peak	17:00	17:00	16:00	15:00	14:00	12:00	17:00	13:00	12:00	14:00	15:00			15:00
Vol.	8	876	241	13	17	15	6	8	10	2	1			1123
Grand Total	36	11215	2477	88	252	148	40	62	67	4	2	0	0	14391
Percent	0.3%	77.9%	17.2%	0.6%	1.8%	1.0%	0.3%	0.4%	0.5%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Perris
 Ethanac Road
 B/ Murrieta Road - Hull Street
 24 Hour Directional Classification Count
 Eastbound, Westbound

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

PER008
 Site Code: 108-21622B

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
10/26/21	0	97	6	0	1	0	0	0	0	0	0	0	0	104
01:00	0	55	4	0	1	0	0	1	0	0	0	0	0	61
02:00	0	74	6	0	0	0	0	0	0	0	0	0	0	80
03:00	1	100	4	0	2	1	0	0	0	0	0	0	1	109
04:00	2	274	8	0	5	2	1	2	0	0	0	0	0	294
05:00	0	437	16	0	17	18	3	8	3	0	0	0	0	502
06:00	0	616	84	9	29	21	0	13	4	1	0	0	0	777
07:00	6	983	243	11	28	17	0	25	5	0	0	0	0	1318
08:00	9	786	194	6	32	12	2	9	6	0	0	0	0	1056
09:00	1	559	181	5	30	13	1	8	5	1	0	0	0	804
10:00	3	570	179	3	34	11	7	4	3	1	0	0	0	815
11:00	2	650	200	7	30	15	5	10	6	0	0	0	0	925
12 PM	0	729	215	2	28	16	3	4	10	0	0	0	0	1007
13:00	1	919	242	4	28	15	2	8	9	0	1	0	0	1229
14:00	4	984	250	15	31	11	0	9	8	2	0	0	0	1314
15:00	5	1014	299	9	34	5	1	8	8	0	1	0	0	1384
16:00	6	957	293	7	20	3	2	5	0	0	0	0	0	1293
17:00	8	1001	253	2	25	5	5	3	3	0	0	0	0	1305
18:00	2	927	162	1	17	5	5	0	1	0	0	0	0	1120
19:00	2	673	76	5	10	1	0	0	1	0	0	0	0	768
20:00	1	504	48	4	9	0	0	2	1	0	0	0	0	569
21:00	0	411	4	1	2	0	0	0	0	0	0	0	0	418
22:00	0	296	10	0	4	0	0	0	0	0	0	0	0	310
23:00	0	137	14	0	1	1	0	0	0	0	0	0	0	153
Total	53	13753	2991	91	418	172	37	119	73	5	2	0	1	17715
Percent	0.3%	77.6%	16.9%	0.5%	2.4%	1.0%	0.2%	0.7%	0.4%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	07:00	07:00	07:00	10:00	06:00	10:00	07:00	08:00	06:00			03:00	07:00
Vol.	9	983	243	11	34	21	7	25	6	1			1	1318
PM Peak	17:00	15:00	15:00	14:00	15:00	12:00	17:00	14:00	12:00	14:00	13:00			15:00
Vol.	8	1014	299	15	34	16	5	9	10	2	1			1384
Grand Total	53	13753	2991	91	418	172	37	119	73	5	2	0	1	17715
Percent	0.3%	77.6%	16.9%	0.5%	2.4%	1.0%	0.2%	0.7%	0.4%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

PER009

Site Code: 108-21622B

City of Perris
Ethanac Road
B/ Hull Street - Case Road
24 Hour Directional Classification Count
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
10/26/21	1	96	12	0	1	0	0	0	0	0	1	0	0	111
01:00	0	52	8	0	2	1	0	0	2	0	0	0	0	65
02:00	0	70	12	0	1	0	0	0	1	0	0	0	0	84
03:00	0	96	19	0	2	0	0	0	3	0	0	0	0	120
04:00	3	234	65	1	12	4	0	0	3	0	0	0	0	322
05:00	2	335	135	3	12	27	1	1	4	0	2	0	0	522
06:00	3	550	175	12	46	14	5	8	3	0	0	0	0	816
07:00	6	1000	265	11	46	19	3	18	9	1	0	0	0	1378
08:00	8	751	193	5	35	10	5	3	6	0	0	0	0	1016
09:00	0	560	178	6	38	13	1	0	5	1	0	0	0	802
10:00	3	574	171	3	39	11	7	1	4	1	0	0	0	814
11:00	2	628	193	9	35	14	6	3	9	0	0	0	0	899
12 PM	2	698	211	2	29	17	3	2	13	0	0	0	0	977
13:00	1	914	248	4	26	15	3	6	10	0	1	0	0	1228
14:00	3	947	259	15	33	9	0	7	10	2	0	0	0	1285
15:00	3	1000	304	11	35	6	1	3	7	0	2	0	0	1372
16:00	5	904	299	7	27	6	1	4	1	0	0	0	0	1254
17:00	5	951	261	2	21	3	6	1	3	0	0	0	0	1253
18:00	6	851	202	2	13	2	4	2	2	0	0	0	0	1084
19:00	7	613	124	4	5	5	1	0	2	0	0	0	0	761
20:00	2	478	59	6	6	1	1	0	2	0	0	0	0	555
21:00	0	363	50	1	4	0	0	0	2	0	0	0	0	420
22:00	0	262	35	0	3	0	0	0	1	0	0	0	0	301
23:00	0	123	32	0	3	0	0	0	2	0	0	0	0	160
Total	62	13050	3510	104	474	177	48	59	104	5	6	0	0	17599
Percent	0.4%	74.2%	19.9%	0.6%	2.7%	1.0%	0.3%	0.3%	0.6%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	07:00	07:00	06:00	06:00	05:00	10:00	07:00	07:00	07:00	05:00			07:00
Vol.	8	1000	265	12	46	27	7	18	9	1	2			1378
PM Peak	19:00	15:00	15:00	14:00	15:00	12:00	17:00	14:00	12:00	14:00	15:00			15:00
Vol.	7	1000	304	15	35	17	6	7	13	2	2			1372
Grand Total	62	13050	3510	104	474	177	48	59	104	5	6	0	0	17599
Percent	0.4%	74.2%	19.9%	0.6%	2.7%	1.0%	0.3%	0.3%	0.6%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Perris
Ethanac Road
B/ Case Road - Interstate 15 Southbound
24 Hour Directional Classification Count
Eastbound, Westbound

PER10
Site Code: 108-21622B

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
10/26/21	1	140	14	0	3	0	0	0	4	2	3	0	0	167
01:00	0	96	8	0	4	1	0	0	3	0	0	0	0	112
02:00	0	87	16	0	5	0	0	0	4	0	0	0	0	112
03:00	0	129	18	0	2	0	0	2	12	0	2	0	0	165
04:00	2	305	66	1	23	5	0	0	14	0	5	0	0	421
05:00	2	465	139	2	27	33	2	1	16	0	3	0	0	690
06:00	3	721	240	13	77	19	5	18	21	0	3	0	0	1120
07:00	6	1205	398	10	80	19	7	38	21	0	0	0	0	1784
08:00	8	1076	351	6	48	25	8	12	26	0	0	0	0	1560
09:00	0	871	284	5	55	18	5	1	13	1	2	0	0	1255
10:00	1	863	287	2	56	16	11	6	14	1	1	0	0	1258
11:00	4	984	292	8	54	21	8	9	19	0	6	0	0	1405
12 PM	3	1052	353	2	53	22	4	4	25	0	3	0	0	1521
13:00	1	1297	342	6	32	17	4	5	17	0	3	0	0	1724
14:00	3	1299	371	15	48	14	0	5	22	2	1	0	0	1780
15:00	8	1367	394	11	46	8	1	3	11	0	3	0	0	1852
16:00	8	1292	368	7	38	7	1	5	7	0	0	0	0	1733
17:00	7	1359	377	2	26	2	6	2	12	0	0	0	0	1793
18:00	9	1252	271	2	16	5	4	3	6	0	0	0	0	1568
19:00	7	922	159	4	11	5	1	0	9	1	0	0	0	1119
20:00	2	664	94	7	7	1	0	0	4	0	0	0	0	779
21:00	2	519	59	1	6	0	0	0	6	0	0	0	0	593
22:00	0	347	44	0	3	0	0	0	5	0	0	0	0	399
23:00	0	202	39	0	4	0	0	0	5	0	1	0	0	251
Total	77	18514	4984	104	724	238	67	114	296	7	36	0	0	25161
Percent	0.3%	73.6%	19.8%	0.4%	2.9%	0.9%	0.3%	0.5%	1.2%	0.0%	0.1%	0.0%	0.0%	
AM Peak	08:00	07:00	07:00	06:00	07:00	05:00	10:00	07:00	08:00	00:00	11:00			07:00
Vol.	8	1205	398	13	80	33	11	38	26	2	6			1784
PM Peak	18:00	15:00	15:00	14:00	12:00	12:00	17:00	13:00	12:00	14:00	12:00			15:00
Vol.	9	1367	394	15	53	22	6	5	25	2	3			1852
Grand Total	77	18514	4984	104	724	238	67	114	296	7	36	0	0	25161
Percent	0.3%	73.6%	19.8%	0.4%	2.9%	0.9%	0.3%	0.5%	1.2%	0.0%	0.1%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

PER011

Site Code: 108-21622B

City of Perris
Ethanac Road
B/ Interstate 15 Southbound - Interstate 15 Northbound
24 Hour Directional Classification Count
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
10/26/21	2	88	6	0	2	0	0	1	0	0	0	0	0	99
01:00	0	52	4	0	1	0	0	0	0	0	0	0	0	57
02:00	1	50	5	0	1	0	0	0	3	0	0	0	0	60
03:00	0	116	8	0	5	2	1	0	4	0	2	2	0	140
04:00	0	265	19	0	5	1	3	3	6	1	3	4	0	310
05:00	1	482	32	0	30	8	6	9	8	1	0	1	0	578
06:00	2	710	73	13	40	27	9	5	11	0	1	1	0	892
07:00	2	1006	137	10	36	15	10	1	13	1	2	0	0	1233
08:00	1	1005	116	4	42	20	7	5	13	1	1	0	0	1215
09:00	0	736	113	3	31	20	8	2	11	1	0	0	0	925
10:00	1	733	122	0	29	13	14	4	16	0	0	0	0	932
11:00	4	920	118	3	27	16	13	4	4	5	1	0	0	1115
12 PM	6	835	210	3	15	34	6	2	14	2	0	1	0	1128
13:00	1	919	218	4	21	30	5	2	17	0	0	0	1	1218
14:00	5	1050	260	6	16	23	3	2	10	0	0	0	0	1375
15:00	9	1121	259	12	20	20	4	1	14	0	3	0	0	1463
16:00	7	1121	242	13	24	4	5	7	13	0	1	0	0	1437
17:00	4	1087	207	1	16	8	9	0	9	0	0	0	0	1341
18:00	3	993	116	1	13	5	5	4	5	0	0	0	0	1145
19:00	1	736	50	4	8	5	3	3	7	0	0	0	0	817
20:00	1	514	86	4	4	4	0	1	7	0	1	0	0	622
21:00	1	338	21	1	1	0	1	0	2	0	1	0	0	366
22:00	1	240	17	0	1	0	0	1	2	0	1	0	0	263
23:00	0	157	16	0	0	1	0	0	2	0	0	0	0	176
Total	53	15274	2455	82	388	256	112	57	191	12	17	9	1	18907
Percent	0.3%	80.8%	13.0%	0.4%	2.1%	1.4%	0.6%	0.3%	1.0%	0.1%	0.1%	0.0%	0.0%	
AM Peak	11:00	07:00	07:00	06:00	08:00	06:00	10:00	05:00	10:00	11:00	04:00	04:00		07:00
Vol.	4	1006	137	13	42	27	14	9	16	5	3	4		1233
PM Peak	15:00	15:00	14:00	16:00	16:00	12:00	17:00	16:00	13:00	12:00	15:00	12:00	13:00	15:00
Vol.	9	1121	260	13	24	34	9	7	17	2	3	1	1	1463
Grand Total	53	15274	2455	82	388	256	112	57	191	12	17	9	1	18907
Percent	0.3%	80.8%	13.0%	0.4%	2.1%	1.4%	0.6%	0.3%	1.0%	0.1%	0.1%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Perris
Ethanac Road
B/ Interstate 15 Northbound - Trumble Road
24 Hour Directional Classification Count
Eastbound, Westbound

PER012
Site Code: 108-21622B

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
10/26/21	1	65	3	0	0	0	0	1	1	0	1	0	0	72
01:00	0	49	2	0	0	0	0	0	0	0	1	0	0	52
02:00	1	59	2	0	2	0	1	0	0	0	1	1	2	69
03:00	0	92	1	0	1	0	4	0	1	0	2	0	0	101
04:00	0	194	2	0	6	4	10	2	4	0	3	0	0	225
05:00	0	311	17	0	25	14	15	10	4	0	0	0	0	396
06:00	1	532	40	10	32	12	16	6	8	0	1	0	0	658
07:00	0	795	106	6	28	15	19	2	4	0	1	0	0	976
08:00	2	756	90	3	29	24	19	3	8	1	1	0	0	936
09:00	0	538	91	0	30	15	15	2	6	1	1	0	0	699
10:00	1	523	94	0	29	24	12	10	9	0	1	0	0	703
11:00	4	619	103	2	19	20	14	4	8	5	0	0	0	798
12 PM	7	565	179	2	16	21	8	3	11	2	1	1	0	816
13:00	1	622	207	2	15	31	3	3	16	0	0	0	0	900
14:00	6	769	217	3	15	25	4	0	7	0	2	0	0	1048
15:00	6	863	229	6	18	15	3	2	8	1	2	0	0	1153
16:00	7	814	239	5	31	2	1	6	10	0	0	0	0	1115
17:00	2	837	207	0	34	7	1	0	4	0	0	0	0	1092
18:00	3	672	101	0	16	3	0	2	2	0	0	0	0	799
19:00	0	514	34	0	11	3	1	4	0	0	0	0	0	567
20:00	2	359	35	1	3	4	0	1	1	0	1	0	0	407
21:00	0	229	16	0	0	0	0	0	2	0	1	0	0	248
22:00	0	164	10	0	1	1	0	1	1	0	1	0	0	179
23:00	0	113	12	0	1	0	0	0	2	0	2	0	0	130
Total	44	11054	2037	40	362	240	146	62	117	10	23	2	2	14139
Percent	0.3%	78.2%	14.4%	0.3%	2.6%	1.7%	1.0%	0.4%	0.8%	0.1%	0.2%	0.0%	0.0%	
AM Peak	11:00	07:00	07:00	06:00	06:00	08:00	07:00	05:00	10:00	11:00	04:00	02:00	02:00	07:00
Vol.	4	795	106	10	32	24	19	10	9	5	3	1	2	976
PM Peak	12:00	15:00	16:00	15:00	17:00	13:00	12:00	16:00	13:00	12:00	14:00	12:00		15:00
Vol.	7	863	239	6	34	31	8	6	16	2	2	1		1153
Grand Total	44	11054	2037	40	362	240	146	62	117	10	23	2	2	14139
Percent	0.3%	78.2%	14.4%	0.3%	2.6%	1.7%	1.0%	0.4%	0.8%	0.1%	0.2%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Menifee
Ethanac Roac
B/ Trumble Road - Sherman Road
24 Hour Directional Classification Count
Eastbound, Westbound

MEN021
Site Code: 108-22005

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
01/13/22	1	28	12	0	0	0	0	0	0	0	0	0	0	41
01:00	0	27	4	0	2	1	0	0	0	0	1	0	0	35
02:00	0	30	9	0	4	0	0	0	1	0	2	0	0	46
03:00	1	43	8	0	5	1	0	1	3	0	1	1	0	64
04:00	1	77	38	2	22	2	0	1	4	0	1	0	0	148
05:00	2	107	57	8	65	1	0	4	8	0	2	1	0	255
06:00	1	182	114	12	79	5	0	7	9	1	3	0	0	413
07:00	4	434	179	8	93	5	0	24	5	0	1	0	0	753
08:00	1	261	111	5	69	6	0	7	9	0	2	0	1	472
09:00	0	212	100	10	51	4	0	10	14	0	1	0	0	402
10:00	4	203	112	3	46	4	0	2	14	1	3	0	0	392
11:00	4	266	124	6	56	9	1	3	10	0	1	2	0	482
12 PM	2	297	122	7	59	6	0	5	11	1	0	0	0	510
13:00	4	320	126	8	53	2	0	5	11	0	2	0	0	531
14:00	4	464	185	5	72	10	0	10	9	0	3	0	0	762
15:00	8	443	199	8	88	6	0	15	13	0	0	0	0	780
16:00	4	420	188	5	84	6	1	11	5	0	0	0	0	724
17:00	3	431	142	2	66	3	0	5	1	0	1	0	0	654
18:00	3	326	118	3	48	1	0	1	1	0	0	0	0	501
19:00	1	231	70	1	23	2	0	1	4	0	0	0	0	333
20:00	0	177	44	1	15	0	0	1	1	0	0	0	0	239
21:00	2	100	29	1	10	0	0	1	1	0	0	0	0	144
22:00	0	106	18	1	4	0	0	0	0	0	0	0	0	129
23:00	1	51	16	1	3	0	0	0	0	0	1	0	0	73
Total	51	5236	2125	97	1017	74	2	114	134	3	25	4	1	8883
Percent	0.6%	58.9%	23.9%	1.1%	11.4%	0.8%	0.0%	1.3%	1.5%	0.0%	0.3%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	06:00	07:00	11:00	11:00	07:00	09:00	06:00	06:00	11:00	08:00	07:00
Vol.	4	434	179	12	93	9	1	24	14	1	3	2	1	753
PM Peak	15:00	14:00	15:00	13:00	15:00	14:00	16:00	15:00	15:00	12:00	14:00			15:00
Vol.	8	464	199	8	88	10	1	15	13	1	3			780
Grand Total	51	5236	2125	97	1017	74	2	114	134	3	25	4	1	8883
Percent	0.6%	58.9%	23.9%	1.1%	11.4%	0.8%	0.0%	1.3%	1.5%	0.0%	0.3%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Menifee
Ethanac Road
B/ Sherman Road - Antelope Road
24 Hour Directional Classification Count
Eastbound, Westbound

MEN022
Site Code: 108-22005

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
01/13/22	0	12	3	0	2	0	0	0	0	0	0	0	0	17
01:00	0	7	2	0	0	1	0	0	0	0	1	0	0	11
02:00	0	11	3	0	2	0	0	0	1	0	0	0	0	17
03:00	1	14	3	0	5	1	0	0	1	0	1	1	0	27
04:00	1	39	17	1	15	1	0	0	3	0	1	0	0	78
05:00	0	62	31	2	48	1	0	2	5	0	1	1	0	153
06:00	4	90	56	5	62	2	0	4	4	0	4	0	0	231
07:00	1	208	106	7	61	2	0	16	8	0	1	0	0	410
08:00	1	118	46	1	30	2	0	9	7	0	3	0	0	217
09:00	0	69	47	6	21	5	0	6	12	0	1	0	0	167
10:00	1	87	46	2	32	5	0	3	10	0	1	0	0	187
11:00	0	90	51	3	27	5	1	2	7	0	1	1	0	188
12 PM	3	114	47	3	32	6	0	12	8	0	0	1	0	226
13:00	2	136	61	6	36	2	0	6	6	0	0	0	0	255
14:00	3	224	122	3	60	5	0	7	6	0	2	0	0	432
15:00	3	179	94	5	47	4	0	17	12	0	0	0	0	361
16:00	0	130	90	3	54	3	1	6	1	0	0	0	0	288
17:00	2	139	55	2	34	1	0	3	1	0	0	0	0	237
18:00	0	96	45	0	13	0	0	0	0	0	0	0	0	154
19:00	0	67	20	0	9	1	0	2	0	0	0	0	0	99
20:00	0	43	12	0	6	0	0	0	1	0	0	0	0	62
21:00	1	28	9	0	5	0	0	1	0	0	0	0	0	44
22:00	0	34	5	0	0	0	0	0	0	0	0	0	0	39
23:00	0	22	12	0	0	0	0	0	0	0	0	0	0	34
Total	23	2019	983	49	601	47	2	96	93	0	17	4	0	3934
Percent	0.6%	51.3%	25.0%	1.2%	15.3%	1.2%	0.1%	2.4%	2.4%	0.0%	0.4%	0.1%	0.0%	
AM Peak	06:00	07:00	07:00	07:00	06:00	09:00	11:00	07:00	09:00		06:00	03:00		07:00
Vol.	4	208	106	7	62	5	1	16	12		4	1		410
PM Peak	12:00	14:00	14:00	13:00	14:00	12:00	16:00	15:00	15:00		14:00	12:00		14:00
Vol.	3	224	122	6	60	6	1	17	12		2	1		432
Grand Total	23	2019	983	49	601	47	2	96	93	0	17	4	0	3934
Percent	0.6%	51.3%	25.0%	1.2%	15.3%	1.2%	0.1%	2.4%	2.4%	0.0%	0.4%	0.1%	0.0%	

Counts Unlimited, Inc.

City of Perris
 Murrieta Road
 B/ Ethanac Road - Rouse Road
 24 Hour Directional Volume Count

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

PER013
 Site Code: 108-21622A

Start Time	26-Oct-21 Tue	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		10	79			2	50				
12:15		7	81			6	61				
12:30		5	64			5	68				
12:45		2	70	24	294	2	72	15	251	39	545
01:00		0	73			8	70				
01:15		4	65			5	85				
01:30		1	88			2	78				
01:45		4	80	9	306	1	65	16	298	25	604
02:00		8	87			9	64				
02:15		5	80			2	62				
02:30		0	95			4	68				
02:45		10	75	23	337	6	69	21	263	44	600
03:00		4	84			2	79				
03:15		7	104			4	94				
03:30		7	88			2	91				
03:45		13	95	31	371	1	76	9	340	40	711
04:00		20	82			3	73				
04:15		23	64			6	85				
04:30		20	78			5	103				
04:45		21	73	84	297	5	87	19	348	103	645
05:00		20	76			4	104				
05:15		22	62			9	79				
05:30		27	80			10	82				
05:45		42	77	111	295	11	66	34	331	145	626
06:00		26	60			12	76				
06:15		36	93			14	66				
06:30		38	68			25	45				
06:45		70	44	170	265	20	54	71	241	241	506
07:00		69	37			32	41				
07:15		62	47			34	47				
07:30		75	28			42	39				
07:45		74	32	280	144	41	27	149	154	429	298
08:00		58	25			41	31				
08:15		60	39			35	28				
08:30		75	26			34	26				
08:45		64	24	257	114	49	29	159	114	416	228
09:00		65	25			45	21				
09:15		64	22			40	25				
09:30		65	21			52	20				
09:45		92	24	286	92	51	18	188	84	474	176
10:00		53	11			52	17				
10:15		66	12			41	9				
10:30		63	6			49	10				
10:45		50	11	232	40	56	9	198	45	430	85
11:00		71	8			78	8				
11:15		62	11			47	12				
11:30		55	3			58	4				
11:45		70	3	258	25	41	6	224	30	482	55
Total		1765	2580	1765	2580	1103	2499	1103	2499	2868	5079
Combined Total		4345		4345		3602		3602		7947	
AM Peak	-	09:00	-	-	-	10:45	-	-	-	-	-
Vol.	-	286	-	-	-	239	-	-	-	-	-
P.H.F.	-	0.777	-	-	-	0.766	-	-	-	-	-
PM Peak	-	-	03:00	-	-	-	04:15	-	-	-	-
Vol.	-	-	371	-	-	-	379	-	-	-	-
P.H.F.	-	-	0.892	-	-	-	0.911	-	-	-	-
Percentage		40.6%	59.4%			30.6%	69.4%				
ADT/AADT		ADT 7,947		AADT 7,947							

Counts Unlimited, Inc.

City of Perris
 Murrieta Road
 B/ Rouse Road - Chambers Avenue
 24 Hour Directional Volume Count

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

PER014
 Site Code: 108-21622A

Start Time	26-Oct-21 Tue	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		8	59			2	41				
12:15		5	66			5	46				
12:30		5	51			3	58				
12:45		2	60	20	236	2	62	12	207	32	443
01:00		0	59			5	58				
01:15		4	54			4	72				
01:30		1	63			2	60				
01:45		3	72	8	248	1	49	12	239	20	487
02:00		7	71			9	58				
02:15		3	71			2	50				
02:30		0	83			3	61				
02:45		8	63	18	288	5	53	19	222	37	510
03:00		3	75			2	59				
03:15		5	83			3	79				
03:30		6	69			1	87				
03:45		10	83	24	310	1	61	7	286	31	596
04:00		14	73			2	58				
04:15		19	55			7	72				
04:30		18	59			3	76				
04:45		16	61	67	248	6	65	18	271	85	519
05:00		12	62			4	81				
05:15		19	54			6	69				
05:30		21	71			10	71				
05:45		35	75	87	262	9	52	29	273	116	535
06:00		23	53			13	63				
06:15		28	79			14	52				
06:30		32	58			18	41				
06:45		57	41	140	231	16	43	61	199	201	430
07:00		58	35			31	33				
07:15		52	43			30	39				
07:30		63	24			38	29				
07:45		63	30	236	132	34	23	133	124	369	256
08:00		46	18			36	26				
08:15		50	36			29	24				
08:30		56	22			31	24				
08:45		55	21	207	97	36	18	132	92	339	189
09:00		54	27			40	14				
09:15		46	15			33	23				
09:30		49	24			41	14				
09:45		76	19	225	85	45	15	159	66	384	151
10:00		40	9			42	15				
10:15		56	10			38	8				
10:30		48	7			34	9				
10:45		40	13	184	39	43	7	157	39	341	78
11:00		59	5			57	8				
11:15		54	8			35	10				
11:30		48	4			43	5				
11:45		65	1	226	18	37	4	172	27	398	45
Total		1442	2194	1442	2194	911	2045	911	2045	2353	4239
Combined Total		3636		3636		2956		2956		6592	
AM Peak	-	07:00	-	-	-	10:45	-	-	-	-	-
Vol.	-	236	-	-	-	178	-	-	-	-	-
P.H.F.	-	0.937	-	-	-	0.781	-	-	-	-	-
PM Peak	-	-	03:00	-	-	-	04:15	-	-	-	-
Vol.	-	-	310	-	-	-	294	-	-	-	-
P.H.F.	-	-	0.934	-	-	-	0.845	-	-	-	-
Percentage		39.7%	60.3%			30.8%	69.2%				
ADT/AADT		ADT 6,592		AADT 6,592							

Counts Unlimited, Inc.

City of Perris
 Murrieta Road
 B/ Chambers Avenue - McCall Boulevard
 24 Hour Directional Volume Count

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

PER015
 Site Code: 108-21622A

Start Time	26-Oct-21 Tue	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		9	77			1	53				
12:15		2	73			3	56				
12:30		5	62			4	66				
12:45		3	69	19	281	1	77	9	252	28	533
01:00		3	76			3	65				
01:15		2	61			0	68				
01:30		2	64			2	77				
01:45		8	81	15	282	1	69	6	279	21	561
02:00		7	92			5	81				
02:15		2	103			1	59				
02:30		2	92			4	53				
02:45		3	97	14	384	1	74	11	267	25	651
03:00		1	87			1	47				
03:15		4	107			3	65				
03:30		4	79			2	74				
03:45		7	90	16	363	1	58	7	244	23	607
04:00		3	75			4	60				
04:15		8	91			7	66				
04:30		6	75			5	76				
04:45		8	96	25	337	8	41	24	243	49	580
05:00		3	88			12	56				
05:15		8	82			11	67				
05:30		12	82			17	70				
05:45		20	96	43	348	13	58	53	251	96	599
06:00		19	93			18	71				
06:15		23	75			21	49				
06:30		25	65			22	40				
06:45		34	56	101	289	35	39	96	199	197	488
07:00		47	52			59	26				
07:15		56	59			76	35				
07:30		81	37			61	30				
07:45		94	44	278	192	50	27	246	118	524	310
08:00		68	37			42	31				
08:15		43	60			51	23				
08:30		61	23			53	18				
08:45		54	33	226	153	54	19	200	91	426	244
09:00		48	40			49	15				
09:15		48	26			36	16				
09:30		40	18			55	17				
09:45		73	22	209	106	64	8	204	56	413	162
10:00		50	15			50	8				
10:15		56	17			62	11				
10:30		62	13			42	4				
10:45		54	11	222	56	45	4	199	27	421	83
11:00		64	12			69	4				
11:15		61	12			56	5				
11:30		65	8			55	7				
11:45		72	5	262	37	47	4	227	20	489	57
Total		1430	2828	1430	2828	1282	2047	1282	2047	2712	4875
Combined Total		4258		4258		3329		3329		7587	
AM Peak	-	07:15	-	-	-	07:00	-	-	-	-	-
Vol.	-	299	-	-	-	246	-	-	-	-	-
P.H.F.	-	0.795	-	-	-	0.809	-	-	-	-	-
PM Peak	-	-	02:00	-	-	-	01:15	-	-	-	-
Vol.	-	-	384	-	-	-	295	-	-	-	-
P.H.F.	-	-	0.932	-	-	-	0.910	-	-	-	-
Percentage		33.6%	66.4%			38.5%	61.5%				
ADT/AADT		ADT 7,587		AADT 7,587							

Counts Unlimited, Inc.

City of Perris
 McCall Boulevard
 B/ Murrieta Road - Bradley Road
 24 Hour Directional Volume Count

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

PER016
 Site Code: 108-21622A

Start Time	26-Oct-21 Tue	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		6	84			14	53				
12:15		5	75			6	76				
12:30		2	75			0	52				
12:45		2	76	15	310	8	59	28	240	43	550
01:00		3	69			0	52				
01:15		2	92			0	63				
01:30		4	76			7	119				
01:45		2	65	11	302	4	91	11	325	22	627
02:00		4	66			3	83				
02:15		2	87			1	56				
02:30		5	105			1	75				
02:45		3	89	14	347	1	102	6	316	20	663
03:00		5	85			3	90				
03:15		6	87			3	98				
03:30		6	79			4	70				
03:45		5	64	22	315	4	98	14	356	36	671
04:00		25	74			3	84				
04:15		18	66			3	79				
04:30		26	98			5	80				
04:45		20	60	89	298	3	97	14	340	103	638
05:00		35	80			3	95				
05:15		29	90			12	78				
05:30		48	64			8	92				
05:45		47	63	159	297	26	113	49	378	208	675
06:00		47	67			21	74				
06:15		38	55			24	79				
06:30		72	54			28	67				
06:45		71	48	228	224	32	54	105	274	333	498
07:00		52	41			50	46				
07:15		85	40			41	48				
07:30		73	39			36	42				
07:45		99	32	309	152	69	32	196	168	505	320
08:00		89	39			65	35				
08:15		69	30			74	52				
08:30		63	20			48	22				
08:45		73	19	294	108	50	30	237	139	531	247
09:00		62	25			45	33				
09:15		56	16			46	24				
09:30		51	19			40	24				
09:45		68	16	237	76	46	19	177	100	414	176
10:00		55	16			43	15				
10:15		58	12			52	20				
10:30		70	10			53	14				
10:45		54	10	237	48	54	6	202	55	439	103
11:00		57	6			57	8				
11:15		73	8			52	11				
11:30		73	10			49	8				
11:45		63	10	266	34	62	6	220	33	486	67
Total		1881	2511	1881	2511	1259	2724	1259	2724	3140	5235
Combined Total		4392		4392		3983		3983		8375	
AM Peak	-	07:15	-	-	-	07:45	-	-	-	-	-
Vol.	-	346	-	-	-	256	-	-	-	-	-
P.H.F.		0.874				0.865					
PM Peak	-	-	02:15	-	-	-	05:00	-	-	-	-
Vol.	-	-	366	-	-	-	378	-	-	-	-
P.H.F.			0.871				0.836				
Percentage		42.8%	57.2%			31.6%	68.4%				
ADT/AADT		ADT 8,375		AADT 8,375							

Counts Unlimited, Inc.

City of Menifee
 McCall Boulevard
 B/ Sun City Boulevard - Bradley Road
 24 Hour Directional Classification Count
 Eastbound, Westbound

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

MEN023
 Site Code: 108-22005

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
01/13/22	0	74	5	0	1	1	0	0	0	0	0	0	0	81
01:00	1	71	7	0	0	1	0	1	0	0	0	0	0	81
02:00	0	63	5	0	0	1	0	0	1	0	0	0	0	70
03:00	0	80	7	0	6	1	0	0	0	0	0	0	0	94
04:00	0	147	33	0	5	0	0	0	1	0	0	0	0	186
05:00	0	217	58	0	9	1	0	0	1	0	0	0	0	286
06:00	2	364	110	1	17	0	0	3	3	0	0	0	0	500
07:00	0	665	147	1	16	4	0	3	7	0	0	0	0	843
08:00	0	762	180	1	20	0	0	5	4	0	0	0	0	972
09:00	2	705	165	0	16	0	0	1	1	0	0	0	0	890
10:00	3	828	150	1	13	1	0	2	2	1	0	0	0	1001
11:00	3	966	164	2	13	2	0	2	2	0	0	0	1	1155
12 PM	2	942	188	0	18	2	0	1	2	0	0	0	0	1155
13:00	7	977	197	0	27	0	0	4	1	0	0	0	0	1213
14:00	2	1049	184	0	17	2	0	2	6	0	0	0	0	1262
15:00	3	1107	237	1	16	4	0	3	1	0	0	0	0	1372
16:00	5	1064	190	2	15	3	0	2	1	0	0	0	0	1282
17:00	3	1018	126	0	12	0	0	2	2	0	0	0	0	1163
18:00	4	833	117	0	5	1	0	0	0	0	0	0	0	960
19:00	0	540	70	0	3	0	0	0	0	0	0	0	0	613
20:00	0	380	44	0	1	0	0	1	0	0	0	0	0	426
21:00	2	243	29	0	2	0	0	0	0	0	0	0	0	276
22:00	0	179	28	0	1	0	0	0	1	0	0	0	0	209
23:00	0	148	9	0	0	0	0	0	0	0	0	0	0	157
Total	39	13422	2450	9	233	24	0	32	36	1	0	0	1	16247
Percent	0.2%	82.6%	15.1%	0.1%	1.4%	0.1%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	11:00	08:00	11:00	08:00	07:00		08:00	07:00	10:00			11:00	11:00
Vol.	3	966	180	2	20	4		5	7	1			1	1155
PM Peak	13:00	15:00	15:00	16:00	13:00	15:00		13:00	14:00					15:00
Vol.	7	1107	237	2	27	4		4	6					1372
Grand Total	39	13422	2450	9	233	24	0	32	36	1	0	0	1	16247
Percent	0.2%	82.6%	15.1%	0.1%	1.4%	0.1%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Menifee
McCall Boulevard
B/ Bradley Road - Interstate 15 Southbound Ramps
24 Hour Directional Classification Count
Eastbound, Westbound

MEN024
Site Code: 108-22005

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
01/13/22	1	119	11	0	3	1	0	0	1	0	0	0	0	136
01:00	1	101	13	0	0	2	0	1	0	0	0	0	0	118
02:00	1	93	6	0	2	1	0	0	1	0	0	0	0	104
03:00	0	135	15	0	6	1	0	0	0	0	0	0	0	157
04:00	1	249	57	0	8	1	0	1	2	0	0	0	0	319
05:00	1	413	97	0	13	1	0	0	1	0	0	0	0	526
06:00	2	651	186	1	26	0	0	4	3	0	0	0	0	873
07:00	0	1225	254	1	31	6	0	8	8	0	0	0	0	1533
08:00	2	1364	298	0	39	1	0	6	4	0	0	0	0	1714
09:00	3	1270	283	0	27	0	0	3	1	0	0	0	0	1587
10:00	7	1439	263	2	28	3	0	2	2	1	0	0	0	1747
11:00	3	1643	270	4	20	3	0	5	3	0	0	0	1	1952
12 PM	5	1610	287	0	37	2	0	5	2	0	0	0	0	1948
13:00	13	1746	303	0	47	4	0	7	2	0	0	0	0	2122
14:00	10	1869	363	0	31	3	0	2	8	0	0	0	0	2286
15:00	3	2013	407	2	24	3	1	3	2	0	0	0	0	2458
16:00	8	1893	345	2	22	3	0	3	2	0	0	0	0	2278
17:00	4	1772	285	0	26	0	0	2	3	0	0	0	0	2092
18:00	5	1372	190	0	7	1	0	1	1	0	0	0	0	1577
19:00	1	921	128	0	7	0	0	0	0	0	0	0	0	1057
20:00	1	636	84	0	4	0	0	1	0	0	0	0	0	726
21:00	4	409	52	0	5	0	0	1	2	0	0	0	0	473
22:00	0	295	36	0	2	0	0	0	2	0	0	0	0	335
23:00	0	216	18	0	0	0	0	0	0	0	0	0	0	234
Total	76	23454	4251	12	415	36	1	55	50	1	0	0	1	28352
Percent	0.3%	82.7%	15.0%	0.0%	1.5%	0.1%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	11:00	08:00	11:00	08:00	07:00		07:00	07:00	10:00			11:00	11:00
Vol.	7	1643	298	4	39	6		8	8	1			1	1952
PM Peak	13:00	15:00	15:00	15:00	13:00	13:00	15:00	13:00	14:00					15:00
Vol.	13	2013	407	2	47	4	1	7	8					2458
Grand Total	76	23454	4251	12	415	36	1	55	50	1	0	0	1	28352
Percent	0.3%	82.7%	15.0%	0.0%	1.5%	0.1%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Menifee
McCall Boulevard
B/ I-15 Southbound Ramps - I-15 Northbound Ramps
24 Hour Directional Classification Count
Eastbound, Westbound

MEN025
Site Code: 108-22005

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
01/13/22	0	122	13	0	0	0	0	0	0	0	0	0	0	135
01:00	0	105	12	0	1	1	0	1	0	0	0	0	0	120
02:00	1	95	13	0	2	0	0	0	1	0	0	0	0	112
03:00	0	142	29	0	10	1	0	0	0	0	0	0	0	182
04:00	0	280	69	0	10	1	0	0	1	0	0	0	0	361
05:00	2	418	132	1	11	0	1	1	3	0	0	0	0	569
06:00	2	716	215	1	16	11	0	3	3	0	0	0	0	967
07:00	2	1414	249	1	35	9	2	7	14	0	0	0	0	1733
08:00	2	1301	280	5	37	3	0	2	10	0	0	0	0	1640
09:00	3	1123	257	0	19	3	1	2	4	0	0	0	0	1412
10:00	8	1244	218	3	32	7	0	0	12	1	0	0	0	1525
11:00	3	1376	274	6	17	10	1	2	6	0	0	0	0	1695
12 PM	11	1451	275	2	31	9	0	3	6	0	0	0	0	1788
13:00	6	1530	312	0	43	5	1	4	8	0	0	0	0	1909
14:00	7	1751	351	5	33	9	0	1	9	1	0	0	0	2167
15:00	1	1919	375	5	20	1	1	3	4	1	0	0	0	2330
16:00	10	1813	358	3	31	5	0	1	3	0	0	0	0	2224
17:00	5	1705	294	3	25	0	0	0	2	0	0	0	0	2034
18:00	5	1373	189	0	8	0	0	1	3	0	0	0	0	1579
19:00	3	948	137	0	6	0	0	0	1	0	0	0	0	1095
20:00	1	641	93	1	6	0	0	0	0	0	0	0	0	742
21:00	3	464	61	0	6	1	0	0	0	0	0	0	0	535
22:00	0	326	35	0	2	0	0	0	0	0	0	0	0	363
23:00	0	203	33	0	0	0	0	0	0	0	0	0	0	236
Total	75	22460	4274	36	401	76	7	31	90	3	0	0	0	27453
Percent	0.3%	81.8%	15.6%	0.1%	1.5%	0.3%	0.0%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	07:00	08:00	11:00	08:00	06:00	07:00	07:00	07:00	10:00				07:00
Vol.	8	1414	280	6	37	11	2	7	14	1				1733
PM Peak	12:00	15:00	15:00	14:00	13:00	12:00	13:00	13:00	14:00	14:00				15:00
Vol.	11	1919	375	5	43	9	1	4	9	1				2330
Grand Total	75	22460	4274	36	401	76	7	31	90	3	0	0	0	27453
Percent	0.3%	81.8%	15.6%	0.1%	1.5%	0.3%	0.0%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Menifee
McCall Boulevard
B/ Interstate 15 Northbound Ramps - Encanto Drive
24 Hour Directional Classification Count
Eastbound, Westbound

MEN026
Site Code: 108-22005

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
01/13/22	0	138	15	0	2	0	0	0	0	0	0	0	0	155
01:00	0	104	11	0	1	1	0	0	0	0	0	0	0	117
02:00	1	94	15	0	3	0	0	0	0	0	0	0	0	113
03:00	0	160	27	0	10	0	0	0	1	0	0	0	0	198
04:00	0	348	78	0	7	1	0	2	0	0	0	0	0	436
05:00	2	524	130	1	9	0	0	2	7	0	0	0	0	675
06:00	2	860	248	3	26	11	1	5	5	1	0	0	0	1162
07:00	3	1662	255	2	38	10	2	7	18	0	0	0	0	1997
08:00	2	1361	286	6	32	6	0	3	16	0	0	0	0	1712
09:00	3	1050	245	2	20	6	5	1	10	0	0	0	0	1342
10:00	9	1129	202	3	30	9	3	3	16	2	0	0	0	1406
11:00	3	1239	271	6	19	10	2	2	5	0	0	0	0	1557
12 PM	11	1361	256	2	24	10	3	1	7	0	0	0	0	1675
13:00	9	1360	319	0	42	4	5	3	10	0	0	0	0	1752
14:00	6	1682	359	5	34	14	1	2	15	0	0	0	0	2118
15:00	5	1837	415	6	27	1	1	4	8	0	0	0	0	2304
16:00	16	1708	383	3	34	3	0	0	1	0	0	0	0	2148
17:00	3	1725	294	3	21	1	4	0	1	0	0	0	0	2052
18:00	5	1356	207	0	6	0	2	0	2	0	0	0	0	1578
19:00	2	996	121	0	7	0	0	0	1	0	0	0	0	1127
20:00	1	674	113	1	5	0	0	1	0	0	0	0	0	795
21:00	2	486	71	0	6	1	0	0	0	0	0	0	0	566
22:00	0	365	32	0	3	0	0	0	0	0	0	0	0	400
23:00	0	216	34	0	1	0	0	0	2	0	0	0	0	253
Total	85	22435	4387	43	407	88	29	36	125	3	0	0	0	27638
Percent	0.3%	81.2%	15.9%	0.2%	1.5%	0.3%	0.1%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	07:00	08:00	08:00	07:00	06:00	09:00	07:00	07:00	10:00				07:00
Vol.	9	1662	286	6	38	11	5	7	18	2				1997
PM Peak	16:00	15:00	15:00	15:00	13:00	14:00	13:00	15:00	14:00					15:00
Vol.	16	1837	415	6	42	14	5	4	15					2304
Grand Total	85	22435	4387	43	407	88	29	36	125	3	0	0	0	27638
Percent	0.3%	81.2%	15.9%	0.2%	1.5%	0.3%	0.1%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 McCall Boulevard
 B/ Encanto Drive - Sherman Road
 24 Hour Directional Classification Count
 Eastbound, Westbound

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

MEN027
 Site Code: 108-22005

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
01/13/22	0	103	12	0	4	0	0	0	0	0	0	0	0	119
01:00	0	60	14	0	3	0	0	0	0	0	0	0	0	77
02:00	0	70	9	0	5	0	0	1	2	0	0	0	0	87
03:00	0	98	26	1	16	0	0	1	0	0	0	0	0	142
04:00	3	227	57	1	33	1	0	5	0	0	0	0	0	327
05:00	4	338	114	2	65	1	0	5	4	1	0	0	0	534
06:00	6	560	178	3	87	15	2	16	5	0	1	0	1	874
07:00	9	1152	276	8	98	9	4	51	6	12	2	4	2	1633
08:00	9	820	276	3	64	6	5	40	9	4	2	0	2	1240
09:00	6	620	187	7	63	8	4	24	10	2	1	0	0	932
10:00	7	672	188	7	54	8	5	24	11	2	1	0	2	981
11:00	3	764	211	3	80	7	3	26	6	1	1	1	1	1107
12 PM	10	827	213	6	77	5	2	36	4	5	4	0	0	1189
13:00	7	839	218	11	67	2	9	40	6	3	1	2	1	1206
14:00	10	1072	283	4	87	13	3	40	12	6	1	2	2	1535
15:00	10	1141	317	5	96	10	3	47	5	4	0	1	1	1640
16:00	9	1045	297	2	85	5	3	43	3	5	3	0	0	1500
17:00	5	1045	244	0	99	7	4	37	1	2	1	0	0	1445
18:00	9	850	205	1	68	4	1	23	1	5	0	0	1	1168
19:00	1	629	137	0	36	2	0	6	0	1	0	0	0	812
20:00	3	463	83	0	29	1	0	7	2	1	0	0	0	589
21:00	1	346	71	1	19	1	0	4	0	0	1	0	0	444
22:00	0	226	38	0	11	0	0	2	0	0	0	0	0	277
23:00	1	163	24	0	3	0	0	1	0	0	0	0	0	192
Total	113	14130	3678	65	1249	105	48	479	87	54	19	10	13	20050
Percent	0.6%	70.5%	18.3%	0.3%	6.2%	0.5%	0.2%	2.4%	0.4%	0.3%	0.1%	0.0%	0.1%	
AM Peak	07:00	07:00	07:00	07:00	07:00	06:00	08:00	07:00	10:00	07:00	07:00	07:00	07:00	07:00
Vol.	9	1152	276	8	98	15	5	51	11	12	2	4	2	1633
PM Peak	12:00	15:00	15:00	13:00	17:00	14:00	13:00	15:00	14:00	14:00	12:00	13:00	14:00	15:00
Vol.	10	1141	317	11	99	13	9	47	12	6	4	2	2	1640
Grand Total	113	14130	3678	65	1249	105	48	479	87	54	19	10	13	20050
Percent	0.6%	70.5%	18.3%	0.3%	6.2%	0.5%	0.2%	2.4%	0.4%	0.3%	0.1%	0.0%	0.1%	

Counts Unlimited, Inc.

City of Menifee
 McCall Boulevard
 B/ Sherman Road - Antelope Road
 24 Hour Directional Classification Count
 Eastbound, Westbound

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

MEN028
 Site Code: 108-22005

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
01/13/22	0	67	15	0	2	0	0	0	0	0	0	0	0	84
01:00	1	52	9	1	4	0	0	0	0	0	0	0	0	67
02:00	0	60	8	1	7	0	0	0	2	0	0	0	0	78
03:00	0	70	15	0	12	1	0	2	1	0	0	0	0	101
04:00	4	161	46	1	37	0	1	6	1	0	0	0	0	257
05:00	4	249	103	2	56	0	0	12	1	0	0	0	0	427
06:00	7	460	150	5	93	9	4	22	3	1	0	0	1	755
07:00	23	964	289	9	120	10	12	58	10	6	1	0	0	1502
08:00	7	593	222	12	83	17	8	34	10	2	1	1	0	990
09:00	4	503	183	8	68	16	10	23	10	2	0	2	0	829
10:00	6	505	163	7	64	13	12	18	15	5	3	0	0	811
11:00	9	617	192	7	89	14	5	33	4	1	0	0	1	972
12 PM	7	628	207	10	76	17	9	25	2	5	4	1	1	992
13:00	6	679	217	9	82	10	11	30	10	8	3	2	0	1067
14:00	15	871	263	7	106	12	4	44	8	7	5	2	0	1344
15:00	12	895	280	5	90	8	6	47	6	5	0	0	5	1359
16:00	16	863	240	3	120	2	3	51	2	4	0	1	2	1307
17:00	18	861	230	1	105	7	6	40	1	2	0	0	1	1272
18:00	9	695	192	0	80	1	3	25	3	1	0	0	0	1009
19:00	4	480	129	0	36	0	1	20	0	3	0	0	0	673
20:00	3	383	81	0	35	0	1	7	2	1	0	0	0	513
21:00	0	284	64	0	27	2	0	4	0	1	0	0	0	382
22:00	0	171	32	0	15	1	0	0	1	0	0	0	0	220
23:00	2	124	27	0	6	0	0	0	0	0	0	0	0	159
Total	157	11235	3357	88	1413	140	96	501	92	54	17	9	11	17170
Percent	0.9%	65.4%	19.6%	0.5%	8.2%	0.8%	0.6%	2.9%	0.5%	0.3%	0.1%	0.1%	0.1%	
AM Peak	07:00	07:00	07:00	08:00	07:00	08:00	07:00	07:00	10:00	07:00	10:00	09:00	06:00	07:00
Vol.	23	964	289	12	120	17	12	58	15	6	3	2	1	1502
PM Peak	17:00	15:00	15:00	12:00	16:00	12:00	13:00	16:00	13:00	13:00	14:00	13:00	15:00	15:00
Vol.	18	895	280	10	120	17	11	51	10	8	5	2	5	1359
Grand Total	157	11235	3357	88	1413	140	96	501	92	54	17	9	11	17170
Percent	0.9%	65.4%	19.6%	0.5%	8.2%	0.8%	0.6%	2.9%	0.5%	0.3%	0.1%	0.1%	0.1%	

Int	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1	17	110	14	114	57	99	75	149	15	5	162	205	Perris Blvd at 11th Street
2	233	0	251	0	0	0	0	153	115	188	136	0	Goetz Rd at Case Rd
3	123	0	18	0	0	0	0	177	35	13	140	0	Murrieta Rd at Case Rd
4	268	278	14	3	141	165	146	0	187	0	0	1	Goetz Rd at Mapes Rd
5	184	385	0	0	486	18	29	0	136	0	0	0	I-215 SB Ramps/SR-74 at Bonnie Dr
6	0	0	0	131	0	11	8	629	0	0	531	676	I-215 NB Ramps at SR-74
7	46	1	250	0	4	1	5	623	15	239	860	1	SR-74 at Sherman Rd
8	18	516	7	12	276	17	68	4	60	3	0	15	Goetz Rd at Fieldstone Dr
9	2	229	371	224	110	8	16	88	6	167	70	271	Goetz Rd at Ethanac Rd
10	0	0	6	0	0	0	0	692	2	6	512	0	Byers Rd at Ethanac Rd
11	0	0	0	0	0	0	0	674	0	1	524	0	Geary St at Ethanac Rd
12	97	90	162	67	34	9	6	665	51	78	357	48	Murriets Rd at Ethanac Rd
13	2	0	21	0	0	0	0	816	0	1	551	0	Hull St at Ethanac Rd
14	0	0	2	0	0	0	0	854	1	0	549	0	Evans Rd at Ethanac Rd
15	29	6	85	324	7	60	151	608	24	70	475	350	Barnett Rd/Case Rd at Ethanac Rd
16	0	0	0	124	0	245	0	722	499	105	703	0	I-215 SB Ramps at Ethanac Rd
17	351	0	135	0	0	0	270	580	0	0	456	143	I-215 NB Ramps at Etahanc Rd
18	99	9	34	8	9	109	87	558	34	61	341	11	Trumble Rd at Ethanac Rd
19	4	3	2	5	7	196	229	222	14	0	246	8	Sherman Rd at Ethanac Rd
20	8	25	5	64	26	32	24	826	23	4	988	29	Palomar Rd at SR-74
21	0	0	0	0	0	0	0	0	0	0	0	0	Byers Rd at McLaughling Rd
22	1	298	2	12	147	2	6	0	3	0	0	31	Murrieta Rd at McLaughlin Rd
23	0	0	0	0	0	0	0	0	0	0	0	0	Evans Rd at McLaughlin Rd
24	24	0	2	1	0	5	19	124	6	0	108	1	Palomar Rd at Matthews Rd
25	3	234	7	28	120	4	14	18	6	10	3	40	Murrieta Rd at Rouse Rd
26	36	211	2	36	188	8	28	44	51	7	10	15	Murrieta Rd at Chambers Ave
27	0	149	111	50	90	92	79	191	1	25	113	76	Murrieta Rd at McCall Blvd
28	31	53	58	54	45	8	25	371	32	136	306	42	Sun City Blvd at McCall Blvd
29	41	44	337	141	51	4	17	466	48	480	464	94	Bradley Rd at McCall Blvd
30	0	0	0	363	3	477	0	844	318	287	813	0	I-215 SB Ramps at McCall Blvd
31	201	0	256	0	0	0	234	603	0	0	957	495	I-215 NB Ramps at McCall Blvd
32	196	28	80	30	18	121	113	653	76	72	1129	31	Encanto Dr at McCall Blvd
33	26	6	26	53	10	81	112	563	19	22	1024	54	Sherman Rd at McCall Blvd
34	41	4	82	9	0	80	58	673	11	44	892	54	Antelope Rd at McCall Blvd

Int	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1	7	48	7	181	99	52	35	206	23	13	192	159	Perris Blvd at 11th Street
2	132	0	156	0	0	0	0	199	189	206	260	0	Goetz Rd at Case Rd
3	104	0	10	0	0	0	0	269	104	14	232	0	Murrieta Rd at Case Rd
4	210	161	0	3	323	63	64	0	317	0	0	0	Goetz Rd at Mapes Rd
5	194	320	0	0	706	44	38	0	264	0	0	0	I-215 SB Ramps/SR-74 at Bonnie Dr
6	0	0	0	207	0	21	14	955	0	0	503	602	I-215 NB Ramps at SR-74
7	76	0	243	2	2	2	19	936	36	183	688	2	SR-74 at Sherman Rd
8	31	319	2	16	552	64	35	1	25	0	3	13	Goetz Rd at Fieldstone Dr
9	7	134	227	254	245	30	17	63	5	275	67	239	Goetz Rd at Ethanac Rd
10	5	0	2	0	0	0	0	538	1	4	598	0	Byers Rd at Ethanac Rd
11	0	0	1	0	0	0	0	513	2	4	614	0	Geary St at Ethanac Rd
12	106	76	143	45	75	13	6	402	108	212	484	42	Murriets Rd at Ethanac Rd
13	0	0	8	0	0	0	0	594	0	8	740	0	Hull St at Ethanac Rd
14	0	0	2	0	0	0	0	602	3	4	754	0	Evans Rd at Ethanac Rd
15	26	9	48	425	10	141	169	442	18	51	493	394	Barnett Rd/Case Rd at Ethanac Rd
16	0	0	0	193	0	361	0	602	384	125	716	0	I-215 SB Ramps at Ethanac Rd
17	426	2	198	0	0	0	246	570	0	0	413	195	I-215 NB Ramps at Etahanc Rd
18	84	5	37	30	15	141	73	588	33	44	361	4	Trumble Rd at Ethanac Rd
19	19	5	2	4	2	191	271	173	15	2	95	3	Sherman Rd at Ethanac Rd
20	7	1	11	22	1	37	72	886	7	6	770	12	Palomar Rd at SR-74
21	0	0	0	0	0	0	0	0	0	0	0	0	Byers Rd at McLaughling Rd
22	2	297	3	25	368	7	6	0	3	7	0	23	Murrieta Rd at McLaughlin Rd
23	0	0	0	0	0	0	0	0	0	0	0	0	Evans Rd at McLaughlin Rd
24	8	1	3	6	0	18	2	112	3	2	29	0	Palomar Rd at Matthews Rd
25	4	227	12	65	297	26	9	8	2	4	10	61	Murrieta Rd at Rouse Rd
26	50	256	9	44	222	38	11	24	24	6	31	57	Murrieta Rd at Chambers Ave
27	3	184	130	80	115	48	38	121	1	77	153	125	Murrieta Rd at McCall Blvd
28	80	121	148	65	77	10	25	324	59	67	416	228	Sun City Blvd at McCall Blvd
29	57	84	516	115	89	3	26	509	67	568	667	120	Bradley Rd at McCall Blvd
30	0	0	0	358	3	462	0	845	315	285	794	0	I-215 SB Ramps at McCall Blvd
31	383	4	480	0	0	0	283	897	0	0	740	244	I-215 NB Ramps at McCall Blvd
32	172	19	40	30	17	140	184	982	261	32	671	22	Encanto Dr at McCall Blvd
33	26	1	8	32	3	18	12	907	23	14	622	13	Sherman Rd at McCall Blvd
34	15	1	17	7	1	34	38	775	31	22	532	7	Antelope Rd at McCall Blvd

Existing Peak Hour Volumes - Classification Counts

1 Perris Blvd at 11th Street

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	17	0	0	0	0	0.0%	0	0.0	17	7	0	0	0	0	0.0%	0	0.0	7
NT	89	4	0	5	9	9.2%	21	2.3	110	45	2	0	0	2	4.3%	3	1.5	48
NR	14	0	0	0	0	0.0%	0	0.0	14	7	0	0	0	0	0.0%	0	0.0	7
SL	94	7	3	1	11	10.5%	20	1.8	114	157	3	8	1	12	7.1%	24	2.0	181
ST	49	1	0	2	3	5.8%	8	2.7	57	96	0	0	1	1	1.0%	3	3.0	99
SR	96	2	0	0	2	2.0%	3	1.5	99	50	1	0	0	1	2.0%	2	2.0	52
EL	73	1	0	0	1	1.4%	2	2.0	75	35	0	0	0	0	0.0%	0	0.0	35
ET	144	3	0	0	3	2.0%	5	1.7	149	183	5	3	3	11	5.7%	23	2.1	206
ER	15	0	0	0	0	0.0%	0	0.0	15	23	0	0	0	0	0.0%	0	0.0	23
WL	3	1	0	0	1	25.0%	2	2.0	5	10	2	0	0	2	16.7%	3	1.5	13
WT	150	5	2	0	7	4.5%	12	1.7	162	184	5	0	0	5	2.6%	8	1.6	192
WR	189	5	1	2	8	4.1%	16	2.0	205	150	4	0	1	5	3.2%	9	1.8	159
									1,022									1,022
North Leg Volumes																		
Approach	239	10	3	3	16		31		270	303	4	8	2	14		29		332
Depart	351	10	1	7	18		39		390	230	6	0	1	7		12		242
Total	590	20	4	10	34	5.4%	70	2.1	660	533	10	8	3	21	3.8%	41	2.0	574
South Leg Volumes																		
Approach	120	4	0	5	9		21		141	59	2	0	0	2		3		62
Depart	67	2	0	2	4		10		77	129	2	0	1	3		6		135
Total	187	6	0	7	13	6.5%	31	2.4	218	188	4	0	1	5	2.6%	9	1.8	197
East Leg Volumes																		
Approach	342	11	3	2	16		30		372	344	11	0	1	12		20		364
Depart	252	10	3	1	14		25		277	347	8	11	4	23		47		394
Total	594	21	6	3	30	4.8%	55	1.8	649	691	19	11	5	35	4.8%	67	1.9	758
West Leg Volumes																		
Approach	232	4	0	0	4		7		239	241	5	3	3	11		23		264
Depart	263	7	2	0	9		15		278	241	6	0	0	6		10		251
Total	495	11	2	0	13	2.6%	22	1.7	517	482	11	3	3	17	3.4%	33	1.9	515
All Legs																		
Approach	933	29	6	10	45		89		1,022	947	22	11	6	39		75		1,022
Depart	933	29	6	10	45		89		1,022	947	22	11	6	39		75		1,022
Total	1,866	58	12	20	90	4.6%	178	2.0	2,044	1,894	44	22	12	78	4.0%	150	1.9	2,044

Existing Peak Hour Volumes - Classification Counts

2 Goetz Rd at Case Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE		
NL	217	7	1	1	9	4.0%	16	1.8	233	124	3	0	1	4	3.1%	8	2.0	132
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
NR	204	13	9	3	25	10.9%	47	1.9	251	148	2	1	1	4	2.6%	8	2.0	156
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ET	145	4	1	0	5	3.3%	8	1.6	153	191	3	0	1	4	2.1%	8	2.0	199
ER	97	7	2	1	10	9.3%	18	1.8	115	151	4	10	4	18	10.7%	38	2.1	189
WL	172	8	2	0	10	5.5%	16	1.6	188	168	9	12	0	21	11.1%	38	1.8	206
WT	123	5	1	1	7	5.4%	13	1.9	136	230	4	0	8	12	5.0%	30	2.5	260
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									1,076									1,142
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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	0.0%	0	0.0	0
South Leg Volumes																		
Approach	421	20	10	4	34		63		484	272	5	1	2	8		16		288
Depart	269	15	4	1	20		34		303	319	13	22	4	39		76		395
Total	690	35	14	5	54	7.3%	97	1.8	787	591	18	23	6	47	7.4%	92	2.0	683
East Leg Volumes																		
Approach	295	13	3	1	17		29		324	398	13	12	8	33		68		466
Depart	349	17	10	3	30		55		404	339	5	1	2	8		16		355
Total	644	30	13	4	47	6.8%	84	1.8	728	737	18	13	10	41	5.3%	84	2.0	821
West Leg Volumes																		
Approach	242	11	3	1	15		26		268	342	7	10	5	22		46		388
Depart	340	12	2	2	16		29		369	354	7	0	9	16		38		392
Total	582	23	5	3	31	5.1%	55	1.8	637	696	14	10	14	38	5.2%	84	2.2	780
All Legs																		
Approach	958	44	16	6	66		118		1,076	1,012	25	23	15	63		130		1,142
Depart	958	44	16	6	66		118		1,076	1,012	25	23	15	63		130		1,142
Total	1,916	88	32	12	132	6.4%	236	1.8	2,152	2,024	50	46	30	126	5.9%	260	2.1	2,284

Existing Peak Hour Volumes - Classification Counts

3 Murrieta Rd at Case Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	118	3	0	0	3	2.5%	5	1.7	123	102	1	0	0	1	1.0%	2	2.0	104
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
NR	15	2	0	0	2	11.8%	3	1.5	18	8	1	0	0	1	11.1%	2	2.0	10
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ET	147	13	5	0	18	10.9%	30	1.7	177	260	3	2	0	5	1.9%	9	1.8	269
ER	33	1	0	0	1	2.9%	2	2.0	35	104	0	0	0	0	0.0%	0	0.0	104
WL	13	0	0	0	0	0.0%	0	0.0	13	14	0	0	0	0	0.0%	0	0.0	14
WT	131	6	0	0	6	4.4%	9	1.5	140	188	8	16	0	24	11.3%	44	1.8	232
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									506									733
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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%	0	0.0		0
South Leg Volumes																		
Approach	133	5	0	0	5		8		141	110	2	0	0	2		4		114
Depart	46	1	0	0	1		2		48	118	0	0	0	0		0		118
Total	179	6	0	0	6	3.2%	10	1.7	189	228	2	0	0	2	0.9%	4	2.0	232
East Leg Volumes																		
Approach	144	6	0	0	6		9		153	202	8	16	0	24		44		246
Depart	162	15	5	0	20		33		195	268	4	2	0	6		11		279
Total	306	21	5	0	26	7.8%	42	1.6	348	470	12	18	0	30	6.0%	55	1.8	525
West Leg Volumes																		
Approach	180	14	5	0	19		32		212	364	3	2	0	5		9		373
Depart	249	9	0	0	9		14		263	290	9	16	0	25		46		336
Total	429	23	5	0	28	6.1%	46	1.6	475	654	12	18	0	30	4.4%	55	1.8	709
All Legs																		
Approach	457	25	5	0	30		49		506	676	13	18	0	31		57		733
Depart	457	25	5	0	30		49		506	676	13	18	0	31		57		733
Total	914	50	10	0	60	6.2%	98	1.6	1,012	1,352	26	36	0	62	4.4%	114	1.8	1,466

Existing Peak Hour Volumes - Classification Counts

4 Goetz Rd at Mapes Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	240	13	1	2	16	6.3%	28	1.8	268	193	6	1	2	9	4.5%	17	1.9	210
NT	255	7	3	2	12	4.5%	23	1.9	278	143	6	0	3	9	5.9%	18	2.0	161
NR	14	0	0	0	0	0.0%	0	0.0	14	0	0	0	0	0	0.0%	0	0.0	0
SL	3	0	0	0	0	0.0%	0	0.0	3	3	0	0	0	0	0.0%	0	0.0	3
ST	104	11	10	0	21	16.8%	37	1.8	141	318	3	0	0	3	0.9%	5	1.7	323
SR	143	3	1	5	9	5.9%	22	2.4	165	39	2	0	7	9	18.8%	24	2.7	63
EL	140	4	0	0	4	2.8%	6	1.5	146	41	2	1	6	9	18.0%	23	2.6	64
ET	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ER	166	11	2	0	13	7.3%	21	1.6	187	294	11	3	0	14	4.5%	23	1.6	317
WL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WR	1	0	0	0	0	0.0%	0	0.0	1	0	0	0	0	0	0.0%	0	0.0	0
									1,203									1,141
North Leg Volumes																		
Approach	250	14	11	5	30		59		309	360	5	0	7	12		29		389
Depart	396	11	3	2	16		29		425	184	8	1	9	18		41		225
Total	646	25	14	7	46	6.6%	88	1.9	734	544	13	1	16	30	5.2%	70	2.3	614
South Leg Volumes																		
Approach	509	20	4	4	28		51		560	336	12	1	5	18		35		371
Depart	270	22	12	0	34		58		328	612	14	3	0	17		28		640
Total	779	42	16	4	62	7.4%	109	1.8	888	948	26	4	5	35	3.6%	63	1.8	1,011
East Leg Volumes																		
Approach	1	0	0	0	0		0		1	0	0	0	0	0		0		0
Depart	17	0	0	0	0		0		17	3	0	0	0	0		0		3
Total	18	0	0	0	0	0.0%	0	0.0	18	3	0	0	0	0	0.0%	0	0.0	3
West Leg Volumes																		
Approach	306	15	2	0	17		27		333	335	13	4	6	23		46		381
Depart	383	16	2	7	25		50		433	232	8	1	9	18		41		273
Total	689	31	4	7	42	5.7%	77	1.8	766	567	21	5	15	41	6.7%	87	2.1	654
All Legs																		
Approach	1,066	49	17	9	75		137		1,203	1,031	30	5	18	53		110		1,141
Depart	1,066	49	17	9	75		137		1,203	1,031	30	5	18	53		110		1,141
Total	2,132	98	34	18	150	6.6%	274	1.8	2,406	2,062	60	10	36	106	4.9%	220	2.1	2,282

Existing Peak Hour Volumes - Classification Counts

5 I-215 SB Ramps/SR-74 at Bonnie Dr

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE		
NL	172	5	2	0	7	3.9%	12	1.7	184	151	6	17	0	23	13.2%	43	1.9	194
NT	331	20	3	6	29	8.1%	54	1.9	385	313	1	1	1	3	0.9%	7	2.3	320
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ST	397	16	13	13	42	9.6%	89	2.1	486	687	7	4	0	11	1.6%	19	1.7	706
SR	12	0	0	2	2	14.3%	6	3.0	18	44	0	0	0	0	0.0%	0	0.0	44
EL	27	1	0	0	1	3.6%	2	2.0	29	38	0	0	0	0	0.0%	0	0.0	38
ET	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ER	110	12	4	0	16	12.7%	26	1.6	136	246	8	3	0	11	4.3%	18	1.6	264
WL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									1,238									1,566
North Leg Volumes																		
Approach	409	16	13	15	44		95		504	731	7	4	0	11		19		750
Depart	358	21	3	6	30		56		414	351	1	1	1	3		7		358
Total	767	37	16	21	74	8.8%	151	2.0	918	1,082	8	5	1	14	1.3%	26	1.9	1,108
South Leg Volumes																		
Approach	503	25	5	6	36		66		569	464	7	18	1	26		50		514
Depart	507	28	17	13	58		115		622	933	15	7	0	22		37		970
Total	1,010	53	22	19	94	8.5%	181	1.9	1,191	1,397	22	25	1	48	3.3%	87	1.8	1,484
East Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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	0.0%	0	0.0	0
West Leg Volumes																		
Approach	137	13	4	0	17		28		165	284	8	3	0	11		18		302
Depart	184	5	2	2	9		18		202	195	6	17	0	23		43		238
Total	321	18	6	2	26	7.5%	46	1.8	367	479	14	20	0	34	6.6%	61	1.8	540
All Legs																		
Approach	1,049	54	22	21	97		189		1,238	1,479	22	25	1	48		87		1,566
Depart	1,049	54	22	21	97		189		1,238	1,479	22	25	1	48		87		1,566
Total	2,098	108	44	42	194	8.5%	378	1.9	2,476	2,958	44	50	2	96	3.1%	174	1.8	3,132

Existing Peak Hour Volumes - Classification Counts

6 I-215 NB Ramps at SR-74

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE		
NL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
SL	121	3	1	1	5	4.0%	10	2.0	131	177	14	0	3	17	8.8%	30	1.8	207
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	0
SR	11	0	0	0	0	0.0%	0	0.0	11	21	0	0	0	0	0.0%	0	0.0	21
EL	6	1	0	0	1	14.3%	2	2.0	8	14	0	0	0	0	0.0%	0	0.0	14
ET	507	32	13	16	61	10.7%	122	2.0	629	912	20	5	1	26	2.8%	43	1.7	955
ER	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	0
WT	448	37	6	5	48	9.7%	83	1.7	531	445	7	16	5	28	5.9%	58	2.1	503
WR	592	22	3	15	40	6.3%	84	2.1	676	553	8	11	5	24	4.2%	49	2.0	602
									1,986									2,302
North Leg Volumes																		
Approach	132	3	1	1	5		10		142	198	14	0	3	17		30		228
Depart	598	23	3	15	41		86		684	567	8	11	5	24		49		616
Total	730	26	4	16	46	5.9%	96	2.1	826	765	22	11	8	41	5.1%	79	1.9	844
South Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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	0.0%	0	0.0	0
East Leg Volumes																		
Approach	1,040	59	9	20	88		167		1,207	998	15	27	10	52		107		1,105
Depart	628	35	14	17	66		132		760	1,089	34	5	4	43		73		1,162
Total	1,668	94	23	37	154	8.5%	299	1.9	1,967	2,087	49	32	14	95	4.4%	180	1.9	2,267
West Leg Volumes																		
Approach	513	33	13	16	62		124		637	926	20	5	1	26		43		969
Depart	459	37	6	5	48		83		542	466	7	16	5	28		58		524
Total	972	70	19	21	110	10.2%	207	1.9	1,179	1,392	27	21	6	54	3.7%	101	1.9	1,493
All Legs																		
Approach	1,685	95	23	37	155		301		1,986	2,122	49	32	14	95		180		2,302
Depart	1,685	95	23	37	155		301		1,986	2,122	49	32	14	95		180		2,302
Total	3,370	190	46	74	310	8.4%	602	1.9	3,972	4,244	98	64	28	190	4.3%	360	1.9	4,604

Existing Peak Hour Volumes - Classification Counts

7 SR-74 at Sherman Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE		
NL	41	3	0	0	3	6.8%	5	1.7	46	70	0	0	2	2	2.8%	6	3.0	76
NT	1	0	0	0	0	0.0%	0	0.0	1	0	0	0	0	0	0.0%	0	0.0	0
NR	217	16	0	3	19	8.1%	33	1.7	250	235	5	0	0	5	2.1%	8	1.6	243
SL	0	0	0	0	0	0.0%	0	0.0	0	2	0	0	0	0	0.0%	0	0.0	2
ST	4	0	0	0	0	0.0%	0	0.0	4	2	0	0	0	0	0.0%	0	0.0	2
SR	1	0	0	0	0	0.0%	0	0.0	1	2	0	0	0	0	0.0%	0	0.0	2
EL	5	0	0	0	0	0.0%	0	0.0	5	19	0	0	0	0	0.0%	0	0.0	19
ET	482	28	9	27	64	11.7%	141	2.2	623	900	10	0	7	17	1.9%	36	2.1	936
ER	15	0	0	0	0	0.0%	0	0.0	15	36	0	0	0	0	0.0%	0	0.0	36
WL	221	4	3	2	9	3.9%	18	2.0	239	170	2	2	2	6	3.4%	13	2.2	183
WT	794	20	3	10	33	4.0%	66	2.0	860	626	17	6	8	31	4.7%	62	2.0	688
WR	1	0	0	0	0	0.0%	0	0.0	1	2	0	0	0	0	0.0%	0	0.0	2
									2,045									2,189
North Leg Volumes																		
Approach	5	0	0	0	0		0		5	6	0	0	0	0		0		6
Depart	7	0	0	0	0		0		7	21	0	0	0	0		0		21
Total	12	0	0	0	0	0.0%	0	0.0	12	27	0	0	0	0	0.0%	0	0.0	27
South Leg Volumes																		
Approach	259	19	0	3	22		38		297	305	5	0	2	7		14		319
Depart	240	4	3	2	9		18		258	208	2	2	2	6		13		221
Total	499	23	3	5	31	5.8%	56	1.8	555	513	7	2	4	13	2.5%	27	2.1	540
East Leg Volumes																		
Approach	1,016	24	6	12	42		84		1,100	798	19	8	10	37		75		873
Depart	699	44	9	30	83		174		873	1,137	15	0	7	22		44		1,181
Total	1,715	68	15	42	125	6.8%	258	2.1	1,973	1,935	34	8	17	59	3.0%	119	2.0	2,054
West Leg Volumes																		
Approach	502	28	9	27	64		141		643	955	10	0	7	17		36		991
Depart	836	23	3	10	36		71		907	698	17	6	10	33		68		766
Total	1,338	51	12	37	100	7.0%	212	2.1	1,550	1,653	27	6	17	50	2.9%	104	2.1	1,757
All Legs																		
Approach	1,782	71	15	42	128		263		2,045	2,064	34	8	19	61		125		2,189
Depart	1,782	71	15	42	128		263		2,045	2,064	34	8	19	61		125		2,189
Total	3,564	142	30	84	256	6.7%	526	2.1	4,090	4,128	68	16	38	122	2.9%	250	2.0	4,378

Existing Peak Hour Volumes - Classification Counts

8 Goetz Rd at Fieldstone Dr

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	16	1	0	0	1	5.9%	2	2.0	18	29	1	0	0	1	3.3%	2	2.0	31
NT	475	16	4	3	23	4.6%	41	1.8	516	296	7	6	0	13	4.2%	23	1.8	319
NR	5	1	0	0	1	16.7%	2	2.0	7	2	0	0	0	0	0.0%	0	0.0	2
SL	7	2	1	0	3	30.0%	5	1.7	12	16	0	0	0	0	0.0%	0	0.0	16
ST	219	15	14	2	31	12.4%	57	1.8	276	538	5	3	0	8	1.5%	14	1.8	552
SR	14	2	0	0	2	12.5%	3	1.5	17	64	0	0	0	0	0.0%	0	0.0	64
EL	68	0	0	0	0	0.0%	0	0.0	68	33	1	0	0	1	2.9%	2	2.0	35
ET	4	0	0	0	0	0.0%	0	0.0	4	1	0	0	0	0	0.0%	0	0.0	1
ER	58	0	1	0	1	1.7%	2	2.0	60	25	0	0	0	0	0.0%	0	0.0	25
WL	1	1	0	0	1	50.0%	2	2.0	3	0	0	0	0	0	0.0%	0	0.0	0
WT	0	0	0	0	0	0.0%	0	0.0	0	3	0	0	0	0	0.0%	0	0.0	3
WR	15	0	0	0	0	0.0%	0	0.0	15	11	1	0	0	1	8.3%	2	2.0	13
									996									1,061
North Leg Volumes																		
Approach	240	19	15	2	36		65		305	618	5	3	0	8		14		632
Depart	558	16	4	3	23		41		599	340	9	6	0	15		27		367
Total	798	35	19	5	59	6.9%	106	1.8	904	958	14	9	0	23	2.3%	41	1.8	999
South Leg Volumes																		
Approach	496	18	4	3	25		45		541	327	8	6	0	14		25		352
Depart	278	16	15	2	33		61		339	563	5	3	0	8		14		577
Total	774	34	19	5	58	7.0%	106	1.8	880	890	13	9	0	22	2.4%	39	1.8	929
East Leg Volumes																		
Approach	16	1	0	0	1		2		18	14	1	0	0	1		2		16
Depart	16	3	1	0	4		7		23	19	0	0	0	0		0		19
Total	32	4	1	0	5	13.5%	9	1.8	41	33	1	0	0	1	2.9%	2	2.0	35
West Leg Volumes																		
Approach	130	0	1	0	1		2		132	59	1	0	0	1		2		61
Depart	30	3	0	0	3		5		35	96	1	0	0	1		2		98
Total	160	3	1	0	4	2.4%	7	1.8	167	155	2	0	0	2	1.3%	4	2.0	159
All Legs																		
Approach	882	38	20	5	63		114		996	1,018	15	9	0	24		43		1,061
Depart	882	38	20	5	63		114		996	1,018	15	9	0	24		43		1,061
Total	1,764	76	40	10	126	6.7%	228	1.8	1,992	2,036	30	18	0	48	2.3%	86	1.8	2,122

Existing Peak Hour Volumes - Classification Counts

9 Goetz Rd at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume		
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age				
NL	2	0	0	0	0	0.0%	0	0.0	2	7	0	0	0	0	0.0%	0	0.0	7
NT	220	4	0	1	5	2.2%	9	1.8	229	134	0	0	0	0	0.0%	0	0.0	134
NR	365	4	0	0	4	1.1%	6	1.5	371	219	5	0	0	5	2.2%	8	1.6	227
SL	176	12	12	2	26	12.9%	48	1.8	224	251	2	0	0	2	0.8%	3	1.5	254
ST	106	1	1	0	2	1.9%	4	2.0	110	240	3	0	0	3	1.2%	5	1.7	245
SR	8	0	0	0	0	0.0%	0	0.0	8	30	0	0	0	0	0.0%	0	0.0	30
EL	16	0	0	0	0	0.0%	0	0.0	16	17	0	0	0	0	0.0%	0	0.0	17
ET	88	0	0	0	0	0.0%	0	0.0	88	63	0	0	0	0	0.0%	0	0.0	63
ER	6	0	0	0	0	0.0%	0	0.0	6	5	0	0	0	0	0.0%	0	0.0	5
WL	164	2	0	0	2	1.2%	3	1.5	167	275	0	0	0	0	0.0%	0	0.0	275
WT	67	0	0	1	1	1.5%	3	3.0	70	67	0	0	0	0	0.0%	0	0.0	67
WR	235	16	3	2	21	8.2%	36	1.7	271	204	4	4	7	15	6.8%	35	2.3	239
									1,562									1,563
North Leg Volumes																		
Approach	290	13	13	2	28		52		342	521	5	0	0	5		8		529
Depart	471	20	3	3	26		45		516	355	4	4	7	15		35		390
Total	761	33	16	5	54	6.6%	97	1.8	858	876	9	4	7	20	2.2%	43	2.2	919
South Leg Volumes																		
Approach	587	8	0	1	9		15		602	360	5	0	0	5		8		368
Depart	276	3	1	0	4		7		283	520	3	0	0	3		5		525
Total	863	11	1	1	13	1.5%	22	1.7	885	880	8	0	0	8	0.9%	13	1.6	893
East Leg Volumes																		
Approach	466	18	3	3	24		42		508	546	4	4	7	15		35		581
Depart	629	16	12	2	30		54		683	533	7	0	0	7		11		544
Total	1,095	34	15	5	54	4.7%	96	1.8	1,191	1,079	11	4	7	22	2.0%	46	2.1	1,125
West Leg Volumes																		
Approach	110	0	0	0	0		0		110	85	0	0	0	0		0		85
Depart	77	0	0	1	1		3		80	104	0	0	0	0		0		104
Total	187	0	0	1	1	0.5%	3	3.0	190	189	0	0	0	0	0.0%	0	0.0	189
All Legs																		
Approach	1,453	39	16	6	61		109		1,562	1,512	14	4	7	25		51		1,563
Depart	1,453	39	16	6	61		109		1,562	1,512	14	4	7	25		51		1,563
Total	2,906	78	32	12	122	4.0%	218	1.8	3,124	3,024	28	8	14	50	1.6%	102	2.0	3,126

Existing Peak Hour Volumes - Classification Counts

10 Byers Rd at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume		
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age				
NL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NR	6	0	0	0	0	0.0%	0	0.0	6	2	0	0	0	0.0%	0	0.0	2	
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ET	619	32	11	1	44	6.6%	73	1.7	692	524	9	0	0	9	1.7%	14	1.6	538
ER	2	0	0	0	0	0.0%	0	0.0	2	1	0	0	0	0	0.0%	0	0.0	1
WL	6	0	0	0	0	0.0%	0	0.0	6	4	0	0	0	0	0.0%	0	0.0	4
WT	471	16	4	3	23	4.7%	41	1.8	512	563	4	7	5	16	2.8%	35	2.2	598
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									1,218									1,148
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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%	0	0.0		0
South Leg Volumes																		
Approach	6	0	0	0	0		0		6	7	0	0	0	0		0		7
Depart	8	0	0	0	0		0		8	5	0	0	0	0		0		5
Total	14	0	0	0	0	0.0%	0	0.0	14	12	0	0	0	0.0%	0	0.0		12
East Leg Volumes																		
Approach	477	16	4	3	23		41		518	567	4	7	5	16		35		602
Depart	625	32	11	1	44		73		698	526	9	0	0	9		14		540
Total	1,102	48	15	4	67	5.7%	114	1.7	1,216	1,093	13	7	5	25	2.2%	49	2.0	1,142
West Leg Volumes																		
Approach	621	32	11	1	44		73		694	525	9	0	0	9		14		539
Depart	471	16	4	3	23		41		512	568	4	7	5	16		35		603
Total	1,092	48	15	4	67	5.8%	114	1.7	1,206	1,093	13	7	5	25	2.2%	49	2.0	1,142
All Legs																		
Approach	1,104	48	15	4	67		114		1,218	1,099	13	7	5	25		49		1,148
Depart	1,104	48	15	4	67		114		1,218	1,099	13	7	5	25		49		1,148
Total	2,208	96	30	8	134	5.7%	228	1.7	2,436	2,198	26	14	10	50	2.2%	98	2.0	2,296

Existing Peak Hour Volumes - Classification Counts

11 Geary St at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume		
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age				
NL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NR	0	0	0	0	0	0.0%	0	0.0	0	1	0	0	0	0.0%	0	0.0	1	
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ET	628	14	8	3	25	3.8%	46	1.8	674	498	7	2	0	9	1.8%	15	1.7	513
ER	0	0	0	0	0	0.0%	0	0.0	0	2	0	0	0	0	0.0%	0	0.0	2
WL	1	0	0	0	0	0.0%	0	0.0	1	4	0	0	0	0	0.0%	0	0.0	4
WT	471	15	6	6	27	5.4%	53	2.0	524	576	20	4	0	24	4.0%	38	1.6	614
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									1,199									1,134
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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%	0	0.0		0
South Leg Volumes																		
Approach	0	0	0	0	0		0		0	1	0	0	0	0		0		1
Depart	1	0	0	0	0		0		1	6	0	0	0	0		0		6
Total	1	0	0	0	0	0.0%	0	0.0	1	7	0	0	0	0.0%	0	0.0		7
East Leg Volumes																		
Approach	472	15	6	6	27		53		525	580	20	4	0	24		38		618
Depart	628	14	8	3	25		46		674	499	7	2	0	9		15		514
Total	1,100	29	14	9	52	4.5%	99	1.9	1,199	1,079	27	6	0	33	3.0%	53	1.6	1,132
West Leg Volumes																		
Approach	628	14	8	3	25		46		674	500	7	2	0	9		15		515
Depart	471	15	6	6	27		53		524	576	20	4	0	24		38		614
Total	1,099	29	14	9	52	4.5%	99	1.9	1,198	1,076	27	6	0	33	3.0%	53	1.6	1,129
All Legs																		
Approach	1,100	29	14	9	52		99		1,199	1,081	27	6	0	33		53		1,134
Depart	1,100	29	14	9	52		99		1,199	1,081	27	6	0	33		53		1,134
Total	2,200	58	28	18	104	4.5%	198	1.9	2,398	2,162	54	12	0	66	3.0%	106	1.6	2,268

Existing Peak Hour Volumes - Classification Counts

12 Murriets Rd at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes										
	Passenger Vehicles	Truck Volumes					Average			Total PCE Volume	Passenger Vehicles	Truck Volumes					Average			Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	PCE	PCE			2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	PCE	PCE	
NL	91	4	0	0	4	4.2%	6	1.5	97	106	0	0	0	0	0.0%	0	0.0	106		
NT	87	2	0	0	2	2.2%	3	1.5	90	76	0	0	0	0	0.0%	0	0.0	76		
NR	149	7	1	0	8	5.1%	13	1.6	162	138	3	0	0	3	2.1%	5	1.7	143		
SL	67	0	0	0	0	0.0%	0	0.0	67	43	1	0	0	1	2.3%	2	2.0	45		
ST	34	0	0	0	0	0.0%	0	0.0	34	75	0	0	0	0	0.0%	0	0.0	75		
SR	9	0	0	0	0	0.0%	0	0.0	9	13	0	0	0	0	0.0%	0	0.0	13		
EL	6	0	0	0	0	0.0%	0	0.0	6	6	0	0	0	0	0.0%	0	0.0	6		
ET	616	11	13	2	26	4.0%	49	1.9	665	384	8	3	0	11	2.8%	18	1.6	402		
ER	49	1	0	0	1	2.0%	2	2.0	51	108	0	0	0	0	0.0%	0	0.0	108		
WL	56	7	4	1	12	17.6%	22	1.8	78	207	3	0	0	3	1.4%	5	1.7	212		
WT	321	12	6	2	20	5.9%	36	1.8	357	459	6	2	4	12	2.5%	25	2.1	484		
WR	42	4	0	0	4	8.7%	6	1.5	48	42	0	0	0	0	0.0%	0	0.0	42		
									1,664									1,712		
North Leg Volumes																				
Approach	110	0	0	0	0		0		110	131	1	0	0	1		2		133		
Depart	135	6	0	0	6		9		144	124	0	0	0	0		0		124		
Total	245	6	0	0	6	2.4%	9	1.5	254	255	1	0	0	1	0.4%	2	2.0	257		
South Leg Volumes																				
Approach	327	13	1	0	14		22		349	320	3	0	0	3		5		325		
Depart	139	8	4	1	13		24		163	390	3	0	0	3		5		395		
Total	466	21	5	1	27	5.5%	46	1.7	512	710	6	0	0	6	0.8%	10	1.7	720		
East Leg Volumes																				
Approach	419	23	10	3	36		64		483	708	9	2	4	15		30		738		
Depart	832	18	14	2	34		62		894	565	12	3	0	15		25		590		
Total	1,251	41	24	5	70	5.3%	126	1.8	1,377	1,273	21	5	4	30	2.3%	55	1.8	1,328		
West Leg Volumes																				
Approach	671	12	13	2	27		51		722	498	8	3	0	11		18		516		
Depart	421	16	6	2	24		42		463	578	6	2	4	12		25		603		
Total	1,092	28	19	4	51	4.5%	93	1.8	1,185	1,076	14	5	4	23	2.1%	43	1.9	1,119		
All Legs																				
Approach	1,527	48	24	5	77		137		1,664	1,657	21	5	4	30		55		1,712		
Depart	1,527	48	24	5	77		137		1,664	1,657	21	5	4	30		55		1,712		
Total	3,054	96	48	10	154	4.8%	274	1.8	3,328	3,314	42	10	8	60	1.8%	110	1.8	3,424		

Existing Peak Hour Volumes - Classification Counts

13 Hull St at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume		
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age				
NL	0	1	0	0	1	100.0%	2	2.0	2	0	0	0	0	0.0%	0	0.0	0	
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NR	3	8	3	0	11	78.6%	18	1.6	21	8	0	0	0	0.0%	0	0.0	8	
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ET	750	22	12	3	37	4.7%	66	1.8	816	567	13	2	1	16	2.7%	27	1.7	594
ER	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
WL	1	0	0	0	0	0.0%	0	0.0	1	4	1	1	0	2	33.3%	4	2.0	8
WT	487	21	7	6	34	6.5%	64	1.9	551	713	8	0	5	13	1.8%	27	2.1	740
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
									1,391									1,350
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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%	0	0.0		0
South Leg Volumes																		
Approach	3	9	3	0	12		20		23	8	0	0	0	0		0		8
Depart	1	0	0	0	0		0		1	4	1	1	0	2		4		8
Total	4	9	3	0	12	75.0%	20	1.7	24	12	1	1	0	2	14.3%	4	2.0	16
East Leg Volumes																		
Approach	488	21	7	6	34		64		552	717	9	1	5	15		31		748
Depart	753	30	15	3	48		84		837	575	13	2	1	16		27		602
Total	1,241	51	22	9	82	6.2%	148	1.8	1,389	1,292	22	3	6	31	2.3%	58	1.9	1,350
West Leg Volumes																		
Approach	750	22	12	3	37		66		816	567	13	2	1	16		27		594
Depart	487	22	7	6	35		66		553	713	8	0	5	13		27		740
Total	1,237	44	19	9	72	5.5%	132	1.8	1,369	1,280	21	2	6	29	2.2%	54	1.9	1,334
All Legs																		
Approach	1,241	52	22	9	83		150		1,391	1,292	22	3	6	31		58		1,350
Depart	1,241	52	22	9	83		150		1,391	1,292	22	3	6	31		58		1,350
Total	2,482	104	44	18	166	6.3%	300	1.8	2,782	2,584	44	6	12	62	2.3%	116	1.9	2,700

Existing Peak Hour Volumes - Classification Counts

14 Evans Rd at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume		
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age				
NL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NR	2	0	0	0	0	0.0%	0	0.0	2	2	0	0	0	0.0%	0	0.0	2	
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ET	776	25	14	4	43	5.3%	78	1.8	854	573	15	3	0	18	3.0%	29	1.6	602
ER	1	0	0	0	0	0.0%	0	0.0	1	3	0	0	0	0	0.0%	0	0.0	3
WL	0	0	0	0	0	0.0%	0	0.0	0	4	0	0	0	0	0.0%	0	0.0	4
WT	489	24	6	4	34	6.5%	60	1.8	549	719	12	1	5	18	2.4%	35	1.9	754
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									1,406									1,365
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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%	0	0.0		0
South Leg Volumes																		
Approach	2	0	0	0	0		0		2	2	0	0	0	0		0		2
Depart	1	0	0	0	0		0		1	7	0	0	0	0		0		7
Total	3	0	0	0	0	0.0%	0	0.0	3	9	0	0	0	0.0%	0	0.0		9
East Leg Volumes																		
Approach	489	24	6	4	34		60		549	723	12	1	5	18		35		758
Depart	778	25	14	4	43		78		856	575	15	3	0	18		29		604
Total	1,267	49	20	8	77	5.7%	138	1.8	1,405	1,298	27	4	5	36	2.7%	64	1.8	1,362
West Leg Volumes																		
Approach	777	25	14	4	43		78		855	576	15	3	0	18		29		605
Depart	489	24	6	4	34		60		549	719	12	1	5	18		35		754
Total	1,266	49	20	8	77	5.7%	138	1.8	1,404	1,295	27	4	5	36	2.7%	64	1.8	1,359
All Legs																		
Approach	1,268	49	20	8	77		138		1,406	1,301	27	4	5	36		64		1,365
Depart	1,268	49	20	8	77		138		1,406	1,301	27	4	5	36		64		1,365
Total	2,536	98	40	16	154	5.7%	276	1.8	2,812	2,602	54	8	10	72	2.7%	128	1.8	2,730

Existing Peak Hour Volumes - Classification Counts

15 Barnett Rd/Case Rd at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE		
NL	15	8	1	0	9	37.5%	14	1.6	29	23	2	0	0	2	8.0%	3	1.5	26
NT	6	0	0	0	0	0.0%	0	0.0	6	9	0	0	0	0	0.0%	0	0.0	9
NR	30	14	8	6	28	48.3%	55	2.0	85	30	2	0	5	7	18.9%	18	2.6	48
SL	276	18	6	3	27	8.9%	48	1.8	324	419	4	0	0	4	0.9%	6	1.5	425
ST	3	1	1	0	2	40.0%	4	2.0	7	10	0	0	0	0	0.0%	0	0.0	10
SR	51	6	0	0	6	10.5%	9	1.5	60	137	1	1	0	2	1.4%	4	2.0	141
EL	142	4	0	1	5	3.4%	9	1.8	151	163	2	0	1	3	1.8%	6	2.0	169
ET	547	18	8	6	32	5.5%	61	1.9	608	413	19	0	0	19	4.4%	29	1.5	442
ER	16	4	1	0	5	23.8%	8	1.6	24	18	0	0	0	0	0.0%	0	0.0	18
WL	18	12	5	8	25	58.1%	52	2.1	70	31	3	0	5	8	20.5%	20	2.5	51
WT	431	15	3	5	23	5.1%	44	1.9	475	459	3	1	9	13	2.8%	34	2.6	493
WR	317	14	3	2	19	5.7%	33	1.7	350	392	1	0	0	1	0.3%	2	2.0	394
									2,189									2,226
North Leg Volumes																		
Approach	330	25	7	3	35		61		391	566	5	1	0	6		10		576
Depart	465	18	3	3	24		42		507	564	3	0	1	4		8		572
Total	795	43	10	6	59	6.9%	103	1.7	898	1,130	8	1	1	10	0.9%	18	1.8	1,148
South Leg Volumes																		
Approach	51	22	9	6	37		69		120	62	4	0	5	9		21		83
Depart	37	17	7	8	32		64		101	59	3	0	5	8		20		79
Total	88	39	16	14	69	43.9%	133	1.9	221	121	7	0	10	17	12.3%	41	2.4	162
East Leg Volumes																		
Approach	766	41	11	15	67		129		895	882	7	1	14	22		56		938
Depart	853	50	22	15	87		164		1,017	862	25	0	5	30		53		915
Total	1,619	91	33	30	154	8.7%	293	1.9	1,912	1,744	32	1	19	52	2.9%	109	2.1	1,853
West Leg Volumes																		
Approach	705	26	9	7	42		78		783	594	21	0	1	22		35		629
Depart	497	29	4	5	38		67		564	619	6	2	9	17		41		660
Total	1,202	55	13	12	80	6.2%	145	1.8	1,347	1,213	27	2	10	39	3.1%	76	1.9	1,289
All Legs																		
Approach	1,852	114	36	31	181		337		2,189	2,104	37	2	20	59		122		2,226
Depart	1,852	114	36	31	181		337		2,189	2,104	37	2	20	59		122		2,226
Total	3,704	228	72	62	362	8.9%	674	1.9	4,378	4,208	74	4	40	118	2.7%	244	2.1	4,452

Existing Peak Hour Volumes - Classification Counts

16 I-215 SB Ramps at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE		
NL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
SL	100	6	3	3	12	10.7%	24	2.0	124	172	4	0	5	9	5.0%	21	2.3	193
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
SR	181	18	5	9	32	15.0%	64	2.0	245	338	3	0	6	9	2.6%	23	2.6	361
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ET	599	32	6	21	59	9.0%	123	2.1	722	546	17	3	8	28	4.9%	56	2.0	602
ER	408	22	11	12	45	9.9%	91	2.0	499	376	5	0	5	5	1.3%	8	1.6	384
WL	85	5	3	2	10	10.5%	20	2.0	105	112	3	1	2	6	5.1%	13	2.2	125
WT	593	19	12	19	50	7.8%	110	2.2	703	663	13	3	9	25	3.6%	53	2.1	716
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
									2,398									2,381
North Leg Volumes																		
Approach	281	24	8	12	44		88		369	510	7	0	11	18		44		554
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	281	24	8	12	44	13.5%	88	2.0	369	510	7	0	11	18	3.4%	44	2.4	554
South Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	493	27	14	14	55		111		604	488	8	1	2	11		21		509
Total	493	27	14	14	55	10.0%	111	2.0	604	488	8	1	2	11	2.2%	21	1.9	509
East Leg Volumes																		
Approach	678	24	15	21	60		130		808	775	16	4	11	31		66		841
Depart	699	38	9	24	71		147		846	718	21	3	13	37		77		795
Total	1,377	62	24	45	131	8.7%	277	2.1	1,654	1,493	37	7	24	68	4.4%	143	2.1	1,636
West Leg Volumes																		
Approach	1,007	54	17	33	104		214		1,221	922	22	3	8	33		64		986
Depart	774	37	17	28	82		174		948	1,001	16	3	15	34		76		1,077
Total	1,781	91	34	61	186	9.5%	388	2.1	2,169	1,923	38	6	23	67	3.4%	140	2.1	2,063
All Legs																		
Approach	1,966	102	40	66	208		432		2,398	2,207	45	7	30	82		174		2,381
Depart	1,966	102	40	66	208		432		2,398	2,207	45	7	30	82		174		2,381
Total	3,932	204	80	132	416	9.6%	864	2.1	4,796	4,414	90	14	60	164	3.6%	348	2.1	4,762

Existing Peak Hour Volumes - Classification Counts

17 I-215 NB Ramps at Etahanc Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	323	11	1	3	15	4.4%	28	1.9	351	377	12	5	7	24	6.0%	49	2.0	426
NT	0	0	0	0	0	0.0%	0	0.0	0	2	0	0	0	0	0.0%	0	0.0	2
NR	108	7	5	2	14	11.5%	27	1.9	135	165	7	2	6	15	8.3%	33	2.2	198
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
EL	213	9	2	13	24	10.1%	57	2.4	270	218	6	2	5	13	5.6%	28	2.2	246
ET	487	29	8	11	48	9.0%	93	1.9	580	497	18	2	14	34	6.4%	73	2.1	570
ER	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WT	361	12	13	17	42	10.4%	95	2.3	456	387	6	1	5	12	3.0%	26	2.2	413
WR	94	3	7	10	20	17.5%	49	2.5	143	178	3	0	4	7	3.8%	17	2.4	195
									1,935									2,050
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	307	12	9	23	44		106		413	398	9	2	9	20		45		443
Total	307	12	9	23	44	12.5%	106	2.4	413	398	9	2	9	20	4.8%	45	2.3	443
South Leg Volumes																		
Approach	431	18	6	5	29		55		486	544	19	7	13	39		82		626
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	431	18	6	5	29	6.3%	55	1.9	486	544	19	7	13	39	6.7%	82	2.1	626
East Leg Volumes																		
Approach	455	15	20	27	62		144		599	565	9	1	9	19		43		608
Depart	595	36	13	13	62		120		715	662	25	4	20	49		106		768
Total	1,050	51	33	40	124	10.6%	264	2.1	1,314	1,227	34	5	29	68	5.3%	149	2.2	1,376
West Leg Volumes																		
Approach	700	38	10	24	72		150		850	715	24	4	19	47		101		816
Depart	684	23	14	20	57		123		807	764	18	6	12	36		75		839
Total	1,384	61	24	44	129	8.5%	273	2.1	1,657	1,479	42	10	31	83	5.3%	176	2.1	1,655
All Legs																		
Approach	1,586	71	36	56	163		349		1,935	1,824	52	12	41	105		226		2,050
Depart	1,586	71	36	56	163		349		1,935	1,824	52	12	41	105		226		2,050
Total	3,172	142	72	112	326	9.3%	698	2.1	3,870	3,648	104	24	82	210	5.4%	452	2.2	4,100

Existing Peak Hour Volumes - Classification Counts

18 Trumble Rd at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	64	5	9	3	17	21.0%	35	2.1	99	80	1	1	0	2	2.4%	4	2.0	84
NT	7	1	0	0	1	12.5%	2	2.0	9	5	0	0	0	0	0.0%	0	0.0	5
NR	31	2	0	0	2	6.1%	3	1.5	34	31	4	0	0	4	11.4%	6	1.5	37
SL	5	0	0	1	1	16.7%	3	3.0	8	24	0	0	2	2	7.7%	6	3.0	30
ST	4	1	0	1	2	33.3%	5	2.5	9	13	1	0	0	1	7.1%	2	2.0	15
SR	42	6	2	18	26	38.2%	67	2.6	109	124	5	0	3	8	6.1%	17	2.1	141
EL	56	5	4	5	14	20.0%	31	2.2	87	67	0	3	0	3	4.3%	6	2.0	73
ET	484	27	3	9	39	7.5%	74	1.9	558	524	19	7	7	33	5.9%	64	1.9	588
ER	11	1	0	7	8	42.1%	23	2.9	34	31	1	0	0	1	3.1%	2	2.0	33
WL	26	7	9	2	18	40.9%	35	1.9	61	42	1	0	0	1	2.3%	2	2.0	44
WT	270	12	7	13	32	10.6%	71	2.2	341	341	5	0	4	9	2.6%	20	2.2	361
WR	4	0	2	1	3	42.9%	7	2.3	11	4	0	0	0	0	0.0%	0	0.0	4
									1,360									1,415
North Leg Volumes																		
Approach	51	7	2	20	29		75		126	161	6	0	5	11		25		186
Depart	67	6	6	6	18		40		107	76	0	3	0	3		6		82
Total	118	13	8	26	47	28.5%	115	2.4	233	237	6	3	5	14	5.6%	31	2.2	268
South Leg Volumes																		
Approach	102	8	9	3	20		40		142	116	5	1	0	6		10		126
Depart	41	9	9	10	28		63		104	86	3	0	0	3		6		92
Total	143	17	18	13	48	25.1%	103	2.1	246	202	8	1	0	9	4.3%	16	1.8	218
East Leg Volumes																		
Approach	300	19	18	16	53		113		413	387	6	0	4	10		22		409
Depart	520	29	3	10	42		80		600	579	23	7	9	39		76		655
Total	820	48	21	26	95	10.4%	193	2.0	1,013	966	29	7	13	49	4.8%	98	2.0	1,064
West Leg Volumes																		
Approach	551	33	7	21	61		128		679	622	20	10	7	37		72		694
Depart	376	23	18	34	75		173		549	545	11	1	7	19		41		586
Total	927	56	25	55	136	12.8%	301	2.2	1,228	1,167	31	11	14	56	4.6%	113	2.0	1,280
All Legs																		
Approach	1,004	67	36	60	163		356		1,360	1,286	37	11	16	64		129		1,415
Depart	1,004	67	36	60	163		356		1,360	1,286	37	11	16	64		129		1,415
Total	2,008	134	72	120	326	14.0%	712	2.2	2,720	2,572	74	22	32	128	4.7%	258	2.0	2,830

Existing Peak Hour Volumes - Classification Counts

19 Sherman Rd at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume		
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age				
NL	1	0	0	1	1	50.0%	3	3.0	4	16	0	0	1	1	5.9%	3	3.0	19
NT	3	0	0	0	0	0.0%	0	0.0	3	5	0	0	0	0	0.0%	0	0.0	5
NR	2	0	0	0	0	0.0%	0	0.0	2	2	0	0	0	0	0.0%	0	0.0	2
SL	2	0	0	1	1	33.3%	3	3.0	5	4	0	0	0	0	0.0%	0	0.0	4
ST	7	0	0	0	0	0.0%	0	0.0	7	2	0	0	0	0	0.0%	0	0.0	2
SR	178	3	2	3	8	4.3%	18	2.3	196	176	3	2	2	7	3.8%	15	2.1	191
EL	216	5	1	1	7	3.1%	13	1.9	229	265	4	0	0	4	1.5%	6	1.5	271
ET	207	2	0	4	6	2.8%	15	2.5	222	151	6	2	3	11	6.8%	22	2.0	173
ER	14	0	0	0	0	0.0%	0	0.0	14	15	0	0	0	0	0.0%	0	0.0	15
WL	0	0	0	0	0	0.0%	0	0.0	0	2	0	0	0	0	0.0%	0	0.0	2
WT	151	21	12	13	46	23.4%	95	2.1	246	91	1	1	0	2	2.2%	4	2.0	95
WR	5	2	0	0	2	28.6%	3	1.5	8	3	0	0	0	0	0.0%	0	0.0	3
									936									782
North Leg Volumes																		
Approach	187	3	2	4	9		21		208	182	3	2	2	7		15		197
Depart	224	7	1	1	9		16		240	273	4	0	0	4		6		279
Total	411	10	3	5	18	4.2%	37	2.1	448	455	7	2	2	11	2.4%	21	1.9	476
South Leg Volumes																		
Approach	6	0	0	1	1		3		9	23	0	0	1	1		3		26
Depart	21	0	0	0	0		0		21	19	0	0	0	0		0		19
Total	27	0	0	1	1	3.6%	3	3.0	30	42	0	0	1	1	2.3%	3	3.0	45
East Leg Volumes																		
Approach	156	23	12	13	48		98		254	96	1	1	0	2		4		100
Depart	211	2	0	5	7		18		229	157	6	2	3	11		22		179
Total	367	25	12	18	55	13.0%	116	2.1	483	253	7	3	3	13	4.9%	26	2.0	279
West Leg Volumes																		
Approach	437	7	1	5	13		28		465	431	10	2	3	15		28		459
Depart	330	24	14	17	55		116		446	283	4	3	3	10		22		305
Total	767	31	15	22	68	8.1%	144	2.1	911	714	14	5	6	25	3.4%	50	2.0	764
All Legs																		
Approach	786	33	15	23	71		150		936	732	14	5	6	25		50		782
Depart	786	33	15	23	71		150		936	732	14	5	6	25		50		782
Total	1,572	66	30	46	142	8.3%	300	2.1	1,872	1,464	28	10	12	50	3.3%	100	2.0	1,564

Existing Peak Hour Volumes - Classification Counts

20 Palomar Rd at SR-74

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE		
NL	5	2	0	0	2	28.6%	3	1.5	8	7	0	0	0	0	0.0%	0	0.0	7
NT	1	0	12	0	12	92.3%	24	2.0	25	1	0	0	0	0	0.0%	0	0.0	1
NR	5	0	0	0	0	0.0%	0	0.0	5	11	0	0	0	0	0.0%	0	0.0	11
SL	51	3	1	2	6	10.5%	13	2.2	64	22	0	0	0	0	0.0%	0	0.0	22
ST	2	0	12	0	12	85.7%	24	2.0	26	1	0	0	0	0	0.0%	0	0.0	1
SR	32	0	0	0	0	0.0%	0	0.0	32	37	0	0	0	0	0.0%	0	0.0	37
EL	21	0	0	1	1	4.5%	3	3.0	24	72	0	0	0	0	0.0%	0	0.0	72
ET	646	28	12	38	78	10.8%	180	2.3	826	854	11	0	5	16	1.8%	32	2.0	886
ER	14	4	0	1	5	26.3%	9	1.8	23	4	0	0	1	1	20.0%	3	3.0	7
WL	4	0	0	0	0	0.0%	0	0.0	4	6	0	0	0	0	0.0%	0	0.0	6
WT	931	14	6	8	28	2.9%	57	2.0	988	686	17	14	10	41	5.6%	84	2.0	770
WR	29	0	0	0	0	0.0%	0	0.0	29	12	0	0	0	0	0.0%	0	0.0	12
									2,054									1,832
North Leg Volumes																		
Approach	85	3	13	2	18		37		122	60	0	0	0	0		0		60
Depart	51	0	12	1	13		27		78	85	0	0	0	0		0		85
Total	136	3	25	3	31	18.6%	64	2.1	200	145	0	0	0	0	0.0%	0	0.0	145
South Leg Volumes																		
Approach	11	2	12	0	14		27		38	19	0	0	0	0		0		19
Depart	20	4	12	1	17		33		53	11	0	0	1	1		3		14
Total	31	6	24	1	31	50.0%	60	1.9	91	30	0	0	1	1	3.2%	3	3.0	33
East Leg Volumes																		
Approach	964	14	6	8	28		57		1,021	704	17	14	10	41		84		788
Depart	702	31	13	40	84		193		895	887	11	0	5	16		32		919
Total	1,666	45	19	48	112	6.3%	250	2.2	1,916	1,591	28	14	15	57	3.5%	116	2.0	1,707
West Leg Volumes																		
Approach	681	32	12	40	84		192		873	930	11	0	6	17		35		965
Depart	968	16	6	8	30		60		1,028	730	17	14	10	41		84		814
Total	1,649	48	18	48	114	6.5%	252	2.2	1,901	1,660	28	14	16	58	3.4%	119	2.1	1,779
All Legs																		
Approach	1,741	51	43	50	144		313		2,054	1,713	28	14	16	58		119		1,832
Depart	1,741	51	43	50	144		313		2,054	1,713	28	14	16	58		119		1,832
Total	3,482	102	86	100	288	7.6%	626	2.2	4,108	3,426	56	28	32	116	3.3%	238	2.1	3,664

Existing Peak Hour Volumes - Classification Counts

21 Byers Rd at McLaughling Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes				Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes				Average PCE	Total PCE Volume				
		2-Axle	3-Axle	4-Axle	Total Trucks				2-Axle	3-Axle	4-Axle	Total Trucks						
NL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0.0%	0	0.0	0		
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0.0%	0	0.0	0		
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0.0%	0	0.0	0		
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0.0%	0	0.0	0		
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0.0%	0	0.0	0		
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0.0%	0	0.0	0		
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0.0%	0	0.0	0		
ET	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0.0%	0	0.0	0		
ER	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0.0%	0	0.0	0		
WL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0.0%	0	0.0	0		
WT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0.0%	0	0.0	0		
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0.0%	0	0.0	0		
									0							0		
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		
Depart	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%	0	0.0		
South Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		
Depart	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%	0	0.0		
East Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		
Depart	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%	0	0.0		
West Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		
Depart	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%	0	0.0		
All Legs																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		
Depart	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%	0	0.0		

Existing Peak Hour Volumes - Non-Classification Counts

22 Murrieta Rd at McLaughlin Rd

	AM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes				Truck PCE	
		Truck %age	Passgr Vehicles	Truck	Avg Truck PCE		
NL	1		1	0		0	1
NT	289	2.0%	283	6	2.5	15	298
NR	2		2	0		0	2
SL	12		12	0		0	12
ST	142	2.0%	139	3	2.5	8	147
SR	2		2	0		0	2
EL	6		6	0		0	6
ET	0	2.0%	0	0	2.5	0	0
ER	3		3	0		0	3
WL	0		0	0		0	0
WT	0	2.0%	0	0	2.5	0	0
WR	31		31	0		0	31
							502

North Leg Volumes

Approach	156	0	153	3	2.5	161
Depart	326	0	320	6	2.5	335
Total	482	0	473	9	5.0	496

South Leg Volumes

Approach	292	0	286	6	2.5	301
Depart	145	0	142	3	2.5	150
Total	437	0	428	9	5.0	451

East Leg Volumes

Approach	31	0	31	0	2.5	31
Depart	14	0	14	0	2.5	14
Total	45	0	45	0	5.0	45

West Leg Volumes

Approach	9	0	9	0	2.5	9
Depart	3	0	3	0	2.5	3
Total	12	0	12	0	5.0	12

All Legs

Approach	488	0	479	9	10.0	502
Depart	488	0	479	9	10.0	502
Total	976	0	958	18	20.0	1,004

	PM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes				Truck PCE	
		Truck %age	Passgr Vehicles	Truck	Avg Truck PCE		
NL	2		2	0		0	2
NT	288	2.0%	282	6	2.5	15	297
NR	3		3	0		0	3
SL	25		25	0		0	25
ST	357	2.0%	350	7	2.5	18	368
SR	7		7	0		0	7
EL	6		6	0		0	6
ET	0	2.0%	0	0	2.5	0	0
ER	3		3	0		0	3
WL	7		7	0		0	7
WT	0	2.0%	0	0	2.5	0	0
WR	23		23	0		0	23
							741

North Leg Volumes

Approach	389	0	382	7	2.5	400
Depart	317	0	311	6	2.5	326
Total	706	0	693	13	5.0	726

South Leg Volumes

Approach	293	0	287	6	2.5	302
Depart	367	0	360	7	2.5	378
Total	660	0	647	13	5.0	680

East Leg Volumes

Approach	30	0	30	0	2.5	30
Depart	28	0	28	0	2.5	28
Total	58	0	58	0	5.0	58

West Leg Volumes

Approach	9	0	9	0	2.5	9
Depart	9	0	9	0	2.5	9
Total	18	0	18	0	5.0	18

All Legs

Approach	721	0	708	13	10.0	741
Depart	721	0	708	13	10.0	741
Total	1,442	0	1,416	26	20.0	1,482

Existing Peak Hour Volumes - Classification Counts

23 Evans Rd at McLaughlin Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume		
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age				
NL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ET	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ER	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									0									0
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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	0.0%	0	0.0	0
South Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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	0.0%	0	0.0	0
East Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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	0.0%	0	0.0	0
West Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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	0.0%	0	0.0	0
All Legs																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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	0.0%	0	0.0	0

Existing Peak Hour Volumes - Classification Counts

24 Palomar Rd at Matthews Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle	3-Axle	4-Axle	Total Trucks	Truck %-age	PCE				2-Axle	3-Axle	4-Axle	Total Trucks	Truck %-age	PCE		
NL	1	0	10	1	11	91.7%	23	2.1	24	8	0	0	0	0	0.0%	0	0.0	8
NT	0	0	0	0	0	0.0%	0	0.0	0	1	0	0	0	0	0.0%	0	0.0	1
NR	0	0	1	0	1	100.0%	2	2.0	2	3	0	0	0	0	0.0%	0	0.0	3
SL	1	0	0	0	0	0.0%	0	0.0	1	4	0	1	0	1	20.0%	2	2.0	6
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SR	2	0	0	1	1	33.3%	3	3.0	5	15	0	0	1	1	6.3%	3	3.0	18
EL	13	0	0	2	2	13.3%	6	3.0	19	2	0	0	0	0	0.0%	0	0.0	2
ET	119	2	1	0	3	2.5%	5	1.7	124	104	3	0	1	4	3.7%	8	2.0	112
ER	6	0	0	0	0	0.0%	0	0.0	6	0	0	0	1	1	100.0%	3	3.0	3
WL	0	0	0	0	0	0.0%	0	0.0	0	2	0	0	0	0	0.0%	0	0.0	2
WT	71	15	1	4	20	22.0%	37	1.9	108	29	0	0	0	0	0.0%	0	0.0	29
WR	1	0	0	0	0	0.0%	0	0.0	1	0	0	0	0	0	0.0%	0	0.0	0
									290									184
North Leg Volumes																		
Approach	3	0	0	1	1		3		6	19	0	1	1	2		5		24
Depart	14	0	0	2	2		6		20	3	0	0	0	0		0		3
Total	17	0	0	3	3	15.0%	9	3.0	26	22	0	1	1	2	8.3%	5	2.5	27
South Leg Volumes																		
Approach	1	0	11	1	12		25		26	12	0	0	0	0		0		12
Depart	6	0	0	0	0		0		6	2	0	0	1	1		3		5
Total	7	0	11	1	12	63.2%	25	2.1	32	14	0	0	1	1	6.7%	3	3.0	17
East Leg Volumes																		
Approach	72	15	1	4	20		37		109	31	0	0	0	0		0		31
Depart	120	2	2	0	4		7		127	111	3	1	1	5		10		121
Total	192	17	3	4	24	11.1%	44	1.8	236	142	3	1	1	5	3.4%	10	2.0	152
West Leg Volumes																		
Approach	138	2	1	2	5		11		149	106	3	0	2	5		11		117
Depart	74	15	11	6	32		63		137	52	0	0	1	1		3		55
Total	212	17	12	8	37	14.9%	74	2.0	286	158	3	0	3	6	3.7%	14	2.3	172
All Legs																		
Approach	214	17	13	8	38		76		290	168	3	1	3	7		16		184
Depart	214	17	13	8	38		76		290	168	3	1	3	7		16		184
Total	428	34	26	16	76	15.1%	152	2.0	580	336	6	2	6	14	4.0%	32	2.3	368

Existing Peak Hour Volumes - Non-Classification Counts

25 Murrieta Rd at Rouse Rd

	AM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes			Truck PCE		
		Truck %age	Passgr Vehicles	Avg Truck PCE			
NL	3		3	0	0	3	
NT	226	2.0%	221	5	2.5	13	234
NR	7		7	0	0	0	7
SL	28		28	0	0	0	28
ST	117	2.0%	115	2	2.5	5	120
SR	4		4	0	0	0	4
EL	14		14	0	0	0	14
ET	18	2.0%	18	0	2.5	0	18
ER	6		6	0	0	0	6
WL	10		10	0	0	0	10
WT	3	2.0%	3	0	2.5	0	3
WR	40		40	0	0	0	40
							487

North Leg Volumes

Approach	149	0	147	2	2.5	152
Depart	280	0	275	5	2.5	288
Total	429	0	422	7	5.0	440

South Leg Volumes

Approach	236	0	231	5	2.5	244
Depart	133	0	131	2	2.5	136
Total	369	0	362	7	5.0	380

East Leg Volumes

Approach	53	0	53	0	2.5	53
Depart	53	0	53	0	2.5	53
Total	106	0	106	0	5.0	106

West Leg Volumes

Approach	38	0	38	0	2.5	38
Depart	10	0	10	0	2.5	10
Total	48	0	48	0	5.0	48

All Legs

Approach	476	0	469	7	10.0	487
Depart	476	0	469	7	10.0	487
Total	952	0	938	14	20.0	974

	PM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes			Truck PCE		
		Truck %age	Passgr Vehicles	Avg Truck PCE			
NL	4		4	0	0	0	4
NT	221	2.0%	217	4	2.5	10	227
NR	12		12	0	0	0	12
SL	65		65	0	0	0	65
ST	288	2.0%	282	6	2.5	15	297
SR	26		26	0	0	0	26
EL	9		9	0	0	0	9
ET	8	2.0%	8	0	2.5	0	8
ER	2		2	0	0	0	2
WL	4		4	0	0	0	4
WT	10	2.0%	10	0	2.5	0	10
WR	61		61	0	0	0	61
							725

North Leg Volumes

Approach	379	0	373	6	2.5	388
Depart	291	0	287	4	2.5	297
Total	670	0	660	10	5.0	685

South Leg Volumes

Approach	237	0	233	4	2.5	243
Depart	294	0	288	6	2.5	303
Total	531	0	521	10	5.0	546

East Leg Volumes

Approach	75	0	75	0	2.5	75
Depart	85	0	85	0	2.5	85
Total	160	0	160	0	5.0	160

West Leg Volumes

Approach	19	0	19	0	2.5	19
Depart	40	0	40	0	2.5	40
Total	59	0	59	0	5.0	59

All Legs

Approach	710	0	700	10	10.0	725
Depart	710	0	700	10	10.0	725
Total	1,420	0	1,400	20	20.0	1,450

Existing Peak Hour Volumes - Non-Classification Counts

26 Murrieta Rd at Chambers Ave

	AM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes				Truck PCE	
		Truck %age	Passgr Vehicles	Truck	Avg Truck PCE		
NL	36		36	0		0	36
NT	205	2.0%	201	4	2.5	10	211
NR	2		2	0		0	2
SL	36		36	0		0	36
ST	182	2.0%	178	4	2.5	10	188
SR	8		8	0		0	8
EL	28		28	0		0	28
ET	42	2.0%	41	1	2.5	3	44
ER	51		51	0		0	51
WL	7		7	0		0	7
WT	10	2.0%	10	0	2.5	0	10
WR	15		15	0		0	15

636

North Leg Volumes

Approach	226	0	222	4	2.5	232
Depart	248	0	244	4	2.5	254
Total	474	0	466	8	5.0	486

South Leg Volumes

Approach	243	0	239	4	2.5	249
Depart	240	0	236	4	2.5	246
Total	483	0	475	8	5.0	495

East Leg Volumes

Approach	32	0	32	0	2.5	32
Depart	80	0	79	1	2.5	82
Total	112	0	111	1	5.0	114

West Leg Volumes

Approach	121	0	120	1	2.5	123
Depart	54	0	54	0	2.5	54
Total	175	0	174	1	5.0	177

All Legs

Approach	622	0	613	9	10.0	636
Depart	622	0	613	9	10.0	636
Total	1,244	0	1,226	18	20.0	1,272

	PM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes				Truck PCE	
		Truck %age	Passgr Vehicles	Truck	Avg Truck PCE		
NL	50		50	0		0	50
NT	248	2.0%	243	5	2.5	13	256
NR	9		9	0		0	9
SL	44		44	0		0	44
ST	216	2.0%	212	4	2.5	10	222
SR	38		38	0		0	38
EL	11		11	0		0	11
ET	24	2.0%	24	0	2.5	0	24
ER	24		24	0		0	24
WL	6		6	0		0	6
WT	29	2.0%	28	1	2.5	3	31
WR	57		57	0		0	57

772

North Leg Volumes

Approach	298	0	294	4	2.5	304
Depart	316	0	311	5	2.5	324
Total	614	0	605	9	5.0	628

South Leg Volumes

Approach	307	0	302	5	2.5	315
Depart	246	0	242	4	2.5	252
Total	553	0	544	9	5.0	567

East Leg Volumes

Approach	92	0	91	1	2.5	94
Depart	77	0	77	0	2.5	77
Total	169	0	168	1	5.0	171

West Leg Volumes

Approach	59	0	59	0	2.5	59
Depart	117	0	116	1	2.5	119
Total	176	0	175	1	5.0	178

All Legs

Approach	756	0	746	10	10.0	772
Depart	756	0	746	10	10.0	772
Total	1,512	0	1,492	20	20.0	1,544

Existing Peak Hour Volumes - Non-Classification Counts

27 Murrieta Rd at McCall Blvd

	AM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes				Truck PCE	
		Truck %age	Passgr Vehicles	Truck	Avg Truck PCE		
NL	0		0	0	0	0	0
NT	144	2.0%	141	3	2.5	8	149
NR	111		111	0		0	111
SL	50		50	0		0	50
ST	87	2.0%	85	2	2.5	5	90
SR	92		92	0		0	92
EL	79		79	0		0	79
ET	185	2.0%	181	4	2.5	10	191
ER	1		1	0		0	1
WL	25		25	0		0	25
WT	110	2.0%	108	2	2.5	5	113
WR	76		76	0		0	76
							977

North Leg Volumes

Approach	229	0	227	2	2.5	232
Depart	299	0	296	3	2.5	304
Total	528	0	523	5	5.0	536

South Leg Volumes

Approach	255	0	252	3	2.5	260
Depart	113	0	111	2	2.5	116
Total	368	0	363	5	5.0	376

East Leg Volumes

Approach	211	0	209	2	2.5	214
Depart	346	0	342	4	2.5	352
Total	557	0	551	6	5.0	566

West Leg Volumes

Approach	265	0	261	4	2.5	271
Depart	202	0	200	2	2.5	205
Total	467	0	461	6	5.0	476

All Legs

Approach	960	0	949	11	10.0	977
Depart	960	0	949	11	10.0	977
Total	1,920	0	1,898	22	20.0	1,954

	PM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes				Truck PCE	
		Truck %age	Passgr Vehicles	Truck	Avg Truck PCE		
NL	3		3	0		0	3
NT	178	2.0%	174	4	2.5	10	184
NR	130		130	0		0	130
SL	80		80	0		0	80
ST	112	2.0%	110	2	2.5	5	115
SR	48		48	0		0	48
EL	38		38	0		0	38
ET	118	2.0%	116	2	2.5	5	121
ER	1		1	0		0	1
WL	77		77	0		0	77
WT	148	2.0%	145	3	2.5	8	153
WR	125		125	0		0	125
							1,075

North Leg Volumes

Approach	240	0	238	2	2.5	243
Depart	341	0	337	4	2.5	347
Total	581	0	575	6	5.0	590

South Leg Volumes

Approach	311	0	307	4	2.5	317
Depart	190	0	188	2	2.5	193
Total	501	0	495	6	5.0	510

East Leg Volumes

Approach	350	0	347	3	2.5	355
Depart	328	0	326	2	2.5	331
Total	678	0	673	5	5.0	686

West Leg Volumes

Approach	157	0	155	2	2.5	160
Depart	199	0	196	3	2.5	204
Total	356	0	351	5	5.0	364

All Legs

Approach	1,058	0	1,047	11	10.0	1,075
Depart	1,058	0	1,047	11	10.0	1,075
Total	2,116	0	2,094	22	20.0	2,150

Existing Peak Hour Volumes - Non-Classification Counts

28 Sun City Blvd at McCall Blvd

	AM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes				Truck PCE	
		Truck %age	Passgr Vehicles	Truck	Avg Truck PCE		
NL	31		31	0		0	31
NT	51	2.0%	50	1	2.5	3	53
NR	58		58	0		0	58
SL	54		54	0		0	54
ST	43	2.0%	42	1	2.5	3	45
SR	8		8	0		0	8
EL	25		25	0		0	25
ET	360	2.0%	353	7	2.5	18	371
ER	32		32	0		0	32
WL	136		136	0		0	136
WT	297	2.0%	291	6	2.5	15	306
WR	42		42	0		0	42
							1,161

North Leg Volumes

Approach	105	0	104	1	2.5		107
Depart	118	0	117	1	2.5		120
Total	223	0	221	2	5.0		227

South Leg Volumes

Approach	140	0	139	1	2.5		142
Depart	211	0	210	1	2.5		213
Total	351	0	349	2	5.0		355

East Leg Volumes

Approach	475	0	469	6	2.5		484
Depart	472	0	465	7	2.5		483
Total	947	0	934	13	5.0		967

West Leg Volumes

Approach	417	0	410	7	2.5		428
Depart	336	0	330	6	2.5		345
Total	753	0	740	13	5.0		773

All Legs

Approach	1,137	0	1,122	15	10.0		1,161
Depart	1,137	0	1,122	15	10.0		1,161
Total	2,274	0	2,244	30	20.0		2,322

	PM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes				Truck PCE	
		Truck %age	Passgr Vehicles	Truck	Avg Truck PCE		
NL	80		80	0		0	80
NT	118	2.0%	116	2	2.5	5	121
NR	148		148	0		0	148
SL	65		65	0		0	65
ST	75	2.0%	74	1	2.5	3	77
SR	10		10	0		0	10
EL	25		25	0		0	25
ET	315	2.0%	309	6	2.5	15	324
ER	59		59	0		0	59
WL	67		67	0		0	67
WT	404	2.0%	396	8	2.5	20	416
WR	228		228	0		0	228
							1,620

North Leg Volumes

Approach	150	0	149	1	2.5		152
Depart	371	0	369	2	2.5		374
Total	521	0	518	3	5.0		526

South Leg Volumes

Approach	346	0	344	2	2.5		349
Depart	201	0	200	1	2.5		203
Total	547	0	544	3	5.0		552

East Leg Volumes

Approach	699	0	691	8	2.5		711
Depart	528	0	522	6	2.5		537
Total	1,227	0	1,213	14	5.0		1,248

West Leg Volumes

Approach	399	0	393	6	2.5		408
Depart	494	0	486	8	2.5		506
Total	893	0	879	14	5.0		914

All Legs

Approach	1,594	0	1,577	17	10.0		1,620
Depart	1,594	0	1,577	17	10.0		1,620
Total	3,188	0	3,154	34	20.0		3,240

Existing Peak Hour Volumes - Non-Classification Counts

29 Bradley Rd at McCall Blvd

	AM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes				Truck PCE	
		Truck %age	Passgr Vehicles	Truck	Avg Truck PCE		
NL	41		41	0		0	41
NT	42	2.0%	41	1	2.5	3	44
NR	337		337	0		0	337
SL	141		141	0		0	141
ST	49	2.0%	48	1	2.5	3	51
SR	4		4	0		0	4
EL	17		17	0		0	17
ET	452	2.0%	443	9	2.5	23	466
ER	48		48	0		0	48
WL	480		480	0		0	480
WT	450	2.0%	441	9	2.5	23	464
WR	94		94	0		0	94
							2,187

North Leg Volumes

Approach	194	0	193	1	2.5	196
Depart	153	0	152	1	2.5	155
Total	347	0	345	2	5.0	351

South Leg Volumes

Approach	420	0	419	1	2.5	422
Depart	577	0	576	1	2.5	579
Total	997	0	995	2	5.0	1,001

East Leg Volumes

Approach	1,024	0	1,015	9	2.5	1,038
Depart	930	0	921	9	2.5	944
Total	1,954	0	1,936	18	5.0	1,982

West Leg Volumes

Approach	517	0	508	9	2.5	531
Depart	495	0	486	9	2.5	509
Total	1,012	0	994	18	5.0	1,040

All Legs

Approach	2,155	0	2,135	20	10.0	2,187
Depart	2,155	0	2,135	20	10.0	2,187
Total	4,310	0	4,270	40	20.0	4,374

	PM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes				Truck PCE	
		Truck %age	Passgr Vehicles	Truck	Avg Truck PCE		
NL	57		57	0		0	57
NT	81	2.0%	79	2	2.5	5	84
NR	516		516	0		0	516
SL	115		115	0		0	115
ST	86	2.0%	84	2	2.5	5	89
SR	3		3	0		0	3
EL	26		26	0		0	26
ET	494	2.0%	484	10	2.5	25	509
ER	67		67	0		0	67
WL	568		568	0		0	568
WT	647	2.0%	634	13	2.5	33	667
WR	120		120	0		0	120
							2,821

North Leg Volumes

Approach	204	0	202	2	2.5	207
Depart	227	0	225	2	2.5	230
Total	431	0	427	4	5.0	437

South Leg Volumes

Approach	654	0	652	2	2.5	657
Depart	721	0	719	2	2.5	724
Total	1,375	0	1,371	4	5.0	1,381

East Leg Volumes

Approach	1,335	0	1,322	13	2.5	1,355
Depart	1,125	0	1,115	10	2.5	1,140
Total	2,460	0	2,437	23	5.0	2,495

West Leg Volumes

Approach	587	0	577	10	2.5	602
Depart	707	0	694	13	2.5	727
Total	1,294	0	1,271	23	5.0	1,329

All Legs

Approach	2,780	0	2,753	27	10.0	2,821
Depart	2,780	0	2,753	27	10.0	2,821
Total	5,560	0	5,506	54	20.0	5,642

Existing Peak Hour Volumes - Classification Counts

30 I-215 SB Ramps at McCall Blvd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
SL	348	5	2	1	8	2.2%	15	1.9	363	348	2	2	1	5	1.4%	10	2.0	358
ST	3	0	0	0	0	0.0%	0	0.0	3	3	0	0	0	0	0.0%	0	0.0	3
SR	453	11	2	1	14	3.0%	24	1.7	477	453	2	0	2	4	0.9%	9	2.3	462
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ET	822	9	1	2	12	1.4%	22	1.8	844	822	10	1	2	13	1.6%	23	1.8	845
ER	312	4	0	0	4	1.3%	6	1.5	318	312	2	0	0	2	0.6%	3	1.5	315
WL	282	2	1	0	3	1.1%	5	1.7	287	282	2	0	0	2	0.7%	3	1.5	285
WT	786	12	0	3	15	1.9%	27	1.8	813	786	5	0	0	5	0.6%	8	1.6	794
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
									3,105									3,062
North Leg Volumes																		
Approach	804	16	4	2	22		39		843	804	4	2	3	9		19		823
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	804	16	4	2	22	2.7%	39	1.8	843	804	4	2	3	9	1.1%	19	2.1	823
South Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	597	6	1	0	7		11		608	597	4	0	0	4		6		603
Total	597	6	1	0	7	1.2%	11	1.6	608	597	4	0	0	4	0.7%	6	1.5	603
East Leg Volumes																		
Approach	1,068	14	1	3	18		32		1,100	1,068	7	0	0	7		11		1,079
Depart	1,170	14	3	3	20		37		1,207	1,170	12	3	3	18		33		1,203
Total	2,238	28	4	6	38	1.7%	69	1.8	2,307	2,238	19	3	3	25	1.1%	44	1.8	2,282
West Leg Volumes																		
Approach	1,134	13	1	2	16		28		1,162	1,134	12	1	2	15		26		1,160
Depart	1,239	23	2	4	29		51		1,290	1,239	7	0	2	9		17		1,256
Total	2,373	36	3	6	45	1.9%	79	1.8	2,452	2,373	19	1	4	24	1.0%	43	1.8	2,416
All Legs																		
Approach	3,006	43	6	7	56		99		3,105	3,006	23	3	5	31		56		3,062
Depart	3,006	43	6	7	56		99		3,105	3,006	23	3	5	31		56		3,062
Total	6,012	86	12	14	112	1.8%	198	1.8	6,210	6,012	46	6	10	62	1.0%	112	1.8	6,124

Existing Peak Hour Volumes - Classification Counts

31 I-215 NB Ramps at McCall Blvd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	190	4	1	1	6	3.1%	11	1.8	201	378	2	1	0	3	0.8%	5	1.7	383
NT	0	0	0	0	0	0.0%	0	0.0	0	2	0	1	0	1	33.3%	2	2.0	4
NR	247	3	2	0	5	2.0%	9	1.8	256	480	0	0	0	0	0.0%	0	0.0	480
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
EL	219	4	0	3	7	3.1%	15	2.1	234	275	4	1	0	5	1.8%	8	1.6	283
ET	585	9	2	0	11	1.8%	18	1.6	603	884	4	2	1	7	0.8%	13	1.9	897
ER	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WT	941	7	1	1	9	0.9%	16	1.8	957	730	5	1	0	6	0.8%	10	1.7	740
WR	475	2	1	5	8	1.7%	20	2.5	495	236	4	1	0	5	2.1%	8	1.6	244
									2,746									3,031
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	694	6	1	8	15		35		729	513	8	3	0	11		18		531
Total	694	6	1	8	15	2.1%	35	2.3	729	513	8	3	0	11	2.1%	18	1.6	531
South Leg Volumes																		
Approach	437	7	3	1	11		20		457	860	2	2	0	4		7		867
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	437	7	3	1	11	2.5%	20	1.8	457	860	2	2	0	4	0.5%	7	1.8	867
East Leg Volumes																		
Approach	1,416	9	2	6	17		36		1,452	966	9	2	0	11		18		984
Depart	832	12	4	0	16		27		859	1,364	4	2	1	7		13		1,377
Total	2,248	21	6	6	33	1.4%	63	1.9	2,311	2,330	13	4	1	18	0.8%	31	1.7	2,361
West Leg Volumes																		
Approach	804	13	2	3	18		33		837	1,159	8	3	1	12		21		1,180
Depart	1,131	11	2	2	15		27		1,158	1,108	7	2	0	9		15		1,123
Total	1,935	24	4	5	33	1.7%	60	1.8	1,995	2,267	15	5	1	21	0.9%	36	1.7	2,303
All Legs																		
Approach	2,657	29	7	10	46		89		2,746	2,985	19	7	1	27		46		3,031
Depart	2,657	29	7	10	46		89		2,746	2,985	19	7	1	27		46		3,031
Total	5,314	58	14	20	92	1.7%	178	1.9	5,492	5,970	38	14	2	54	0.9%	92	1.7	6,062

Existing Peak Hour Volumes - Non-Classification Counts

32 Encanto Dr at McCall Blvd

	AM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes				Truck PCE	
		Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE		
NL	196		196	0		0	196
NT	26	2.0%	25	1	2.5	3	28
NR	80		80	0		0	80
SL	30		30	0		0	30
ST	18	2.0%	18	0	2.5	0	18
SR	121		121	0		0	121
EL	113		113	0		0	113
ET	633	2.0%	620	13	2.5	33	653
ER	76		76	0		0	76
WL	72		72	0		0	72
WT	1,096	2.0%	1,074	22	2.5	55	1,129
WR	31		31	0		0	31
							2,547

North Leg Volumes

Approach	169	0	169	0	2.5		169
Depart	170	0	169	1	2.5		172
Total	339	0	338	1	5.0		341

South Leg Volumes

Approach	302	0	301	1	2.5		304
Depart	166	0	166	0	2.5		166
Total	468	0	467	1	5.0		470

East Leg Volumes

Approach	1,199	0	1,177	22	2.5		1,232
Depart	743	0	730	13	2.5		763
Total	1,942	0	1,907	35	5.0		1,995

West Leg Volumes

Approach	822	0	809	13	2.5		842
Depart	1,413	0	1,391	22	2.5		1,446
Total	2,235	0	2,200	35	5.0		2,288

All Legs

Approach	2,492	0	2,456	36	10.0		2,547
Depart	2,492	0	2,456	36	10.0		2,547
Total	4,984	0	4,912	72	20.0		5,094

	PM Peak Hour Volumes						Total PCE Volume
	Total Vehicles	Truck Volumes				Truck PCE	
		Truck %-age	Passgr Vehicles	Truck	Avg Truck PCE		
NL	172		172	0		0	172
NT	19	2.0%	19	0	2.5	0	19
NR	40		40	0		0	40
SL	30		30	0		0	30
ST	17	2.0%	17	0	2.5	0	17
SR	140		140	0		0	140
EL	184		184	0		0	184
ET	953	2.0%	934	19	2.5	48	982
ER	261		261	0		0	261
WL	32		32	0		0	32
WT	651	2.0%	638	13	2.5	33	671
WR	22		22	0		0	22
							2,570

North Leg Volumes

Approach	187	0	187	0	2.5		187
Depart	225	0	225	0	2.5		225
Total	412	0	412	0	5.0		412

South Leg Volumes

Approach	231	0	231	0	2.5		231
Depart	310	0	310	0	2.5		310
Total	541	0	541	0	5.0		541

East Leg Volumes

Approach	705	0	692	13	2.5		725
Depart	1,023	0	1,004	19	2.5		1,052
Total	1,728	0	1,696	32	5.0		1,777

West Leg Volumes

Approach	1,398	0	1,379	19	2.5		1,427
Depart	963	0	950	13	2.5		983
Total	2,361	0	2,329	32	5.0		2,410

All Legs

Approach	2,521	0	2,489	32	10.0		2,570
Depart	2,521	0	2,489	32	10.0		2,570
Total	5,042	0	4,978	64	20.0		5,140

Existing Peak Hour Volumes - Classification Counts

33 Sherman Rd at McCall Blvd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	23	0	0	1	1	4.2%	3	3.0	26	24	1	0	0	1	4.0%	2	2.0	26
NT	6	0	0	0	0	0.0%	0	0.0	6	1	0	0	0	0	0.0%	0	0.0	1
NR	8	0	9	0	9	52.9%	18	2.0	26	8	0	0	0	0	0.0%	0	0.0	8
SL	53	0	0	0	0	0.0%	0	0.0	53	32	0	0	0	0	0.0%	0	0.0	32
ST	10	0	0	0	0	0.0%	0	0.0	10	3	0	0	0	0	0.0%	0	0.0	3
SR	79	1	0	0	1	1.3%	2	2.0	81	18	0	0	0	0	0.0%	0	0.0	18
EL	112	0	0	0	0	0.0%	0	0.0	112	12	0	0	0	0	0.0%	0	0.0	12
ET	523	6	2	9	17	3.1%	40	2.4	563	896	6	1	0	7	0.8%	11	1.6	907
ER	16	0	0	1	1	5.9%	3	3.0	19	23	0	0	0	0	0.0%	0	0.0	23
WL	8	0	7	0	7	46.7%	14	2.0	22	14	0	0	0	0	0.0%	0	0.0	14
WT	961	11	5	12	28	2.8%	63	2.3	1,024	612	2	2	1	5	0.8%	10	2.0	622
WR	52	0	1	0	1	1.9%	2	2.0	54	13	0	0	0	0	0.0%	0	0.0	13
									1,996									1,679
North Leg Volumes																		
Approach	142	1	0	0	1		2		144	53	0	0	0	0		0		53
Depart	170	0	1	0	1		2		172	26	0	0	0	0		0		26
Total	312	1	1	0	2	0.6%	4	2.0	316	79	0	0	0	0	0.0%	0	0.0	79
South Leg Volumes																		
Approach	37	0	9	1	10		21		58	33	1	0	0	1		2		35
Depart	34	0	7	1	8		17		51	40	0	0	0	0		0		40
Total	71	0	16	2	18	20.2%	38	2.1	109	73	1	0	0	1	1.4%	2	2.0	75
East Leg Volumes																		
Approach	1,021	11	13	12	36		79		1,100	639	2	2	1	5		10		649
Depart	584	6	11	9	26		58		642	936	6	1	0	7		11		947
Total	1,605	17	24	21	62	3.7%	137	2.2	1,742	1,575	8	3	1	12	0.8%	21	1.8	1,596
West Leg Volumes																		
Approach	651	6	2	10	18		43		694	931	6	1	0	7		11		942
Depart	1,063	12	5	13	30		68		1,131	654	3	2	1	6		12		666
Total	1,714	18	7	23	48	2.7%	111	2.3	1,825	1,585	9	3	1	13	0.8%	23	1.8	1,608
All Legs																		
Approach	1,851	18	24	23	65		145		1,996	1,656	9	3	1	13		23		1,679
Depart	1,851	18	24	23	65		145		1,996	1,656	9	3	1	13		23		1,679
Total	3,702	36	48	46	130	3.4%	290	2.2	3,992	3,312	18	6	2	26	0.8%	46	1.8	3,358

Existing Peak Hour Volumes - Classification Counts

34 Antelope Rd at McCall Blvd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle	3-Axle	4-Axle	Total Trucks	Truck %-age	PCE				2-Axle	3-Axle	4-Axle	Total Trucks	Truck %-age	PCE		
NL	41	0	0	0	0	0.0%	0	0.0	41	15	0	0	0	0	0.0%	0	0.0	15
NT	4	0	0	0	0	0.0%	0	0.0	4	1	0	0	0	0.0%	0	0.0	1	
NR	80	1	0	0	1	1.2%	2	2.0	82	17	0	0	0	0.0%	0	0.0	17	
SL	9	0	0	0	0	0.0%	0	0.0	9	7	0	0	0	0.0%	0	0.0	7	
ST	0	0	0	0	0	0.0%	0	0.0	0	1	0	0	0	0.0%	0	0.0	1	
SR	39	3	6	8	17	30.4%	41	2.4	80	34	0	0	0	0.0%	0	0.0	34	
EL	23	3	0	10	13	36.1%	35	2.7	58	38	0	0	0	0.0%	0	0.0	38	
ET	630	2	2	12	16	2.5%	43	2.7	673	767	4	1	0	5	0.6%	8	1.6	775
ER	11	0	0	0	0	0.0%	0	0.0	11	29	1	0	0	1	3.3%	2	2.0	31
WL	42	1	0	0	1	2.3%	2	2.0	44	20	1	0	0	1	4.8%	2	2.0	22
WT	861	3	4	6	13	1.5%	31	2.4	892	525	1	1	1	3	0.6%	7	2.3	532
WR	41	1	1	3	5	10.9%	13	2.6	54	7	0	0	0	0	0.0%	0	0.0	7
									1,948									1,480
North Leg Volumes																		
Approach	48	3	6	8	17		41		89	42	0	0	0	0		0		42
Depart	68	4	1	13	18		48		116	46	0	0	0	0		0		46
Total	116	7	7	21	35	23.2%	89	2.5	205	88	0	0	0	0	0.0%	0	0.0	88
South Leg Volumes																		
Approach	125	1	0	0	1		2		127	33	0	0	0	0		0		33
Depart	53	1	0	0	1		2		55	50	2	0	0	2		4		54
Total	178	2	0	0	2	1.1%	4	2.0	182	83	2	0	0	2	2.4%	4	2.0	87
East Leg Volumes																		
Approach	944	5	5	9	19		46		990	552	2	1	1	4		9		561
Depart	719	3	2	12	17		45		764	791	4	1	0	5		8		799
Total	1,663	8	7	21	36	2.1%	91	2.5	1,754	1,343	6	2	1	9	0.7%	17	1.9	1,360
West Leg Volumes																		
Approach	664	5	2	22	29		78		742	834	5	1	0	6		10		844
Depart	941	6	10	14	30		72		1,013	574	1	1	1	3		7		581
Total	1,605	11	12	36	59	3.5%	150	2.5	1,755	1,408	6	2	1	9	0.6%	17	1.9	1,425
All Legs																		
Approach	1,781	14	13	39	66		167		1,948	1,461	7	2	1	10		19		1,480
Depart	1,781	14	13	39	66		167		1,948	1,461	7	2	1	10		19		1,480
Total	3,562	28	26	78	132	3.6%	334	2.5	3,896	2,922	14	4	2	20	0.7%	38	1.9	2,960

APPENDIX C

INTERSECTION ANALYSIS
WORKSHEETS

APPENDIX C-1

INTERSECTION ANALYSIS
WORKSHEETS -
EXISTING CONDITIONS

CADO Warehouse Project

Vistro File: K:\...\Menifee CADO_AM.vistro

Scenario 1 EX AM

Report File: K:\...\1 EX AM.pdf

7/21/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Case Rd	Signalized	HCM 6th Edition	WB Left	0.379	38.0	D
2	Murrieta Rd at Case Rd	All-way stop	HCM 6th Edition	NB Left	0.262	9.4	A
3	Goetz Rd at Mapes Rd	Signalized	HCM 6th Edition	SB Left	0.443	35.2	D
4	I-215 SB Ramps/SR-74 at Bonnie Dr	Signalized	HCM 6th Edition	EB Left	0.386	15.5	B
5	I-215 NB Ramps at SR-74	Signalized	HCM 6th Edition	EB Left	0.271	10.4	B
6	Sherman Rd at SR-74	Signalized	HCM 6th Edition	EB Left	0.491	27.0	C
7	Goetz Rd at Fieldstone Dr	Signalized	HCM 6th Edition	WB Left	0.341	15.8	B
8	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.554	42.9	D
9	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	EB Thru	0.007	0.0	A
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.009	10.6	B
11	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	0.490	32.3	C
12	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.004	11.5	B
13	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.501	31.3	C
14	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.691	20.4	C
15	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	0.702	32.5	C
16	Trumble Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.505	28.2	C
17	Sherman Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.058	49.4	E
			HCM 6th				

18	Byers Rd at McLaughlin Rd	All-way stop	HCM 6th Edition	NB Left	0.000	0.0	A
19	Murrieta Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	EB Left	0.013	12.9	B
20	Murrieta Rd at Rouse Rd	Two-way stop	HCM 6th Edition	EB Left	0.035	13.3	B
21	Murrieta Rd at Chambers Ave	All-way stop	HCM 6th Edition	SB Thru	0.331	10.1	B
22	Murrieta Rd at McCall Blvd	Signalized	HCM 6th Edition	SB Left	0.307	35.9	D
23	Sun City Blvd at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.263	26.5	C
24	Bradley Rd at McCall Blvd	Signalized	HCM 6th Edition	EB Left	0.623	31.3	C
25	I-215 SB Ramps at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.695	32.6	C
26	I-215 NB Ramps at McCall Blvd	Signalized	HCM 6th Edition	NB Right	0.588	26.7	C
27	Encanto Dr at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.548	25.7	C
28	Sherman Rd at McCall Blvd	Signalized	HCM 6th Edition	SB Left	0.464	18.6	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: Goetz Rd at Case Rd

Control Type:	Signalized	Delay (sec / veh):	38.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.379

Intersection Setup

Name	Goetz Rd		Case Rd		Case 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	1	0	1	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]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Goetz Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	233	251	153	115	188	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	233	251	153	115	188	136
Peak Hour Factor	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	65	70	43	32	53	38
Total Analysis Volume [veh/h]	260	280	171	128	210	152
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	Semi-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	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	10	0	7	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.7	0.0	5.0	0.0	3.0	5.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	49	0	30	0	41	71
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	0	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]	3.7	0.0	4.0	0.0	2.0	4.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.70	5.70	6.00	6.00	4.00	6.00
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]	3.70	3.70	4.00	4.00	2.00	4.00
g_i, Effective Green Time [s]	24	24	65	65	16	85
g / C, Green / Cycle	0.20	0.20	0.54	0.54	0.13	0.71
(v / s)_i Volume / Saturation Flow Rate	0.14	0.17	0.09	0.08	0.12	0.08
s, saturation flow rate [veh/h]	1810	1615	1900	1615	1810	1900
c, Capacity [veh/h]	355	317	1023	870	243	1342
d1, Uniform Delay [s]	45.25	46.87	14.05	13.88	50.87	5.63
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]	2.91	8.01	0.35	0.36	8.89	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	0.73	0.88	0.17	0.15	0.86	0.11
d, Delay for Lane Group [s/veh]	48.16	54.88	14.40	14.24	59.77	5.81
Lane Group LOS	D	D	B	B	E	A
Critical Lane Group	No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	7.27	8.50	2.23	1.66	6.50	1.02
50th-Percentile Queue Length [ft/ln]	181.76	212.39	55.82	41.60	162.58	25.44
95th-Percentile Queue Length [veh/ln]	11.69	13.28	4.02	3.00	10.69	1.83
95th-Percentile Queue Length [ft/ln]	292.31	331.90	100.48	74.88	267.13	45.78

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	48.16	54.88	14.40	14.24	59.77	5.81
Movement LOS	D	D	B	B	E	A
d_A, Approach Delay [s/veh]	51.64		14.33		37.11	
Approach LOS	D		B		D	
d_I, Intersection Delay [s/veh]	37.97					
Intersection LOS	D					
Intersection V/C	0.379					

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	0.0	0.0
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]	56.07	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.435	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	722	400	1083
d_b, Bicycle Delay [s]	24.51	38.40	12.60
I_b,int, Bicycle LOS Score for Intersection	1.560	2.053	2.157
Bicycle LOS	A	B	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Murrieta Rd at Case Rd**

Control Type:	All-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.262

Intersection Setup

Name	Murrieta Rd		Case Rd		Case 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	1	0	1	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]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Murrieta Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	123	18	177	35	13	140
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	123	18	177	35	13	140
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]	32	5	46	9	3	36
Total Analysis Volume [veh/h]	128	19	185	36	14	146
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	610	764	706	818	636	698
Degree of Utilization, x	0.21	0.02	0.26	0.04	0.02	0.21

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.79	0.08	1.05	0.14	0.07	0.78
95th-Percentile Queue Length [ft]	19.69	1.91	26.24	3.45	1.69	19.60
Approach Delay [s/veh]	9.83		9.23		9.15	
Approach LOS	A		A		A	
Intersection Delay [s/veh]	9.37					
Intersection LOS	A					

**Intersection Level Of Service Report
Intersection 3: Goetz Rd at Mapes Rd**

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):	0.443

Intersection Setup

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes 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	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes Rd		
Base Volume Input [veh/h]	268	278	14	3	141	165	146	0	187	0	0	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	268	278	14	3	141	165	146	0	187	0	0	1
Peak Hour Factor	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270
Other Adjustment Factor	1.0000	1.0000	1.0000	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	84	4	1	43	50	44	0	57	0	0	0
Total Analysis Volume [veh/h]	324	336	17	4	170	200	177	0	226	0	0	1
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	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	0	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	0.0	3.2	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	55	64	0	12	21	0	17	44	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	0.0	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	17	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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	0.0	2.2	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	C	L	C	R	L	C	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.20	4.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.20	2.20
g_i, Effective Green Time [s]	24	86	86	1	63	63	13	19	2	2
g / C, Green / Cycle	0.20	0.72	0.72	0.01	0.53	0.53	0.11	0.16	0.02	0.02
(v / s)_i Volume / Saturation Flow Rate	0.18	0.09	0.09	0.00	0.09	0.12	0.10	0.14	0.00	0.00
s, saturation flow rate [veh/h]	1810	1900	1868	1810	1900	1615	1810	1615	104	1615
c, Capacity [veh/h]	358	1364	1341	14	1002	852	196	256	32	27
d1, Uniform Delay [s]	47.00	5.27	5.27	59.21	14.72	15.29	52.88	49.38	0.00	58.01
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	8.54	0.20	0.20	10.72	0.37	0.65	13.98	9.60	0.00	0.53
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	0.90	0.13	0.13	0.29	0.17	0.23	0.90	0.88	0.00	0.04
d, Delay for Lane Group [s/veh]	55.54	5.47	5.48	69.93	15.08	15.94	66.85	58.97	0.00	58.54
Lane Group LOS	E	A	A	E	B	B	E	E	A	E
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	9.91	1.17	1.16	0.16	2.33	2.88	6.03	7.30	0.00	0.03
50th-Percentile Queue Length [ft/ln]	247.63	29.35	28.93	3.98	58.31	71.99	150.66	182.41	0.00	0.85
95th-Percentile Queue Length [veh/ln]	15.07	2.11	2.08	0.29	4.20	5.18	10.05	11.73	0.00	0.06
95th-Percentile Queue Length [ft/ln]	376.67	52.82	52.08	7.16	104.95	129.59	251.31	293.16	0.00	1.53

Movement, Approach, & Intersection Results

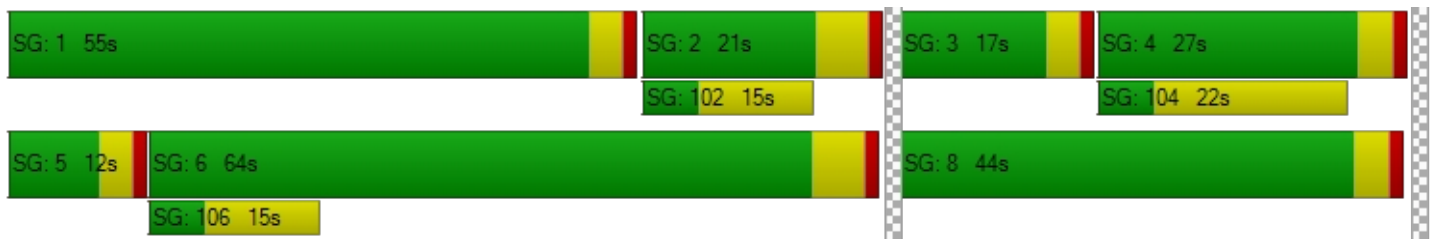
d_M, Delay for Movement [s/veh]	55.54	5.47	5.48	69.93	15.08	15.94	66.85	58.97	58.97	0.00	0.00	58.54
Movement LOS	E	A	A	E	B	B	E	E	E	A	A	E
d_A, Approach Delay [s/veh]	29.43			16.13			62.44			58.54		
Approach LOS	C			B			E			E		
d_I, Intersection Delay [s/veh]	35.17											
Intersection LOS	D											
Intersection V/C	0.443											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	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]	0.00	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.604	2.257	1.963
Crosswalk LOS	F	B	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	972	255	663	380
d_b, Bicycle Delay [s]	15.86	45.68	26.80	39.37
I_b,int, Bicycle LOS Score for Intersection	2.118	2.177	2.225	1.561
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: I-215 SB Ramps/SR-74 at Bonnie Dr

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):	0.386

Intersection Setup

Name	SR-74		I-215 SB Ramps		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]	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]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	SR-74		I-215 SB Ramps		Bonnie Dr	
Base Volume Input [veh/h]	184	385	486	18	29	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	184	385	486	18	29	136
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	48	99	126	5	7	35
Total Analysis Volume [veh/h]	190	398	502	19	30	140
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	Semi-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	Protected	Permissive	Overlap	Permissive	Permissive	Unsignalized
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups			2			
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	10	10	0	7	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	4.3	4.3	0.0	4.3	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	40	95	55	0	25	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	14	0
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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	0.0	3.3	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L
C, Cycle Length [s]	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	3.30	3.30
g_i, Effective Green Time [s]	15	105	86	86	4
g / C, Green / Cycle	0.12	0.87	0.72	0.72	0.04
(v / s)_i Volume / Saturation Flow Rate	0.11	0.21	0.26	0.01	0.02
s, saturation flow rate [veh/h]	1810	1900	1900	1615	1810
c, Capacity [veh/h]	223	1660	1363	1158	69
d1, Uniform Delay [s]	51.54	1.21	6.52	4.85	56.48
k, delay calibration	0.11	0.50	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.90	0.34	0.77	0.03	4.35
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	0.85	0.24	0.37	0.02	0.44
d, Delay for Lane Group [s/veh]	60.45	1.55	7.28	4.88	60.82
Lane Group LOS	E	A	A	A	E
Critical Lane Group	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	6.00	0.47	4.27	0.12	0.95
50th-Percentile Queue Length [ft/ln]	150.04	11.80	106.71	3.01	23.82
95th-Percentile Queue Length [veh/ln]	10.02	0.85	7.66	0.22	1.72
95th-Percentile Queue Length [ft/ln]	250.48	21.25	191.42	5.42	42.88

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	60.45	1.55	7.28	4.88	60.82	0.00
Movement LOS	E	A	A	A	E	
d_A, Approach Delay [s/veh]	20.58		7.20		60.82	
Approach LOS	C		A		E	
d_I, Intersection Delay [s/veh]	15.52					
Intersection LOS	B					
Intersection V/C	0.386					

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	2.545	2.418	2.072
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1495	828	328
d_b, Bicycle Delay [s]	3.83	20.59	41.92
I_b,int, Bicycle LOS Score for Intersection	2.530	2.419	1.560
Bicycle LOS	B	B	A

Sequence




Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: I-215 NB Ramps at SR-74

Control Type:	Signalized	Delay (sec / veh):	10.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.271

Intersection Setup

Name	I-215 NB Ramps		SR-74		SR-74	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB Ramps		SR-74		SR-74	
Base Volume Input [veh/h]	131	11	8	629	531	676
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	131	11	8	629	531	676
Peak Hour Factor	0.9330	0.9330	0.9330	0.9330	0.9330	0.9330
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	3	2	169	142	181
Total Analysis Volume [veh/h]	140	12	9	674	569	725
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	Semi-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	Protected	Permissive	Permissive	Unsignalized
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	4.3	0.0	3.0	5.0	5.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	54	0	11	66	55	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	21	0	0	10	7	0
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	0.0
I2, Clearance Lost Time [s]	3.3	0.0	2.0	4.0	4.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C
C, Cycle Length [s]	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	2.00	4.00	4.00
g_i, Effective Green Time [s]	12	2	96	91
g / C, Green / Cycle	0.10	0.02	0.80	0.75
(v / s)_i Volume / Saturation Flow Rate	0.08	0.00	0.19	0.16
s, saturation flow rate [veh/h]	1792	1810	3618	3618
c, Capacity [veh/h]	185	28	2904	2727
d1, Uniform Delay [s]	52.73	58.45	2.87	4.31
k, delay calibration	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.75	6.46	0.19	0.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.32	0.23	0.21
d, Delay for Lane Group [s/veh]	61.47	64.91	3.06	4.49
Lane Group LOS	E	E	A	A
Critical Lane Group	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.83	0.31	1.13	1.47
50th-Percentile Queue Length [ft/ln]	120.64	7.77	28.14	36.73
95th-Percentile Queue Length [veh/ln]	8.43	0.56	2.03	2.64
95th-Percentile Queue Length [ft/ln]	210.71	13.98	50.65	66.11

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	61.47	61.47	64.91	3.06	4.49	0.00
Movement LOS	E	E	E	A	A	
d_A, Approach Delay [s/veh]	61.47		3.87		4.49	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	10.36					
Intersection LOS	B					
Intersection V/C	0.271					

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	1.848	2.767	2.880
Crosswalk LOS	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	812	1000	817
d_b, Bicycle Delay [s]	21.18	15.00	21.00
I_b,int, Bicycle LOS Score for Intersection	1.810	2.123	2.029
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Sherman Rd at SR-74**

Control Type:	Signalized	Delay (sec / veh):	27.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.491

Intersection Setup

Name	Sherman Rd			Sherman 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	1	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	40.00			40.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	46	1	250	0	4	1	5	623	15	239	860	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	1	250	0	4	1	5	623	15	239	860	1
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	0	67	0	1	0	1	167	4	64	230	0
Total Analysis Volume [veh/h]	49	1	268	0	4	1	5	667	16	256	921	1
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	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	5.0	0.0	3.0	5.0	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	41	0	0	27	0	11	21	0	31	41	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	21	0	0	17	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			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	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	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	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	22	22	2	1	57	57	19	75	75
g / C, Green / Cycle	0.19	0.19	0.01	0.01	0.48	0.48	0.16	0.63	0.63
(v / s)_i Volume / Saturation Flow Rate	0.03	0.17	0.00	0.00	0.18	0.18	0.14	0.24	0.24
s, saturation flow rate [veh/h]	1811	1615	1835	1810	1900	1884	1810	1900	1899
c, Capacity [veh/h]	336	300	25	17	907	900	287	1191	1190
d1, Uniform Delay [s]	40.91	47.70	58.55	59.07	20.00	20.00	49.50	11.04	11.04
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.13	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]	0.20	9.13	3.95	9.86	1.20	1.21	11.21	0.95	0.95
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.15	0.89	0.20	0.30	0.38	0.38	0.89	0.39	0.39
d, Delay for Lane Group [s/veh]	41.11	56.83	62.51	68.93	21.20	21.21	60.71	12.00	12.00
Lane Group LOS	D	E	E	E	C	C	E	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.24	8.41	0.18	0.19	5.90	5.86	8.06	5.43	5.43
50th-Percentile Queue Length [ft/ln]	31.07	210.25	4.38	4.77	147.53	146.51	201.48	135.86	135.81
95th-Percentile Queue Length [veh/ln]	2.24	13.17	0.32	0.34	9.89	9.83	12.71	9.26	9.25
95th-Percentile Queue Length [ft/ln]	55.93	329.15	7.89	8.59	247.13	245.76	317.87	231.43	231.37

Movement, Approach, & Intersection Results

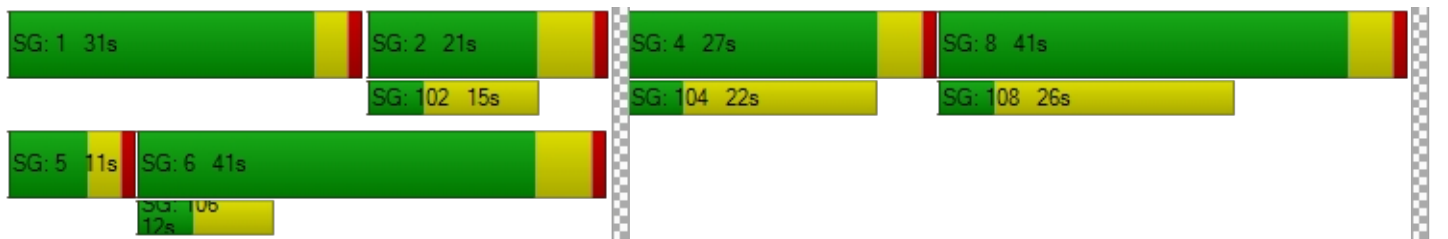
d_M, Delay for Movement [s/veh]	41.11	41.11	56.83	62.51	62.51	62.51	68.93	21.20	21.21	60.71	12.00	12.00
Movement LOS	D	D	E	E	E	E	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	54.36			62.51			21.55			22.58		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	26.97											
Intersection LOS	C											
Intersection V/C	0.491											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.213	1.738	2.908	3.098
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	602	368	250	583
d_b, Bicycle Delay [s]	29.33	39.94	45.94	30.10
I_b,int, Bicycle LOS Score for Intersection	2.084	1.568	2.127	2.531
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Goetz Rd at Fieldstone Dr

Control Type:	Signalized	Delay (sec / veh):	15.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.341

Intersection Setup

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Base Volume Input [veh/h]	18	516	7	12	276	17	68	4	60	3	0	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	516	7	12	276	17	68	4	60	3	0	15
Peak Hour Factor	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530
Other Adjustment Factor	1.0000	1.0000	1.0000	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	135	2	3	72	4	18	1	16	1	0	4
Total Analysis Volume [veh/h]	19	541	7	13	290	18	71	4	63	3	0	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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	3.0	3.2	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]	29	35	0	13	19	0	51	33	0	39	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	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	24	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	2.0	2.2	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.00	4.20	4.20
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	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.00	2.20	2.20
g_i, Effective Green Time [s]	3	89	89	2	88	88	6	10	1	4	4
g / C, Green / Cycle	0.03	0.74	0.74	0.02	0.74	0.74	0.05	0.08	0.01	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.01	0.28	0.00	0.01	0.06	0.06	0.04	0.04	0.00	0.00	0.01
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1844	1810	1630	1810	1900	1615
c, Capacity [veh/h]	50	1410	1198	37	2659	1355	97	134	11	66	56
d1, Uniform Delay [s]	57.32	5.58	4.01	57.97	4.47	4.47	55.94	52.72	59.37	0.00	56.47
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
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]	4.65	0.79	0.01	5.47	0.06	0.11	10.17	2.88	12.61	0.00	2.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.38	0.38	0.01	0.35	0.08	0.08	0.73	0.50	0.27	0.00	0.29
d, Delay for Lane Group [s/veh]	61.97	6.37	4.02	63.44	4.52	4.58	66.11	55.61	71.98	0.00	59.23
Lane Group LOS	E	A	A	E	A	A	E	E	E	A	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.61	3.93	0.04	0.43	0.56	0.60	2.39	2.04	0.13	0.00	0.52
50th-Percentile Queue Length [ft/ln]	15.36	98.33	0.92	10.86	14.00	15.07	59.82	51.10	3.24	0.00	12.91
95th-Percentile Queue Length [veh/ln]	1.11	7.08	0.07	0.78	1.01	1.08	4.31	3.68	0.23	0.00	0.93
95th-Percentile Queue Length [ft/ln]	27.65	176.99	1.65	19.55	25.20	27.12	107.67	91.97	5.83	0.00	23.24

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	61.97	6.37	4.02	63.44	4.54	4.58	66.11	55.61	55.61	71.98	0.00	59.23
Movement LOS	E	A	A	E	A	A	E	E	E	E	A	E
d_A, Approach Delay [s/veh]	8.21			6.93			61.01			61.24		
Approach LOS	A			A			E			E		
d_I, Intersection Delay [s/veh]	15.75											
Intersection LOS	B											
Intersection V/C	0.341											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0			4.0			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]	56.07			56.07			51.34			51.34		
I_p,int, Pedestrian LOS Score for Intersection	2.827			2.729			2.012			2.157		
Crosswalk LOS	C			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	488			222			480			280		
d_b, Bicycle Delay [s]	34.28			47.44			34.66			44.38		
I_b,int, Bicycle LOS Score for Intersection	2.495			1.736			1.787			1.591		
Bicycle LOS	B			A			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 8: Goetz Rd at Ethanac Rd**

Control Type:	Signalized	Delay (sec / veh):	42.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.554

Intersection Setup

Name	Goetz Rd			Goetz 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	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	2	229	371	224	110	8	16	88	6	167	70	271
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	229	371	224	110	8	16	88	6	167	70	271
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	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	60	97	58	29	2	4	23	2	44	18	71
Total Analysis Volume [veh/h]	2	239	387	234	115	8	17	92	6	174	73	283
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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	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]	47	55	0	26	34	0	11	28	0	11	28	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	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	3.7	0.0	2.0	3.7	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	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	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	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	0	31	31	17	48	48	3	38	38	14	49	49
g / C, Green / Cycle	0.00	0.26	0.26	0.15	0.40	0.40	0.03	0.32	0.32	0.11	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.00	0.13	0.24	0.13	0.03	0.00	0.01	0.03	0.00	0.10	0.04	0.18
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	1900	1615
c, Capacity [veh/h]	8	498	424	263	1459	651	46	1151	514	204	770	655
d1, Uniform Delay [s]	59.53	37.35	42.94	50.33	22.07	21.47	57.54	28.63	28.00	52.28	22.07	25.73
k, delay calibration	0.11	0.11	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	1.00
d2, Incremental Delay [s]	15.24	0.72	8.05	9.90	0.02	0.01	4.93	0.14	0.04	9.76	0.24	2.08
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	0.25	0.48	0.91	0.89	0.08	0.01	0.37	0.08	0.01	0.85	0.09	0.43
d, Delay for Lane Group [s/veh]	74.77	38.07	50.99	60.23	22.09	21.48	62.48	28.76	28.04	62.04	22.31	27.80
Lane Group LOS	E	D	D	E	C	C	E	C	C	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.09	5.79	11.53	7.36	0.96	0.13	0.56	0.92	0.12	5.51	1.27	5.88
50th-Percentile Queue Length [ft/ln]	2.32	144.63	288.30	184.01	24.00	3.27	13.88	22.90	3.00	137.86	31.73	146.93
95th-Percentile Queue Length [veh/ln]	0.17	9.73	17.10	11.81	1.73	0.24	1.00	1.65	0.22	9.37	2.28	9.85
95th-Percentile Queue Length [ft/ln]	4.18	243.24	427.53	295.25	43.20	5.88	24.98	41.23	5.40	234.14	57.11	246.33

Movement, Approach, & Intersection Results

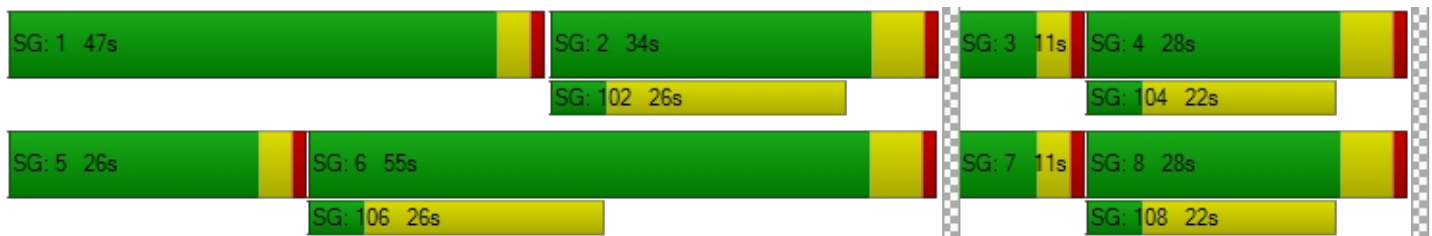
d_M, Delay for Movement [s/veh]	74.77	38.07	50.99	60.23	22.09	21.48	62.48	28.76	28.04	62.04	22.31	27.80
Movement LOS	E	D	D	E	C	C	E	C	C	E	C	C
d_A, Approach Delay [s/veh]	46.15			47.08			33.71			38.29		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	42.92											
Intersection LOS	D											
Intersection V/C	0.554											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.615	2.606	2.522	2.805
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	822	472	372	372
d_b, Bicycle Delay [s]	20.83	35.04	39.77	39.77
I_b,int, Bicycle LOS Score for Intersection	2.596	1.854	1.654	1.997
Bicycle LOS	B	A	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 9: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	Wheat St		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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	0	689	0	0	510
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	689	0	0	510
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	176	0	0	131
Total Analysis Volume [veh/h]	0	0	706	0	0	523
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	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	19.11	10.55	0.00	0.00	8.99	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.83		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

**Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

Intersection Setup

Name	Byers 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	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		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	6	692	2	6	512
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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	6	692	2	6	512
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	177	1	2	131
Total Analysis Volume [veh/h]	0	6	709	2	6	525
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	0.01	0.01	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	19.61	10.62	0.00	0.00	9.04	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.00	0.00	0.02	0.00
95th-Percentile Queue Length [ft/ln]	0.70	0.70	0.00	0.00	0.50	0.00
d_A, Approach Delay [s/veh]	10.62		0.00		0.10	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.09					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 11: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	32.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.490

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	0	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	97	90	162	67	34	9	6	665	51	78	357	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	97	90	162	67	34	9	6	665	51	78	357	48
Peak Hour Factor	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640
Other Adjustment Factor	1.0000	1.0000	1.0000	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	23	42	17	9	2	2	172	13	20	93	12
Total Analysis Volume [veh/h]	101	93	168	70	35	9	6	690	53	81	370	50
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	Semi-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	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	4.7	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	56	0	0	28	0	11	18	0	18	25	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	21	0	0	17	0	0	7	0	0	14	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	3.7	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	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	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
l2, Clearance Lost Time [s]	3.30	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	10	10	10	1	56	56	7	61	61
g / C, Green / Cycle	0.23	0.08	0.08	0.08	0.01	0.46	0.46	0.06	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.21	0.04	0.02	0.01	0.00	0.20	0.20	0.04	0.11	0.11
s, saturation flow rate [veh/h]	1734	1810	1900	1615	1810	1900	1853	1810	1900	1822
c, Capacity [veh/h]	396	149	156	133	20	878	856	106	968	928
d1, Uniform Delay [s]	45.18	52.56	51.48	50.81	58.89	21.65	21.66	55.69	16.27	16.29
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]	8.64	2.29	0.72	0.21	8.31	1.53	1.57	10.94	0.53	0.55
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	0.92	0.47	0.22	0.07	0.30	0.43	0.43	0.77	0.22	0.22
d, Delay for Lane Group [s/veh]	53.82	54.86	52.19	51.02	67.20	23.18	23.23	66.63	16.79	16.84
Lane Group LOS	D	D	D	D	E	C	C	E	B	B
Critical Lane Group	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	11.09	2.06	1.00	0.25	0.22	6.99	6.84	2.66	3.15	3.06
50th-Percentile Queue Length [ft/ln]	277.29	51.59	24.88	6.31	5.54	174.72	170.90	66.53	78.86	76.61
95th-Percentile Queue Length [veh/ln]	16.55	3.71	1.79	0.45	0.40	11.32	11.12	4.79	5.68	5.52
95th-Percentile Queue Length [ft/ln]	413.84	92.87	44.78	11.36	9.96	283.11	278.10	119.76	141.95	137.90

Movement, Approach, & Intersection Results

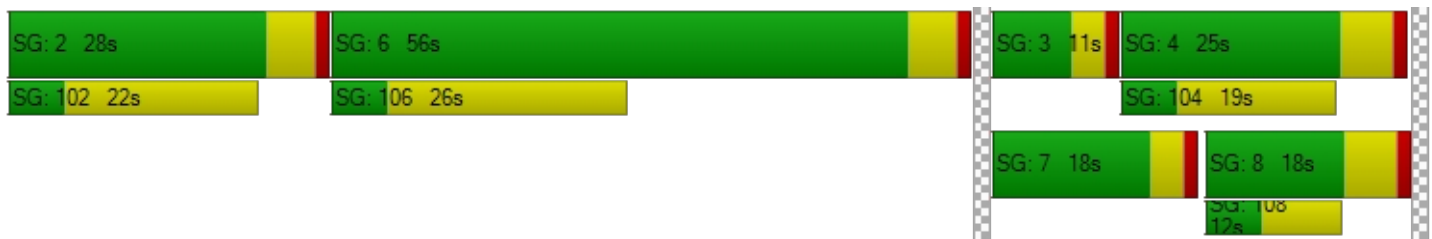
d_M, Delay for Movement [s/veh]	53.82	53.82	53.82	54.86	52.19	51.02	67.20	23.20	23.23	66.63	16.81	16.84
Movement LOS	D	D	D	D	D	D	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	53.82			53.74			23.56			24.87		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	32.28											
Intersection LOS	C											
Intersection V/C	0.490											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.118	2.242	2.715	2.855
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	845	378	205	322
d_b, Bicycle Delay [s]	20.01	39.45	48.33	42.25
I_b,int, Bicycle LOS Score for Intersection	2.157	1.748	2.178	1.973
Bicycle LOS	B	A	B	A

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Evans Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	11.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Evans 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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	2	854	1	0	549
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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	854	1	0	549
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	0	1	227	0	0	146
Total Analysis Volume [veh/h]	0	2	907	1	0	583
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	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	24.92	11.47	0.00	0.00	9.75	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.27	0.27	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.47		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.02					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 13: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	31.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.501

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		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	29	6	85	324	0	60	151	608	24	70	475	350
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	6	85	324	0	60	151	608	24	70	475	350
Peak Hour Factor	0.9270	0.9270	0.9270	0.9270	1.0000	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]	8	2	23	87	0	16	41	164	6	19	128	94
Total Analysis Volume [veh/h]	31	6	92	350	0	65	163	656	26	76	512	378
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	Semi-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	Permiss	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	5	0	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	7	0	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	30	0	0	30	30	0	30	30	0
Amber [s]	0.0	5.0	0.0	5.0	0.0	0.0	3.0	4.7	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	32	0	27	0	0	33	35	0	26	28	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	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	21	0	0	0	7	0	0	17	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	4.0	0.0	4.0	0.0	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	L	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	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]	4.00	4.00	4.00	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	11	14	14	13	66	66	7	60	60
g / C, Green / Cycle	0.09	0.12	0.12	0.11	0.55	0.55	0.06	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.08	0.10	0.02	0.09	0.18	0.02	0.04	0.14	0.23
s, saturation flow rate [veh/h]	1670	3514	2859	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	157	422	344	195	1988	888	100	1798	803
d1, Uniform Delay [s]	53.38	51.58	47.52	52.46	14.87	12.37	55.88	17.69	19.82
k, delay calibration	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
d2, Incremental Delay [s]	10.16	4.22	0.26	8.92	0.45	0.06	11.02	0.40	1.98
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	0.83	0.19	0.83	0.33	0.03	0.76	0.28	0.47
d, Delay for Lane Group [s/veh]	63.54	55.79	47.79	61.38	15.32	12.43	66.90	18.09	21.81
Lane Group LOS	E	E	D	E	B	B	E	B	C
Critical Lane Group	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.10	5.17	0.85	5.13	4.61	0.31	2.51	3.96	6.83
50th-Percentile Queue Length [ft/ln]	102.61	129.16	21.36	128.31	115.21	7.77	62.63	99.06	170.86
95th-Percentile Queue Length [veh/ln]	7.39	8.89	1.54	8.85	8.13	0.56	4.51	7.13	11.12
95th-Percentile Queue Length [ft/ln]	184.69	222.35	38.44	221.20	203.22	13.99	112.73	178.30	278.04

Movement, Approach, & Intersection Results

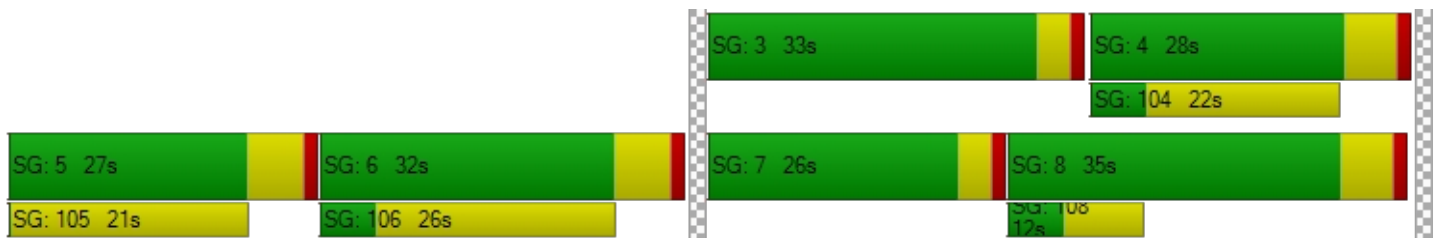
d_M, Delay for Movement [s/veh]	63.54	63.54	63.54	55.79	0.00	47.79	61.38	15.32	12.43	66.90	18.09	21.81
Movement LOS	E	E	E	E		D	E	B	B	E	B	C
d_A, Approach Delay [s/veh]	63.54			54.54			24.11			23.38		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	31.33											
Intersection LOS	C											
Intersection V/C	0.501											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	4.0	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	56.07	51.34
I_p,int, Pedestrian LOS Score for Intersection	1.937	2.659	2.865	3.027
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	350	488	372
d_b, Bicycle Delay [s]	36.82	40.84	34.28	39.77
I_b,int, Bicycle LOS Score for Intersection	1.772	1.560	2.257	2.357
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 14: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	20.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.691

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			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 On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	124	0	245	0	722	499	105	703	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	124	0	245	0	722	499	105	703	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9850	0.9850	0.9850	1.0000	0.9850	0.9850	0.9850	0.9850	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	0	62	0	183	127	27	178	0
Total Analysis Volume [veh/h]	0	0	0	126	0	249	0	733	507	107	714	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	Semi-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	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	10	0	0	10	0	7	10	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	40	0	0	69	0	11	80	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	14	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	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]		120	120	120	120	120	120
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]		21	21	75	75	9	88
g / C, Green / Cycle		0.17	0.17	0.63	0.63	0.07	0.73
(v / s)_i Volume / Saturation Flow Rate		0.07	0.15	0.39	0.31	0.06	0.20
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		317	283	1188	1010	134	2651
d1, Uniform Delay [s]		43.85	48.23	13.70	12.27	54.67	5.33
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]		0.80	8.60	2.40	1.78	10.29	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		0.40	0.88	0.62	0.50	0.80	0.27
d, Delay for Lane Group [s/veh]		44.65	56.83	16.11	14.05	64.96	5.58
Lane Group LOS		D	E	B	B	E	A
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		3.31	7.73	11.14	6.91	3.46	2.35
50th-Percentile Queue Length [ft/ln]		82.85	193.16	278.58	172.72	86.53	58.84
95th-Percentile Queue Length [veh/ln]		5.97	12.29	16.62	11.22	6.23	4.24
95th-Percentile Queue Length [ft/ln]		149.13	307.13	415.44	280.48	155.75	105.91

Movement, Approach, & Intersection Results

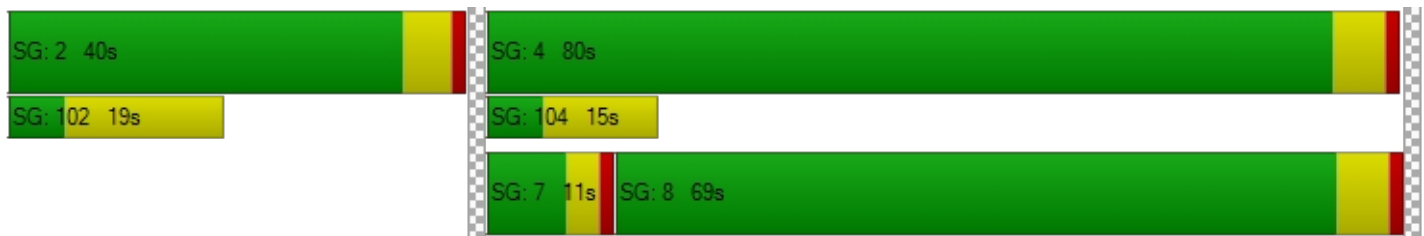
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	44.65	44.65	56.83	0.00	16.11	14.05	64.96	5.58	0.00
Movement LOS				D	D	E		B	B	E	A	
d_A, Approach Delay [s/veh]	0.00			52.74			15.27			13.32		
Approach LOS	A			D			B			B		
d_I, Intersection Delay [s/veh]	20.38											
Intersection LOS	C											
Intersection V/C	0.691											

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	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.138	0.000	2.829
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	578	1055	1238
d_b, Bicycle Delay [s]	60.00	30.32	13.40	8.70
I_b,int, Bicycle LOS Score for Intersection	4.132	2.178	3.606	2.237
Bicycle LOS	D	B	D	B

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	32.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.702

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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]	45.00			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 Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	351	0	135	0	0	0	270	580	0	0	456	143
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	351	0	135	0	0	0	270	580	0	0	456	143
Peak Hour Factor	0.9650	0.9650	0.9650	1.0000	1.0000	1.0000	0.9650	0.9650	1.0000	1.0000	0.9650	0.9650
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	91	0	35	0	0	0	70	150	0	0	118	37
Total Analysis Volume [veh/h]	364	0	140	0	0	0	280	601	0	0	473	148
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	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

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	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	51	0	0	0	0	27	69	0	0	42	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	10	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	3.3	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]	5.30	5.30		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]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	27	27		21	82	57
g / C, Green / Cycle	0.22	0.22		0.17	0.69	0.48
(v / s)_i Volume / Saturation Flow Rate	0.20	0.09		0.15	0.32	0.34
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1823
c, Capacity [veh/h]	404	361		313	1301	872
d1, Uniform Delay [s]	45.28	39.61		48.53	8.72	24.76
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]	7.42	0.68		8.81	1.18	4.92
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	0.90	0.39		0.89	0.46	0.71
d, Delay for Lane Group [s/veh]	52.71	40.29		57.34	9.90	29.68
Lane Group LOS	D	D		E	A	C
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	11.01	3.49		8.64	6.31	13.97
50th-Percentile Queue Length [ft/ln]	275.36	87.33		216.04	157.68	349.24
95th-Percentile Queue Length [veh/ln]	16.46	6.29		13.46	10.43	20.10
95th-Percentile Queue Length [ft/ln]	411.43	157.19		336.56	260.65	502.48

Movement, Approach, & Intersection Results

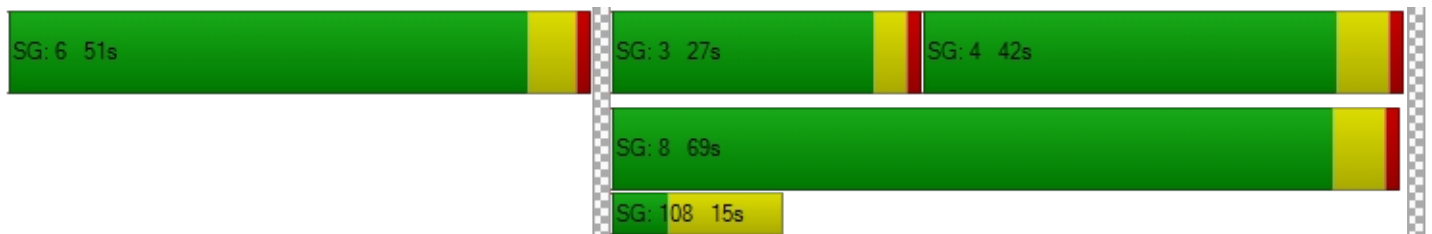
d_M, Delay for Movement [s/veh]	52.71	52.71	40.29	0.00	0.00	0.00	57.34	9.90	0.00	0.00	29.68	29.68
Movement LOS	D	D	D				E	A			C	C
d_A, Approach Delay [s/veh]	49.26			0.00			24.98			29.68		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	32.53											
Intersection LOS	C											
Intersection V/C	0.702											

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	2.201	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]	762	0	1055	605
d_b, Bicycle Delay [s]	23.00	60.00	13.40	29.19
I_b,int, Bicycle LOS Score for Intersection	2.391	4.132	3.013	2.584
Bicycle LOS	B	D	C	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Trumble Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	28.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.505

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	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	99	9	34	8	9	109	87	558	34	61	341	11
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	99	9	34	8	9	109	87	558	34	61	341	11
Peak Hour Factor	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	3	9	2	3	30	24	155	9	17	95	3
Total Analysis Volume [veh/h]	110	10	38	9	10	121	97	621	38	68	380	12
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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	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]	20	27	0	14	21	0	37	51	0	28	42	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	2	0	0	11	0	0	11	0
Pedestrian Clearance [s]	0	10	0	0	14	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	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	4.00	4.00	4.00	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	2.00	2.00	2.00	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	9	19	2	12	8	75	75	6	73
g / C, Green / Cycle	0.08	0.16	0.02	0.10	0.07	0.63	0.63	0.05	0.61
(v / s)_i Volume / Saturation Flow Rate	0.06	0.03	0.00	0.08	0.05	0.33	0.02	0.04	0.21
s, saturation flow rate [veh/h]	1810	1667	1810	1634	1810	1900	1615	1810	1890
c, Capacity [veh/h]	137	261	28	157	125	1192	1013	97	1155
d1, Uniform Delay [s]	54.58	43.98	58.43	53.28	54.91	12.39	8.54	55.86	11.44
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]	10.39	0.34	6.27	10.79	9.64	1.63	0.07	8.93	0.80
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	0.80	0.18	0.32	0.83	0.77	0.52	0.04	0.70	0.34
d, Delay for Lane Group [s/veh]	64.97	44.32	64.69	64.07	64.55	14.02	8.61	64.79	12.24
Lane Group LOS	E	D	E	E	E	B	A	E	B
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.67	1.27	0.32	4.35	3.13	8.48	0.35	2.20	4.78
50th-Percentile Queue Length [ft/ln]	91.66	31.80	8.00	108.79	78.22	212.03	8.86	55.06	119.40
95th-Percentile Queue Length [veh/ln]	6.60	2.29	0.58	7.77	5.63	13.26	0.64	3.96	8.36
95th-Percentile Queue Length [ft/ln]	164.99	57.23	14.40	194.31	140.80	331.44	15.95	99.12	209.00

Movement, Approach, & Intersection Results

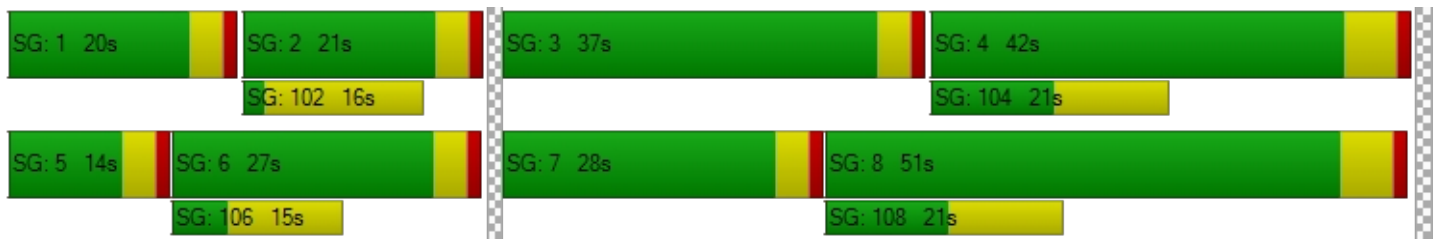
d_M, Delay for Movement [s/veh]	64.97	44.32	44.32	64.69	64.07	64.07	64.55	14.02	8.61	64.79	12.24	12.24
Movement LOS	E	D	D	E	E	E	E	B	A	E	B	B
d_A, Approach Delay [s/veh]	58.70			64.11			20.23			20.01		
Approach LOS	E			E			C			C		
d_I, Intersection Delay [s/veh]	28.24											
Intersection LOS	C											
Intersection V/C	0.505											

Other Modes

g_Walk,mi, Effective Walk Time [s]	15.0	15.0	6.0	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]	45.94	45.94	54.15	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.040	2.035	2.704	2.566
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	383	283	755	605
d_b, Bicycle Delay [s]	39.20	44.20	23.25	29.19
I_b,int, Bicycle LOS Score for Intersection	1.820	1.791	2.807	2.319
Bicycle LOS	A	A	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Sherman Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	49.4
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.058

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews 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	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews Rd		
Base Volume Input [veh/h]	4	3	2	5	7	196	229	222	14	0	246	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	3	2	5	7	196	229	222	14	0	246	8
Peak Hour Factor	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540
Other Adjustment Factor	1.0000	1.0000	1.0000	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	1	1	1	2	57	67	65	4	0	72	2
Total Analysis Volume [veh/h]	5	4	2	6	8	230	268	260	16	0	288	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	0.06	0.02	0.00	0.04	0.05	0.31	0.21	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	49.37	30.02	12.24	32.53	31.30	13.56	8.57	0.00	0.00	7.77	0.00	0.00
Movement LOS	E	D	B	D	D	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.28	0.28	0.28	1.89	1.89	1.89	0.79	0.79	0.79	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	6.88	6.88	6.88	47.20	47.20	47.20	19.82	19.82	19.82	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	35.58			14.61			4.22			0.00		
Approach LOS	E			B			A			A		
d_I, Intersection Delay [s/veh]	5.71											
Intersection LOS	E											

Intersection Level Of Service Report
Intersection 18: Byers Rd at McLaughlin Rd

Control Type:	All-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Byers Rd			Byers 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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Byers Rd			Byers Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	923	923	923	923
Degree of Utilization, x	0.00	0.00	0.00	0.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	0.00	0.00	0.00	0.00
Approach Delay [s/veh]	0.00	0.00	0.00	0.00
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	0.00			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 19: Murrieta Rd at McLaughlin Rd

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):	0.013

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	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]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	1	298	2	12	147	2	6	0	3	0	0	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	298	2	12	147	2	6	0	3	0	0	31
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	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	76	1	3	38	1	2	0	1	0	0	8
Total Analysis Volume [veh/h]	1	305	2	12	151	2	6	0	3	0	0	32
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	0.00	0.00	0.04
d_M, Delay for Movement [s/veh]	7.50	0.00	0.00	7.87	0.00	0.00	12.94	12.61	9.11	12.57	12.72	10.09
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.03	0.00	0.00	0.05	0.05	0.05	0.14	0.14	0.14
95th-Percentile Queue Length [ft/ln]	0.05	0.00	0.00	0.72	0.00	0.00	1.25	1.25	1.25	3.39	3.39	3.39
d_A, Approach Delay [s/veh]	0.02			0.57			11.66			10.09		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.03											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 20: Murrieta Rd at Rouse Rd

Control Type:	Two-way stop	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

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	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	3	234	7	28	120	4	14	18	6	10	3	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	234	7	28	120	4	14	18	6	10	3	40
Peak Hour Factor	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950
Other Adjustment Factor	1.0000	1.0000	1.0000	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	65	2	8	34	1	4	5	2	3	1	11
Total Analysis Volume [veh/h]	3	261	8	31	134	4	16	20	7	11	3	45
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	0.02	0.00	0.00	0.04	0.04	0.01	0.02	0.01	0.06
d_M, Delay for Movement [s/veh]	7.47	0.00	0.00	7.82	0.00	0.00	13.26	12.81	8.94	12.82	12.49	9.88
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	0.07	0.00	0.00	0.11	0.13	0.02	0.07	0.02	0.18
95th-Percentile Queue Length [ft/ln]	0.15	0.00	0.00	1.82	0.00	0.00	2.75	3.25	0.57	1.79	0.47	4.57
d_A, Approach Delay [s/veh]	0.08			1.43			12.35			10.56		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.61											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 21: Murrieta Rd at Chambers Ave

Control Type:	All-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):	0.331

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	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	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Base Volume Input [veh/h]	36	211	2	36	188	8	28	44	51	7	10	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	211	2	36	188	8	28	44	51	7	10	15
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]	10	57	1	10	51	2	8	12	14	2	3	4
Total Analysis Volume [veh/h]	39	229	2	39	204	9	30	48	55	8	11	16
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	589	641	643	588	644	619	559	606	686
Degree of Utilization, x	0.07	0.18	0.18	0.07	0.33	0.21	0.01	0.02	0.02

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.21	0.65	0.65	0.21	1.44	0.81	0.04	0.06	0.07
95th-Percentile Queue Length [ft]	5.31	16.33	16.28	5.31	36.12	20.24	1.09	1.39	1.79
Approach Delay [s/veh]	9.50			10.76		10.40	8.55		
Approach LOS	A			B		B	A		
Intersection Delay [s/veh]	10.08								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 22: Murrieta Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	35.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.307

Intersection Setup

Name	Murrieta Rd			Murrieta 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	149	111	50	90	92	79	191	1	25	113	76
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	149	111	50	90	92	79	191	1	25	113	76
Peak Hour Factor	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160
Other Adjustment Factor	1.0000	1.0000	1.0000	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	41	30	14	25	25	22	52	0	7	31	21
Total Analysis Volume [veh/h]	0	163	121	55	98	100	86	209	1	27	123	83
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	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	11	30	0	17	36	0	0	24	0	0	49	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	14	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	0.0	2.0	3.3	0.0	0.0	2.6	0.0	0.0	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	L	C	R	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]	4.00	5.30	4.00	5.30	5.30	4.60	4.60	4.60	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	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	2.00	3.30	3.30	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	0	76	6	81	81	10	10	10	10	10	10
g / C, Green / Cycle	0.00	0.63	0.05	0.68	0.68	0.08	0.08	0.08	0.08	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.00	0.16	0.03	0.05	0.06	0.05	0.06	0.06	0.01	0.06	0.06
s, saturation flow rate [veh/h]	1810	1767	1810	1900	1615	1810	1900	1897	1810	1900	1657
c, Capacity [veh/h]	0	1111	89	1287	1094	151	159	159	153	160	140
d1, Uniform Delay [s]	0.00	9.86	55.94	6.58	6.65	52.90	53.33	53.33	51.06	53.27	53.52
k, delay calibration	0.11	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	0.00	0.56	6.77	0.12	0.17	3.33	4.63	4.65	0.55	4.60	6.61
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	0.00	0.26	0.62	0.08	0.09	0.57	0.66	0.66	0.18	0.66	0.71
d, Delay for Lane Group [s/veh]	0.00	10.42	62.71	6.69	6.82	56.22	57.96	57.99	51.61	57.87	60.13
Lane Group LOS	A	B	E	A	A	E	E	E	D	E	E
Critical Lane Group	No	Yes	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	3.15	1.76	0.78	0.81	2.62	3.26	3.25	0.77	3.29	3.17
50th-Percentile Queue Length [ft/ln]	0.00	78.64	44.08	19.51	20.33	65.43	81.39	81.34	19.37	82.17	79.32
95th-Percentile Queue Length [veh/ln]	0.00	5.66	3.17	1.41	1.46	4.71	5.86	5.86	1.39	5.92	5.71
95th-Percentile Queue Length [ft/ln]	0.00	141.55	79.35	35.13	36.59	117.78	146.50	146.41	34.87	147.90	142.78

Movement, Approach, & Intersection Results

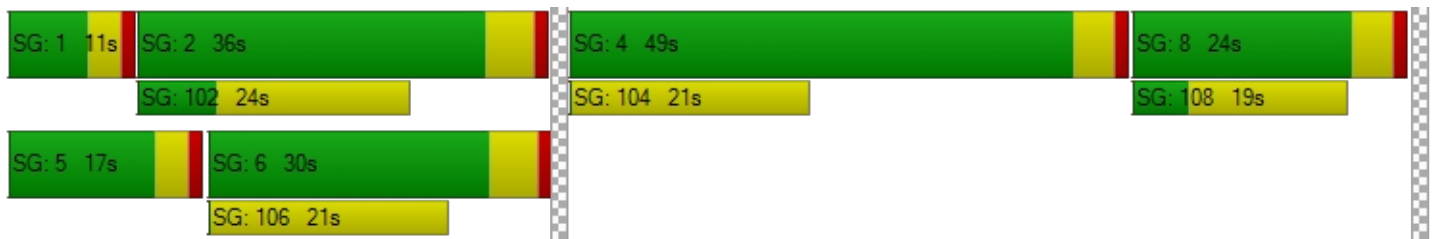
d_M, Delay for Movement [s/veh]	0.00	10.42	10.42	62.71	6.69	6.82	56.22	57.97	57.99	51.61	58.18	60.13
Movement LOS	A	B	B	E	A	A	E	E	E	D	E	E
d_A, Approach Delay [s/veh]	10.42			18.92			57.47			58.11		
Approach LOS	B			B			E			E		
d_I, Intersection Delay [s/veh]	35.93											
Intersection LOS	D											
Intersection V/C	0.307											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	4.0	11.0	4.0
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	56.07	49.50	56.07
I_p,int, Pedestrian LOS Score for Intersection	2.155	2.614	2.432	2.589
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	412	512	323	740
d_b, Bicycle Delay [s]	37.84	33.23	42.17	23.81
I_b,int, Bicycle LOS Score for Intersection	2.028	1.977	1.804	1.752
Bicycle LOS	B	A	A	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 23: Sun City Blvd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	26.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.263

Intersection Setup

Name	Sun City Blvd			Sun City Blvd			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	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sun City Blvd			Sun City Blvd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	31	53	58	54	45	8	25	371	32	136	306	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	53	58	54	45	8	25	371	32	136	306	42
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	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	14	15	14	12	2	7	98	8	36	80	11
Total Analysis Volume [veh/h]	33	56	61	57	47	8	26	390	34	143	322	44
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	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	26	0	0	22	0	34	26	0	46	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	1	0	0	4	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	14	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	C	C	R	C	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	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	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	2.20	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	10	10	10	10	10	4	72	72	12	79	79
g / C, Green / Cycle	0.08	0.08	0.08	0.08	0.08	0.03	0.60	0.60	0.10	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.03	0.02	0.04	0.03	0.03	0.01	0.11	0.11	0.08	0.10	0.10
s, saturation flow rate [veh/h]	1835	1729	1615	1812	1685	1810	1900	1847	1810	1900	1821
c, Capacity [veh/h]	153	144	134	148	137	63	1135	1103	174	1252	1200
d1, Uniform Delay [s]	51.74	51.71	52.42	52.30	52.27	56.73	10.97	10.99	53.19	7.74	7.75
k, delay calibration	0.11	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]	1.11	1.14	2.39	1.71	1.79	4.32	0.37	0.38	9.11	0.25	0.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.30	0.45	0.40	0.39	0.41	0.19	0.19	0.82	0.15	0.15
d, Delay for Lane Group [s/veh]	52.85	52.85	54.80	54.01	54.06	61.05	11.34	11.37	62.30	7.99	8.01
Lane Group LOS	D	D	D	D	D	E	B	B	E	A	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.36	1.26	1.84	1.75	1.60	0.84	2.60	2.56	4.64	1.78	1.73
50th-Percentile Queue Length [ft/ln]	34.10	31.38	46.10	43.67	40.02	21.06	65.04	63.89	115.91	44.62	43.32
95th-Percentile Queue Length [veh/ln]	2.46	2.26	3.32	3.14	2.88	1.52	4.68	4.60	8.17	3.21	3.12
95th-Percentile Queue Length [ft/ln]	61.38	56.49	82.98	78.61	72.03	37.91	117.06	115.00	204.19	80.32	77.98

Movement, Approach, & Intersection Results

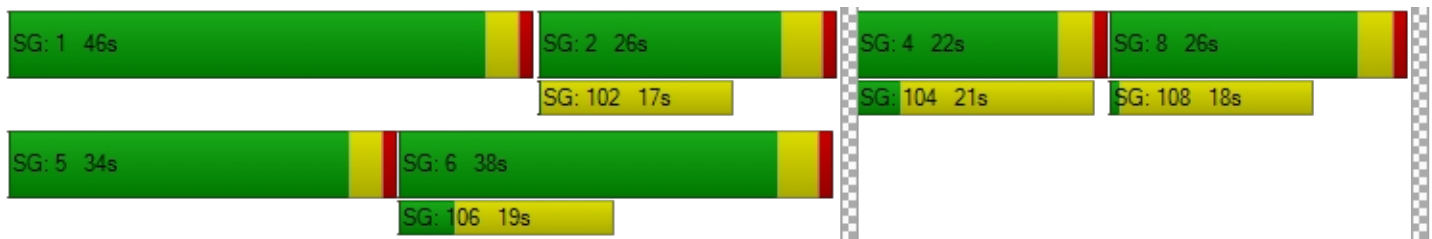
d_M, Delay for Movement [s/veh]	52.85	52.85	54.80	54.01	54.06	54.06	61.05	11.35	11.37	62.30	8.00	8.01
Movement LOS	D	D	D	D	D	D	E	B	B	E	A	A
d_A, Approach Delay [s/veh]	53.64			54.03			14.23			23.25		
Approach LOS	D			D			B			C		
d_I, Intersection Delay [s/veh]	26.48											
Intersection LOS	C											
Intersection V/C	0.263											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	9.0	8.0	5.0
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]	56.07	51.34	52.27	55.10
l_p,int, Pedestrian LOS Score for Intersection	2.392	2.204	2.501	2.549
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	363	297	357	557
d_b, Bicycle Delay [s]	40.18	43.52	40.51	31.25
l_b,int, Bicycle LOS Score for Intersection	1.683	1.652	1.931	1.980
Bicycle LOS	A	A	A	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 24: Bradley Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	31.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.623

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	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	41	44	337	141	51	4	17	466	48	480	464	94
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	41	44	337	141	51	4	17	466	48	480	464	94
Peak Hour Factor	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550
Other Adjustment Factor	1.0000	1.0000	1.0000	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	12	88	37	13	1	4	122	13	126	121	25
Total Analysis Volume [veh/h]	43	46	353	148	53	4	18	488	50	503	486	98
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	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	10	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [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
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	21	21	0	27	0	33	39	0	33	39	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	0	0	0	0	0	0	17	0	0	5	0
Pedestrian Clearance [s]	0	21	21	0	17	0	0	14	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	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	2.0	2.0	0.0	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	
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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	10	51	12	12	3	45	45	37	79	79
g / C, Green / Cycle	0.09	0.09	0.42	0.10	0.10	0.03	0.38	0.38	0.30	0.65	0.65
(v / s)_i Volume / Saturation Flow Rate	0.02	0.02	0.22	0.08	0.03	0.01	0.14	0.14	0.28	0.16	0.16
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1877	1810	1900	1839	1810	1900	1791
c, Capacity [veh/h]	155	162	684	181	188	49	716	693	551	1243	1171
d1, Uniform Delay [s]	51.44	51.46	25.54	52.96	50.15	57.38	27.23	27.26	40.19	8.53	8.53
k, delay calibration	0.11	0.11	0.36	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]	0.97	0.95	2.00	8.73	0.90	4.47	1.54	1.61	6.32	0.46	0.49
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.28	0.52	0.82	0.30	0.37	0.38	0.38	0.91	0.24	0.24
d, Delay for Lane Group [s/veh]	52.41	52.41	27.54	61.69	51.05	61.84	28.77	28.87	46.51	8.99	9.02
Lane Group LOS	D	D	C	E	D	E	C	C	D	A	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.26	1.34	7.76	4.81	1.64	0.59	5.93	5.79	14.95	3.16	2.99
50th-Percentile Queue Length [ft/ln]	31.44	33.61	194.08	120.31	41.05	14.86	148.17	144.67	373.85	78.94	74.70
95th-Percentile Queue Length [veh/ln]	2.26	2.42	12.33	8.41	2.96	1.07	9.92	9.73	21.30	5.68	5.38
95th-Percentile Queue Length [ft/ln]	56.60	60.49	308.31	210.25	73.89	26.75	247.99	243.29	532.40	142.10	134.47

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.41	52.41	27.54	61.69	51.05	51.05	61.84	28.81	28.87	46.51	9.00	9.02
Movement LOS	D	D	C	E	D	D	E	C	C	D	A	A
d_A, Approach Delay [s/veh]	32.55			58.73			29.89			26.36		
Approach LOS	C			E			C			C		
d_I, Intersection Delay [s/veh]	31.31											
Intersection LOS	C											
Intersection V/C	0.623											

Other Modes

g_Walk,mi, Effective Walk Time [s]	21.0	9.0	4.0	4.0
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]	40.85	51.35	56.08	56.08
I_p,int, Pedestrian LOS Score for Intersection	2.393	2.075	2.566	2.865
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	283	383	583	583
d_b, Bicycle Delay [s]	44.22	39.22	30.12	30.12
I_b,int, Bicycle LOS Score for Intersection	2.289	1.898	2.018	2.456
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level of Service Report
Intersection 25: I-215 SB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	32.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.695

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	363	3	477	0	844	318	287	813	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	363	3	477	0	844	318	287	813	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9880	0.9880	0.9880	1.0000	0.9880	0.9880	0.9880	0.9880	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	92	1	121	0	214	80	73	206	0
Total Analysis Volume [veh/h]	0	0	0	367	3	483	0	854	322	290	823	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	Semi-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	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Unsigna	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	10	0	0	10	0	7	10	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	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	64	0	0	31	0	25	56	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	21	0	0	3	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	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	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	L	C
C, Cycle Length [s]		120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	2.60	2.00	2.60
g_i, Effective Green Time [s]		39	39	46	21	71
g / C, Green / Cycle		0.32	0.32	0.38	0.18	0.59
(v / s)_i Volume / Saturation Flow Rate		0.20	0.30	0.24	0.16	0.23
s, saturation flow rate [veh/h]		1810	1615	3618	1810	3618
c, Capacity [veh/h]		589	525	1374	324	2142
d1, Uniform Delay [s]		34.32	38.96	30.21	48.17	12.92
k, delay calibration		0.11	0.17	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		1.11	10.31	2.12	8.70	0.52
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.63	0.92	0.62	0.90	0.38
d, Delay for Lane Group [s/veh]		35.43	49.26	32.33	56.87	13.45
Lane Group LOS		D	D	C	E	B
Critical Lane Group		No	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		8.99	14.56	10.21	9.16	5.73
50th-Percentile Queue Length [ft/ln]		224.84	364.05	255.18	228.97	143.16
95th-Percentile Queue Length [veh/ln]		13.91	20.82	15.45	14.12	9.65
95th-Percentile Queue Length [ft/ln]		347.80	520.51	386.17	353.06	241.28

Movement, Approach, & Intersection Results

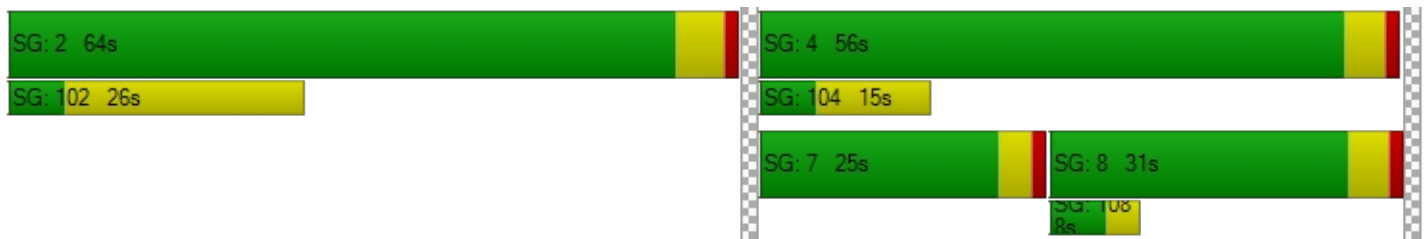
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	35.43	35.43	49.26	0.00	32.33	0.00	56.87	13.45	0.00
Movement LOS				D	D	D		C		E	B	
d_A, Approach Delay [s/veh]	0.00			43.26			32.33			24.76		
Approach LOS	A			D			C			C		
d_I, Intersection Delay [s/veh]	32.65											
Intersection LOS	C											
Intersection V/C	0.695											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	1.724	2.371	2.806	2.911
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	978	440	857
d_b, Bicycle Delay [s]	60.00	15.66	36.50	19.61
I_b,int, Bicycle LOS Score for Intersection	4.132	2.967	2.264	2.478
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: I-215 NB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	26.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.588

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	201	0	256	0	0	0	234	603	0	0	957	495
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	201	0	256	0	0	0	234	603	0	0	957	495
Peak Hour Factor	0.9390	0.9390	0.9390	1.0000	1.0000	1.0000	0.9390	0.9390	1.0000	1.0000	0.9390	0.9390
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	0	68	0	0	0	62	161	0	0	255	132
Total Analysis Volume [veh/h]	214	0	273	0	0	0	249	642	0	0	1019	527
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	Semi-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	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	36	0	0	0	0	29	84	0	0	55	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	21	0	0	0	0	0	10	0	0	3	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	3.3	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
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	2.60	2.60
g_i, Effective Green Time [s]	23	23		19	87	65
g / C, Green / Cycle	0.19	0.19		0.16	0.73	0.54
(v / s)_i Volume / Saturation Flow Rate	0.12	0.17		0.14	0.18	0.28
s, saturation flow rate [veh/h]	1810	1615		1810	3618	3618
c, Capacity [veh/h]	344	307		282	2632	1947
d1, Uniform Delay [s]	44.66	47.39		49.56	5.41	17.81
k, delay calibration	0.11	0.18		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	1.85	13.70		8.82	0.22	1.01
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.62	0.89		0.88	0.24	0.52
d, Delay for Lane Group [s/veh]	46.51	61.08		58.38	5.63	18.82
Lane Group LOS	D	E		E	A	B
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	5.87	8.87		7.92	2.40	8.97
50th-Percentile Queue Length [ft/ln]	146.71	221.79		198.00	60.11	224.13
95th-Percentile Queue Length [veh/ln]	9.84	13.76		12.54	4.33	13.88
95th-Percentile Queue Length [ft/ln]	246.04	343.92		313.39	108.20	346.89

Movement, Approach, & Intersection Results

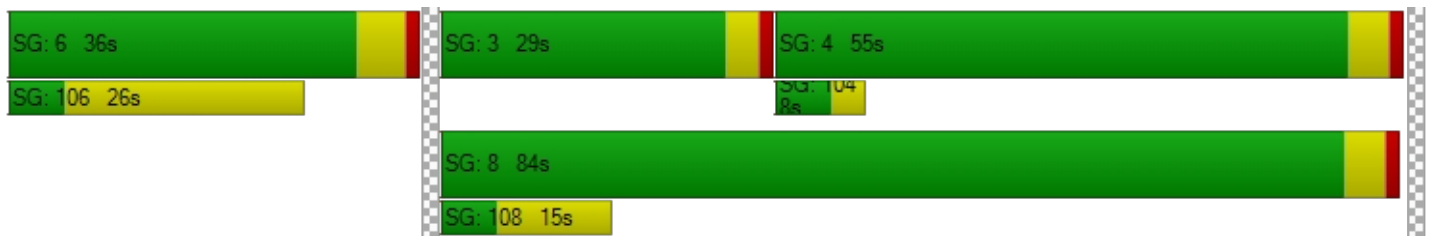
d_M, Delay for Movement [s/veh]	46.51	46.51	61.08	0.00	0.00	0.00	58.38	5.63	0.00	0.00	18.82	0.00
Movement LOS	D	D	E				E	A			B	
d_A, Approach Delay [s/veh]	54.68			0.00			20.37			18.82		
Approach LOS	D			A			C			B		
d_I, Intersection Delay [s/veh]	26.68											
Intersection LOS	C											
Intersection V/C	0.588											

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]	51.34	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	2.193	1.681	2.798	2.835
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	512	0	1323	840
d_b, Bicycle Delay [s]	33.23	60.00	6.87	20.18
l_b,int, Bicycle LOS Score for Intersection	2.363	4.132	2.295	2.400
Bicycle LOS	B	D	B	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 27: Encanto Dr at McCall Blvd**

Control Type:	Signalized	Delay (sec / veh):	25.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.548

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]	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	196	28	80	30	18	121	113	653	76	72	1129	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	196	28	80	30	18	121	113	653	76	72	1129	31
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	7	21	8	5	32	29	170	20	19	295	8
Total Analysis Volume [veh/h]	205	29	84	31	19	126	118	682	79	75	1178	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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	10	0	0	10	0	7	10	0	7	10	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	3.0	0.0	3.0	3.0	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	35	0	0	35	0	31	62	0	23	54	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	21	0	0	17	0	0	14	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	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	4.20	4.20	4.20	4.00	4.00	4.00	4.00	4.00	4.00
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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	31	31	31	31	31	10	70	70	7	67	67
g / C, Green / Cycle	0.26	0.26	0.26	0.26	0.26	0.08	0.59	0.59	0.05	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.16	0.02	0.05	0.02	0.09	0.07	0.20	0.20	0.04	0.32	0.32
s, saturation flow rate [veh/h]	1263	1900	1615	1300	1647	1810	1900	1832	1810	1900	1882
c, Capacity [veh/h]	273	488	414	357	423	149	1114	1074	100	1063	1053
d1, Uniform Delay [s]	49.54	33.67	34.97	36.59	36.35	54.06	12.89	12.89	55.88	17.12	17.13
k, delay calibration	0.18	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]	6.76	0.05	0.24	0.10	0.48	9.08	0.86	0.89	10.73	2.23	2.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.75	0.06	0.20	0.09	0.34	0.79	0.35	0.35	0.75	0.57	0.57
d, Delay for Lane Group [s/veh]	56.30	33.72	35.21	36.70	36.83	63.14	13.74	13.78	66.60	19.36	19.39
Lane Group LOS	E	C	D	D	D	E	B	B	E	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.59	0.65	1.97	0.74	3.54	3.85	5.45	5.26	2.52	10.98	10.90
50th-Percentile Queue Length [ft/ln]	164.76	16.29	49.19	18.39	88.43	96.20	136.15	131.55	63.01	274.38	272.38
95th-Percentile Queue Length [veh/ln]	10.80	1.17	3.54	1.32	6.37	6.93	9.27	9.02	4.54	16.41	16.31
95th-Percentile Queue Length [ft/ln]	270.01	29.32	88.53	33.10	159.18	173.15	231.83	225.60	113.42	410.21	407.71

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.30	33.72	35.21	36.70	36.83	36.83	63.14	13.76	13.78	66.60	19.37	19.39
Movement LOS	E	C	D	D	D	D	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	48.67			36.81			20.39			22.13		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	25.70											
Intersection LOS	C											
Intersection V/C	0.548											

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]	51.34	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	2.266	2.071	3.150	2.907
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	513	513	967	833
d_b, Bicycle Delay [s]	33.15	33.15	16.02	20.42
l_b,int, Bicycle LOS Score for Intersection	2.084	1.850	2.285	2.620
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 28: Sherman Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	18.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.464

Intersection Setup

Name	Sherman Rd			Sherman 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	26	6	26	53	10	81	112	563	19	22	1024	54
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	6	26	53	10	81	112	563	19	22	1024	54
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]	7	2	7	15	3	23	31	158	5	6	288	15
Total Analysis Volume [veh/h]	29	7	29	60	11	91	126	633	21	25	1151	61
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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	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	3.6	0.0	3.0	3.6	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	11	31	0	23	67	0	11	55	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	10	0	0	14	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	2.6	0.0	2.0	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.20	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]	2.00	2.20	2.00	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	4	8	6	10	10	10	85	85	4	79	79
g / C, Green / Cycle	0.04	0.07	0.05	0.08	0.08	0.09	0.71	0.71	0.03	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.02	0.02	0.03	0.01	0.06	0.07	0.17	0.17	0.01	0.32	0.32
s, saturation flow rate [veh/h]	1810	1664	1810	1900	1615	1810	1900	1879	1810	1900	1867
c, Capacity [veh/h]	66	112	91	155	132	156	1347	1332	60	1246	1224
d1, Uniform Delay [s]	56.63	53.33	55.95	50.89	53.62	53.85	6.15	6.15	56.87	10.48	10.48
k, delay calibration	0.11	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]	4.59	1.63	7.75	0.19	6.28	9.44	0.43	0.44	4.54	1.38	1.41
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	0.44	0.32	0.66	0.07	0.69	0.81	0.24	0.24	0.42	0.49	0.49
d, Delay for Lane Group [s/veh]	61.22	54.96	63.70	51.09	59.90	63.28	6.58	6.59	61.41	11.86	11.89
Lane Group LOS	E	D	E	D	E	E	A	A	E	B	B
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.95	1.09	1.98	0.32	2.91	4.11	2.77	2.75	0.81	7.99	7.87
50th-Percentile Queue Length [ft/ln]	23.64	27.23	49.55	7.88	72.64	102.84	69.33	68.64	20.35	199.63	196.71
95th-Percentile Queue Length [veh/ln]	1.70	1.96	3.57	0.57	5.23	7.40	4.99	4.94	1.47	12.62	12.47
95th-Percentile Queue Length [ft/ln]	42.55	49.01	89.18	14.18	130.75	185.11	124.80	123.54	36.63	315.49	311.72

Movement, Approach, & Intersection Results

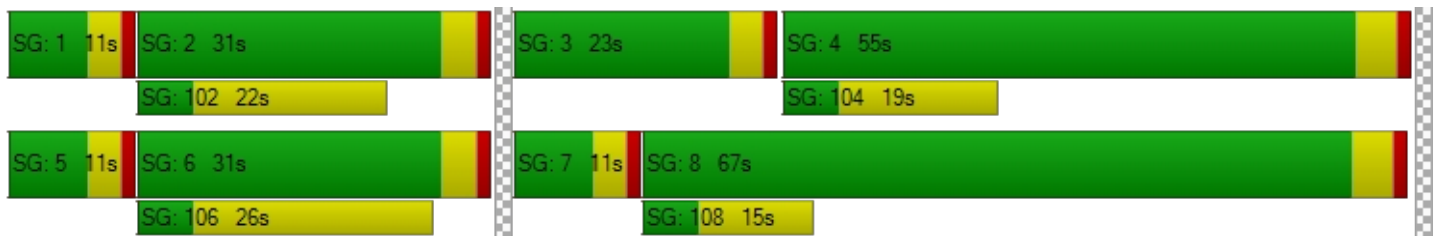
d_M, Delay for Movement [s/veh]	61.22	54.96	54.96	63.70	51.09	59.90	63.28	6.58	6.59	61.41	11.88	11.89
Movement LOS	E	D	D	E	D	E	E	A	A	E	B	B
d_A, Approach Delay [s/veh]	57.75			60.71			15.74			12.88		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	18.63											
Intersection LOS	B											
Intersection V/C	0.464											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	1.995	2.233	2.782	2.839
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	447	447	1040	840
d_b, Bicycle Delay [s]	36.19	36.19	13.82	20.18
I_b,int, Bicycle LOS Score for Intersection	1.667	1.827	2.203	2.580
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



CADO Warehouse Project

Vistro File: K:\...\Menifee CADO_PM.vistro

Scenario 1 EX PM

Report File: K:\...\1 EX PM.pdf

7/21/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Case Rd	Signalized	HCM 6th Edition	NB Right	0.362	29.8	C
2	Murrieta Rd at Case Rd	All-way stop	HCM 6th Edition	EB Thru	0.431	10.8	B
3	Goetz Rd at Mapes Rd	Signalized	HCM 6th Edition	SB Left	0.529	37.6	D
4	I-215 SB Ramps/SR-74 at Bonnie Dr	Signalized	HCM 6th Edition	EB Left	0.520	16.8	B
5	I-215 NB Ramps at SR-74	Signalized	HCM 6th Edition	EB Left	0.422	16.0	B
6	Sherman Rd at SR-74	Signalized	HCM 6th Edition	EB Left	0.537	26.8	C
7	Goetz Rd at Fieldstone Dr	Signalized	HCM 6th Edition	SB Left	0.222	11.4	B
8	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.460	46.2	D
9	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	WB Thru	0.006	0.0	A
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.017	17.7	C
11	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	0.521	35.9	D
12	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.003	10.2	B
13	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.524	33.2	C
14	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.743	26.1	C
15	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	0.749	36.9	D
16	Trumble Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.522	28.4	C
17	Sherman Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.169	38.7	E
			HCM 6th				

18	Byers Rd at McLaughlin Rd	All-way stop	HCM 6th Edition	NB Left	0.000	0.0	A
19	Murrieta Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	EB Left	0.025	18.4	C
20	Murrieta Rd at Rouse Rd	Two-way stop	HCM 6th Edition	EB Left	0.036	18.3	C
21	Murrieta Rd at Chambers Ave	All-way stop	HCM 6th Edition	SB Thru	0.427	10.6	B
22	Murrieta Rd at McCall Blvd	Signalized	HCM 6th Edition	NB Left	0.352	37.0	D
23	Sun City Blvd at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.334	27.6	C
24	Bradley Rd at McCall Blvd	Signalized	HCM 6th Edition	SB Left	0.706	31.6	C
25	I-215 SB Ramps at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.684	33.2	C
26	I-215 NB Ramps at McCall Blvd	Signalized	HCM 6th Edition	EB Left	0.668	31.9	C
27	Encanto Dr at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.515	24.4	C
28	Sherman Rd at McCall Blvd	Signalized	HCM 6th Edition	EB Left	0.301	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: Goetz Rd at Case Rd

Control Type:	Signalized	Delay (sec / veh):	29.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.362

Intersection Setup

Name	Goetz Rd		Case Rd		Case 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	1	0	1	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]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Goetz Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	132	156	199	189	206	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	132	156	199	189	206	260
Peak Hour Factor	0.9050	0.9050	0.9050	0.9050	0.9050	0.9050
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	43	55	52	57	72
Total Analysis Volume [veh/h]	146	172	220	209	228	287
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	Semi-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	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	10	0	7	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.7	0.0	5.0	0.0	3.0	5.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	28	0	21	0	71	92
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]	3.7	0.0	4.0	0.0	2.0	4.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.70	5.70	6.00	6.00	4.00	6.00
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]	3.70	3.70	4.00	4.00	2.00	4.00
g_i, Effective Green Time [s]	15	15	72	72	17	93
g / C, Green / Cycle	0.13	0.13	0.60	0.60	0.14	0.78
(v / s)_i Volume / Saturation Flow Rate	0.08	0.11	0.12	0.13	0.13	0.15
s, saturation flow rate [veh/h]	1810	1615	1900	1615	1810	1900
c, Capacity [veh/h]	227	202	1137	967	263	1477
d1, Uniform Delay [s]	49.94	51.38	10.93	11.10	50.15	3.51
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]	3.05	9.56	0.38	0.51	8.47	0.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.64	0.85	0.19	0.22	0.87	0.19
d, Delay for Lane Group [s/veh]	52.99	60.94	11.31	11.61	58.62	3.80
Lane Group LOS	D	E	B	B	E	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	4.22	5.42	2.44	2.38	7.01	1.27
50th-Percentile Queue Length [ft/ln]	105.52	135.52	61.05	59.46	175.19	31.75
95th-Percentile Queue Length [veh/ln]	7.59	9.24	4.40	4.28	11.35	2.29
95th-Percentile Queue Length [ft/ln]	189.76	230.98	109.89	107.03	283.72	57.16

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.99	60.94	11.31	11.61	58.62	3.80
Movement LOS	D	E	B	B	E	A
d_A, Approach Delay [s/veh]	57.29		11.46		28.07	
Approach LOS	E		B		C	
d_I, Intersection Delay [s/veh]	29.79					
Intersection LOS	C					
Intersection V/C	0.362					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
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	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.364	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	372	250	1433
d_b, Bicycle Delay [s]	39.77	45.94	4.82
I_b,int, Bicycle LOS Score for Intersection	1.560	2.267	2.409
Bicycle LOS	A	B	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Murrieta Rd at Case Rd**

Control Type:	All-way stop	Delay (sec / veh):	10.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.431

Intersection Setup

Name	Murrieta Rd		Case Rd		Case 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	1	0	1	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]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Murrieta Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	104	10	269	104	14	232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	104	10	269	104	14	232
Peak Hour Factor	0.9020	0.9020	0.9020	0.9020	0.9020	0.9020
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	3	75	29	4	64
Total Analysis Volume [veh/h]	115	11	298	115	16	257
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	549	671	692	800	618	676
Degree of Utilization, x	0.21	0.02	0.43	0.14	0.03	0.38

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.78	0.05	2.17	0.50	0.08	1.78
95th-Percentile Queue Length [ft]	19.61	1.25	54.32	12.51	1.99	44.49
Approach Delay [s/veh]	10.75		10.71		11.10	
Approach LOS	B		B		B	
Intersection Delay [s/veh]	10.85					
Intersection LOS	B					

**Intersection Level Of Service Report
Intersection 3: Goetz Rd at Mapes Rd**

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):	0.529

Intersection Setup

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes 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	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes Rd		
Base Volume Input [veh/h]	210	161	0	3	323	63	64	0	317	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	210	161	0	3	323	63	64	0	317	0	0	0
Peak Hour Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	58	44	0	1	89	17	18	0	87	0	0	0
Total Analysis Volume [veh/h]	230	177	0	3	354	69	70	0	348	0	0	0
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	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	0	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	0.0	3.2	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	42	56	0	14	28	0	23	50	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	0.0	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	17	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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	0.0	2.2	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	C	L	C	R	L	C	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.20	4.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.20	2.20
g_i, Effective Green Time [s]	17	77	77	1	60	60	6	28	18	18
g / C, Green / Cycle	0.15	0.64	0.64	0.01	0.50	0.50	0.05	0.23	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.13	0.05	0.05	0.00	0.19	0.04	0.04	0.22	0.00	0.00
s, saturation flow rate [veh/h]	1810	1900	1900	1810	1900	1615	1810	1615	1689	1615
c, Capacity [veh/h]	264	1221	1221	12	956	813	98	379	279	238
d1, Uniform Delay [s]	50.12	8.04	8.04	59.29	18.20	15.47	55.82	44.77	0.00	0.00
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.14	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
d2, Incremental Delay [s]	8.60	0.12	0.12	10.01	1.10	0.21	9.14	11.20	0.00	0.00
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
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	0.87	0.07	0.07	0.25	0.37	0.08	0.71	0.92	0.00	0.00
d, Delay for Lane Group [s/veh]	58.72	8.16	8.16	69.30	19.30	15.67	64.96	55.98	0.00	0.00
Lane Group LOS	E	A	A	E	B	B	E	E	A	A
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.14	0.79	0.79	0.12	5.84	0.96	2.34	11.22	0.00	0.00
50th-Percentile Queue Length [ft/ln]	178.44	19.76	19.76	3.06	145.88	24.12	58.42	280.44	0.00	0.00
95th-Percentile Queue Length [veh/ln]	11.52	1.42	1.42	0.22	9.80	1.74	4.21	16.71	0.00	0.00
95th-Percentile Queue Length [ft/ln]	287.97	35.58	35.58	5.50	244.92	43.41	105.16	417.76	0.00	0.00

Movement, Approach, & Intersection Results

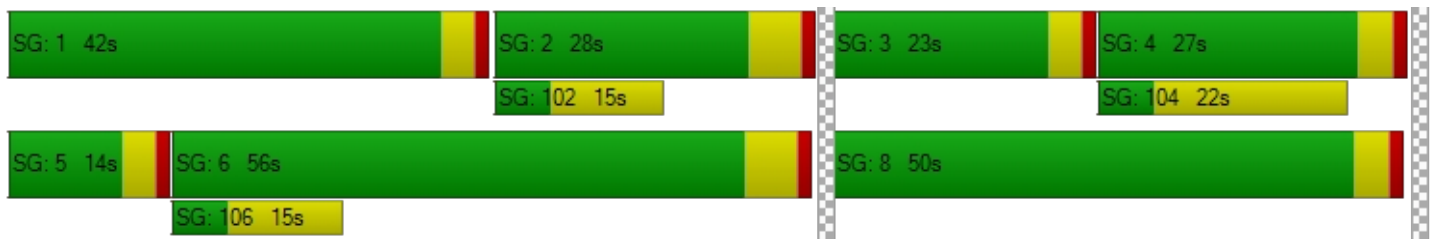
d_M, Delay for Movement [s/veh]	58.72	8.16	8.16	69.30	19.30	15.67	64.96	55.98	55.98	0.00	0.00	0.00
Movement LOS	E	A	A	E	B	B	E	E	E	A	A	A
d_A, Approach Delay [s/veh]	36.73			19.07			57.48			0.00		
Approach LOS	D			B			E			A		
d_I, Intersection Delay [s/veh]	37.65											
Intersection LOS	D											
Intersection V/C	0.529											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			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]	0.00			51.34			51.34			51.34		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.534			2.188			1.956		
Crosswalk LOS	F			B			B			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	838			372			763			380		
d_b, Bicycle Delay [s]	20.24			39.77			22.94			39.37		
I_b,int, Bicycle LOS Score for Intersection	1.895			2.263			2.249			1.560		
Bicycle LOS	A			B			B			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: I-215 SB Ramps/SR-74 at Bonnie Dr

Control Type:	Signalized	Delay (sec / veh):	16.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.520

Intersection Setup

Name	SR-74		I-215 SB Ramps		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]	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]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	SR-74		I-215 SB Ramps		Bonnie Dr	
Base Volume Input [veh/h]	194	320	706	44	38	264
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	194	320	706	44	38	264
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	50	83	183	11	10	69
Total Analysis Volume [veh/h]	202	333	734	46	40	274
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	Semi-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	Protected	Permissive	Overlap	Permissive	Permissive	Unsignalized
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups			2			
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	10	10	0	7	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	4.3	4.3	0.0	4.3	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	44	95	51	0	25	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	14	0
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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	0.0	3.3	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L
C, Cycle Length [s]	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	3.30	3.30
g_i, Effective Green Time [s]	16	104	85	85	5
g / C, Green / Cycle	0.13	0.87	0.71	0.71	0.04
(v / s)_i Volume / Saturation Flow Rate	0.11	0.18	0.39	0.03	0.02
s, saturation flow rate [veh/h]	1810	1900	1900	1615	1810
c, Capacity [veh/h]	235	1649	1338	1138	79
d1, Uniform Delay [s]	51.11	1.27	8.54	5.40	56.09
k, delay calibration	0.11	0.50	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.80	0.28	1.62	0.07	4.86
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	0.20	0.55	0.04	0.50
d, Delay for Lane Group [s/veh]	59.91	1.55	10.17	5.46	60.95
Lane Group LOS	E	A	B	A	E
Critical Lane Group	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	6.36	0.46	8.09	0.32	1.27
50th-Percentile Queue Length [ft/ln]	159.02	11.51	202.29	7.94	31.64
95th-Percentile Queue Length [veh/ln]	10.50	0.83	12.76	0.57	2.28
95th-Percentile Queue Length [ft/ln]	262.43	20.72	318.92	14.29	56.95

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	59.91	1.55	10.17	5.46	60.95	0.00
Movement LOS	E	A	B	A	E	
d_A, Approach Delay [s/veh]	23.59		9.89		60.95	
Approach LOS	C		A		E	
d_I, Intersection Delay [s/veh]	16.80					
Intersection LOS	B					
Intersection V/C	0.520					

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	2.610	2.518	2.096
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1495	762	328
d_b, Bicycle Delay [s]	3.83	23.00	41.92
I_b,int, Bicycle LOS Score for Intersection	2.442	2.847	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 5: I-215 NB Ramps at SR-74**

Control Type:	Signalized	Delay (sec / veh):	16.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.422

Intersection Setup

Name	I-215 NB Ramps		SR-74		SR-74	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB Ramps		SR-74		SR-74	
Base Volume Input [veh/h]	207	21	14	955	503	602
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	207	21	14	955	503	602
Peak Hour Factor	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	6	4	257	136	162
Total Analysis Volume [veh/h]	223	23	15	1029	542	649
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	Semi-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	Protected	Permissive	Permissive	Unsignalized
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	4.3	0.0	3.0	5.0	5.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	91	0	17	29	18	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	21	0	0	10	7	0
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	0.0
I2, Clearance Lost Time [s]	3.3	0.0	2.0	4.0	4.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C
C, Cycle Length [s]	126	126	126	126
L, Total Lost Time per Cycle [s]	5.30	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	2.00	4.00	4.00
g_i, Effective Green Time [s]	20	3	89	82
g / C, Green / Cycle	0.16	0.02	0.71	0.65
(v / s)_i Volume / Saturation Flow Rate	0.14	0.01	0.28	0.15
s, saturation flow rate [veh/h]	1789	1810	3618	3618
c, Capacity [veh/h]	278	42	2559	2361
d1, Uniform Delay [s]	52.09	60.64	7.54	8.94
k, delay calibration	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.06	5.17	0.47	0.23
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.36	0.40	0.23
d, Delay for Lane Group [s/veh]	61.14	65.81	8.01	9.17
Lane Group LOS	E	E	A	A
Critical Lane Group	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	8.12	0.52	4.64	2.66
50th-Percentile Queue Length [ft/ln]	202.90	12.91	115.92	66.62
95th-Percentile Queue Length [veh/ln]	12.79	0.93	8.17	4.80
95th-Percentile Queue Length [ft/ln]	319.70	23.23	204.21	119.92

Movement, Approach, & Intersection Results

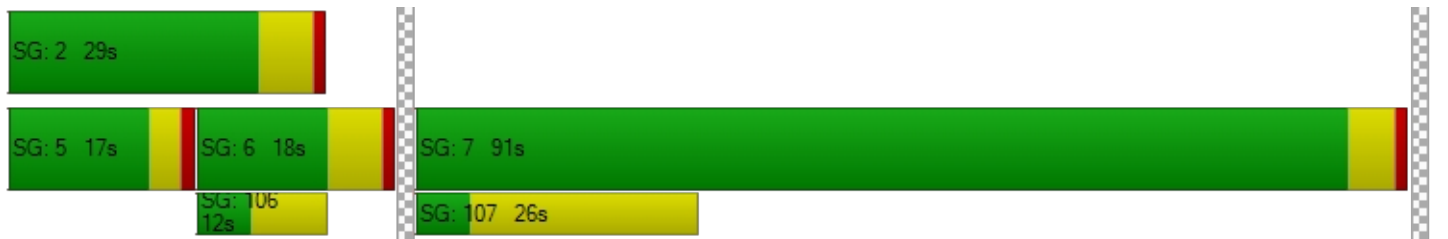
d_M, Delay for Movement [s/veh]	61.14	61.14	65.81	8.01	9.17	0.00
Movement LOS	E	E	E	A	A	
d_A, Approach Delay [s/veh]	61.14		8.84		9.17	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	15.96					
Intersection LOS	B					
Intersection V/C	0.422					

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]	54.32	54.32	54.32
I_p,int, Pedestrian LOS Score for Intersection	1.923	2.893	3.005
Crosswalk LOS	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1360	365	190
d_b, Bicycle Delay [s]	6.44	42.10	51.57
I_b,int, Bicycle LOS Score for Intersection	1.966	2.421	2.007
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Sherman Rd at SR-74**

Control Type:	Signalized	Delay (sec / veh):	26.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.537

Intersection Setup

Name	Sherman Rd			Sherman 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	1	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	40.00			40.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	76	0	243	2	2	2	19	936	36	183	688	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	76	0	243	2	2	2	19	936	36	183	688	2
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	0	64	1	1	1	5	245	9	48	180	1
Total Analysis Volume [veh/h]	80	0	255	2	2	2	20	981	38	192	721	2
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	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	5.0	0.0	3.0	5.0	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	32	0	0	27	0	11	34	0	27	50	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	21	0	0	17	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			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	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	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	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	21	21	2	3	62	62	15	74	74
g / C, Green / Cycle	0.18	0.18	0.02	0.03	0.52	0.52	0.12	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.04	0.16	0.00	0.01	0.27	0.27	0.11	0.19	0.19
s, saturation flow rate [veh/h]	1810	1615	1767	1810	1900	1875	1810	1900	1898
c, Capacity [veh/h]	322	287	29	52	984	971	222	1163	1162
d1, Uniform Delay [s]	42.42	48.15	58.24	57.25	19.12	19.12	51.64	11.16	11.16
k, delay calibration	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
d2, Incremental Delay [s]	0.40	9.04	3.46	4.65	1.98	2.00	9.56	0.70	0.70
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	0.25	0.89	0.21	0.39	0.52	0.52	0.86	0.31	0.31
d, Delay for Lane Group [s/veh]	42.82	57.19	61.70	61.90	21.09	21.12	61.19	11.85	11.85
Lane Group LOS	D	E	E	E	C	C	E	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.05	8.01	0.21	0.64	8.99	8.88	6.01	4.19	4.19
50th-Percentile Queue Length [ft/ln]	51.25	200.22	5.13	16.01	224.71	221.97	150.19	104.86	104.76
95th-Percentile Queue Length [veh/ln]	3.69	12.65	0.37	1.15	13.91	13.77	10.03	7.55	7.54
95th-Percentile Queue Length [ft/ln]	92.25	316.26	9.24	28.82	347.63	344.14	250.68	188.75	188.57

Movement, Approach, & Intersection Results

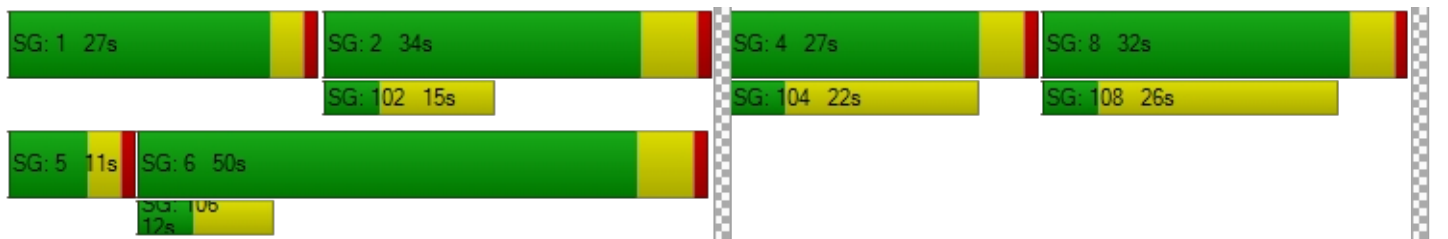
d_M, Delay for Movement [s/veh]	42.82	42.82	57.19	61.70	61.70	61.70	61.90	21.10	21.12	61.19	11.85	11.85
Movement LOS	D	D	E	E	E	E	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	53.76			61.70			21.89			22.21		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	26.77											
Intersection LOS	C											
Intersection V/C	0.537											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.201	1.748	2.974	3.110
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	452	368	467	733
d_b, Bicycle Delay [s]	35.96	39.94	35.27	24.07
I_b,int, Bicycle LOS Score for Intersection	2.112	1.570	2.417	2.314
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Goetz Rd at Fieldstone Dr

Control Type:	Signalized	Delay (sec / veh):	11.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.222

Intersection Setup

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Base Volume Input [veh/h]	31	319	2	16	552	64	35	1	25	0	3	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	319	2	16	552	64	35	1	25	0	3	13
Peak Hour Factor	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170
Other Adjustment Factor	1.0000	1.0000	1.0000	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	87	1	4	150	17	10	0	7	0	1	4
Total Analysis Volume [veh/h]	34	348	2	17	602	70	38	1	27	0	3	14
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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	3.0	3.2	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]	26	40	0	26	40	0	11	43	0	11	43	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	0	0	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	24	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	2.0	2.2	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.00	4.20	4.20
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	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.00	2.20	2.20
g_i, Effective Green Time [s]	5	90	90	3	88	88	5	9	0	4	4
g / C, Green / Cycle	0.04	0.75	0.75	0.03	0.73	0.73	0.04	0.08	0.00	0.04	0.04
(v / s)_i Volume / Saturation Flow Rate	0.02	0.18	0.00	0.01	0.12	0.13	0.02	0.02	0.00	0.00	0.01
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1801	1810	1624	1810	1900	1615
c, Capacity [veh/h]	72	1419	1206	46	2650	1319	76	127	0	70	59
d1, Uniform Delay [s]	56.37	4.71	3.85	57.51	4.90	4.91	56.26	51.85	0.00	55.78	56.17
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
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]	4.72	0.41	0.00	4.81	0.14	0.28	5.03	0.86	0.00	0.25	2.03
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.47	0.25	0.00	0.37	0.17	0.17	0.50	0.22	0.00	0.04	0.24
d, Delay for Lane Group [s/veh]	61.10	5.12	3.86	62.33	5.04	5.19	61.29	52.71	0.00	56.03	58.20
Lane Group LOS	E	A	A	E	A	A	E	D	A	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.07	2.14	0.01	0.55	1.35	1.42	1.23	0.82	0.00	0.09	0.45
50th-Percentile Queue Length [ft/ln]	26.81	53.41	0.25	13.86	33.80	35.52	30.84	20.59	0.00	2.32	11.16
95th-Percentile Queue Length [veh/ln]	1.93	3.85	0.02	1.00	2.43	2.56	2.22	1.48	0.00	0.17	0.80
95th-Percentile Queue Length [ft/ln]	48.26	96.14	0.45	24.94	60.84	63.94	55.52	37.06	0.00	4.17	20.08

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	61.10	5.12	3.86	62.33	5.08	5.19	61.29	52.71	52.71	0.00	56.03	58.20
Movement LOS	E	A	A	E	A	A	E	D	D	A	E	E
d_A, Approach Delay [s/veh]	10.07			6.50			57.65			57.82		
Approach LOS	B			A			E			E		
d_I, Intersection Delay [s/veh]	11.36											
Intersection LOS	B											
Intersection V/C	0.222											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0			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]	56.07			51.34			51.34			51.34		
I_p,int, Pedestrian LOS Score for Intersection	2.848			2.763			2.012			2.155		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	572			572			647			647		
d_b, Bicycle Delay [s]	30.60			30.60			27.47			27.47		
I_b,int, Bicycle LOS Score for Intersection	2.193			1.939			1.669			1.588		
Bicycle LOS	B			A			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 8: Goetz Rd at Ethanac Rd**

Control Type:	Signalized	Delay (sec / veh):	46.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.460

Intersection Setup

Name	Goetz Rd			Goetz 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	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	7	134	227	254	245	30	17	63	5	275	67	239
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	134	227	254	245	30	17	63	5	275	67	239
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]	2	34	58	65	63	8	4	16	1	70	17	61
Total Analysis Volume [veh/h]	7	137	232	260	251	31	17	64	5	281	69	244
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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	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	32	0	32	53	0	16	28	0	28	45	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	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	3.7	0.0	2.0	3.7	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	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	125	125	125	125	125	125	125	125	125	125	125	125
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	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	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	2	20	20	20	39	39	3	39	39	22	57	57
g / C, Green / Cycle	0.01	0.16	0.16	0.16	0.31	0.31	0.03	0.31	0.31	0.17	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.00	0.07	0.14	0.14	0.07	0.02	0.01	0.02	0.00	0.16	0.04	0.15
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	1900	1615
c, Capacity [veh/h]	23	310	263	290	1123	501	47	1120	500	312	867	737
d1, Uniform Delay [s]	61.15	47.20	51.14	51.46	31.93	30.30	59.85	30.33	29.89	50.65	19.18	21.78
k, delay calibration	0.11	0.11	0.11	0.16	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	1.00
d2, Incremental Delay [s]	7.15	0.99	9.37	13.09	0.10	0.05	4.57	0.10	0.04	9.24	0.18	1.21
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	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	0.30	0.44	0.88	0.90	0.22	0.06	0.36	0.06	0.01	0.90	0.08	0.33
d, Delay for Lane Group [s/veh]	68.30	48.19	60.51	64.55	32.03	30.35	64.41	30.43	29.92	59.89	19.36	22.98
Lane Group LOS	E	D	E	E	C	C	E	C	C	E	B	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.26	3.82	7.53	8.76	2.73	0.64	0.58	0.67	0.11	9.10	1.12	4.58
50th-Percentile Queue Length [ft/ln]	6.51	95.44	188.32	218.94	68.32	16.10	14.39	16.81	2.66	227.43	28.06	114.46
95th-Percentile Queue Length [veh/ln]	0.47	6.87	12.03	13.61	4.92	1.16	1.04	1.21	0.19	14.04	2.02	8.09
95th-Percentile Queue Length [ft/ln]	11.71	171.79	300.85	340.27	122.98	28.98	25.90	30.26	4.78	351.09	50.51	202.19

Movement, Approach, & Intersection Results

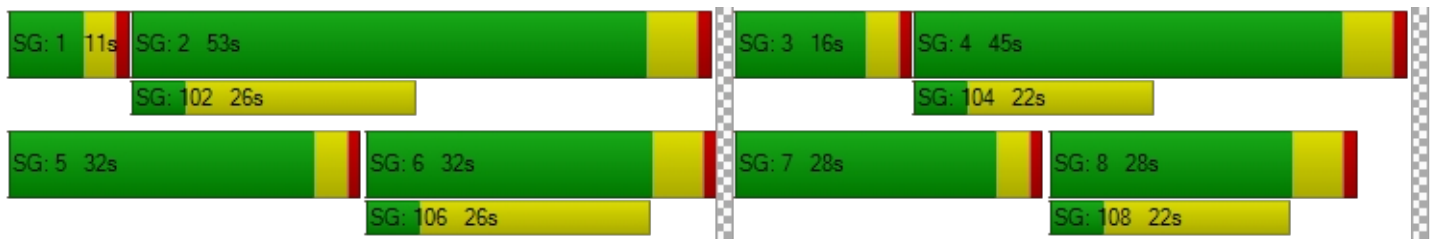
d_M, Delay for Movement [s/veh]	68.30	48.19	60.51	64.55	32.03	30.35	64.41	30.43	29.92	59.89	19.36	22.98
Movement LOS	E	D	E	E	C	C	E	C	C	E	B	C
d_A, Approach Delay [s/veh]	56.17			47.54			37.12			40.02		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	46.21											
Intersection LOS	D											
Intersection V/C	0.460											

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]	53.82	53.82	53.82	53.82
I_p,int, Pedestrian LOS Score for Intersection	2.614	2.622	2.522	2.781
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	421	757	357	629
d_b, Bicycle Delay [s]	38.97	24.15	42.19	29.38
I_b,int, Bicycle LOS Score for Intersection	2.180	2.007	1.631	2.050
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 9: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Wheat St		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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	0	542	0	0	590
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	542	0	0	590
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	139	0	0	151
Total Analysis Volume [veh/h]	0	0	555	0	0	605
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	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	16.99	9.96	0.00	0.00	8.51	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.48		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

**Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	17.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

Intersection Setup

Name	Byers 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	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		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	5	2	538	1	4	598
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	2	538	1	4	598
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]	1	1	140	0	1	156
Total Analysis Volume [veh/h]	5	2	561	1	4	624
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	0.02	0.00	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	17.69	10.20	0.00	0.00	8.55	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.00	0.00	0.01	0.00
95th-Percentile Queue Length [ft/ln]	1.54	1.54	0.00	0.00	0.30	0.00
d_A, Approach Delay [s/veh]	15.55		0.00		0.05	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.12					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 11: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	35.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.521

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	0	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	106	76	143	45	75	13	6	402	108	212	484	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	106	76	143	45	75	13	6	402	108	212	484	42
Peak Hour Factor	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	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]	29	20	38	12	20	3	2	108	29	57	130	11
Total Analysis Volume [veh/h]	114	82	154	48	81	14	6	433	116	228	521	45
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	Semi-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	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	4.7	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	47	0	0	28	0	16	18	0	27	29	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	21	0	0	17	0	0	7	0	0	14	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	3.7	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	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	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
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	26	10	10	10	1	46	46	17	62	62
g / C, Green / Cycle	0.22	0.08	0.08	0.08	0.01	0.38	0.38	0.14	0.52	0.52
(v / s)_i Volume / Saturation Flow Rate	0.20	0.03	0.04	0.01	0.00	0.15	0.15	0.13	0.15	0.15
s, saturation flow rate [veh/h]	1737	1810	1900	1615	1810	1900	1764	1810	1900	1847
c, Capacity [veh/h]	383	150	158	134	20	728	676	261	981	954
d1, Uniform Delay [s]	45.65	51.82	52.70	50.89	58.89	26.84	26.91	50.27	16.54	16.54
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]	8.75	1.21	2.57	0.34	8.35	1.56	1.72	8.88	0.76	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
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	0.91	0.32	0.51	0.10	0.30	0.39	0.39	0.87	0.29	0.29
d, Delay for Lane Group [s/veh]	54.40	53.03	55.27	51.23	67.24	28.41	28.63	59.15	17.29	17.32
Lane Group LOS	D	D	E	D	E	C	C	E	B	B
Critical Lane Group	Yes	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.76	1.38	2.40	0.39	0.22	5.89	5.58	7.10	4.37	4.26
50th-Percentile Queue Length [ft/ln]	268.92	34.55	59.94	9.85	5.54	147.21	139.47	177.40	109.19	106.43
95th-Percentile Queue Length [veh/ln]	16.14	2.49	4.32	0.71	0.40	9.87	9.45	11.46	7.79	7.64
95th-Percentile Queue Length [ft/ln]	403.39	62.20	107.89	17.73	9.97	246.70	236.30	286.62	194.87	191.02

Movement, Approach, & Intersection Results

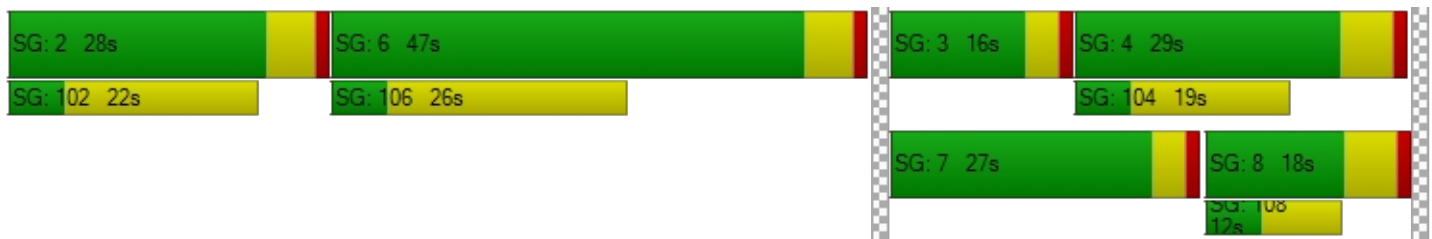
d_M, Delay for Movement [s/veh]	54.40	54.40	54.40	53.03	55.27	51.23	67.24	28.48	28.63	59.15	17.30	17.32
Movement LOS	D	D	D	D	E	D	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	54.40			54.12			28.93			29.32		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	35.89											
Intersection LOS	D											
Intersection V/C	0.521											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.297	2.247	2.706	2.855
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	695	378	205	388
d_b, Bicycle Delay [s]	25.55	39.45	48.33	38.96
I_b,int, Bicycle LOS Score for Intersection	2.137	1.796	2.017	2.215
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Evans Rd at Ethanac 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	Evans 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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	2	602	3	4	754
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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	602	3	4	754
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]	0	1	155	1	1	195
Total Analysis Volume [veh/h]	0	2	621	3	4	778
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	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	20.31	10.23	0.00	0.00	8.74	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	0.00
95th-Percentile Queue Length [ft/ln]	0.22	0.22	0.00	0.00	0.31	0.00
d_A, Approach Delay [s/veh]	10.23		0.00		0.04	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.04					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 13: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	33.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.524

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		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	26	9	48	425	0	141	169	442	18	51	493	394
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	9	48	425	0	141	169	442	18	51	493	394
Peak Hour Factor	0.9690	0.9690	0.9690	0.9690	1.0000	0.9690	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	2	12	110	0	36	44	114	5	13	127	102
Total Analysis Volume [veh/h]	27	9	50	439	0	146	174	456	19	53	509	407
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	Semi-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	Permiss	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	5	0	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	7	0	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	30	0	0	30	30	0	30	30	0
Amber [s]	0.0	5.0	0.0	5.0	0.0	0.0	3.0	4.7	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	32	0	32	0	0	28	45	0	11	28	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	21	0	21	0	0	0	7	0	0	17	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	4.0	0.0	4.0	0.0	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	L	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	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]	4.00	4.00	4.00	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	9	18	18	14	65	65	6	57	57
g / C, Green / Cycle	0.08	0.15	0.15	0.11	0.54	0.54	0.05	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.05	0.12	0.05	0.10	0.13	0.01	0.03	0.14	0.25
s, saturation flow rate [veh/h]	1699	3514	2859	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	135	522	425	206	1962	876	88	1725	770
d1, Uniform Delay [s]	53.53	49.70	45.83	52.10	14.37	12.71	55.97	19.11	21.96
k, delay calibration	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
d2, Incremental Delay [s]	4.86	3.73	0.48	8.96	0.28	0.05	6.54	0.44	2.59
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	0.64	0.84	0.34	0.84	0.23	0.02	0.60	0.30	0.53
d, Delay for Lane Group [s/veh]	58.39	53.44	46.31	61.06	14.65	12.76	62.51	19.55	24.55
Lane Group LOS	E	D	D	E	B	B	E	B	C
Critical Lane Group	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.60	6.38	1.90	5.47	3.06	0.23	1.68	4.14	7.97
50th-Percentile Queue Length [ft/ln]	64.98	159.55	47.56	136.74	76.48	5.77	42.10	103.46	199.13
95th-Percentile Queue Length [veh/ln]	4.68	10.52	3.42	9.30	5.51	0.42	3.03	7.45	12.59
95th-Percentile Queue Length [ft/ln]	116.96	263.12	85.61	232.62	137.66	10.39	75.79	186.23	314.84

Movement, Approach, & Intersection Results

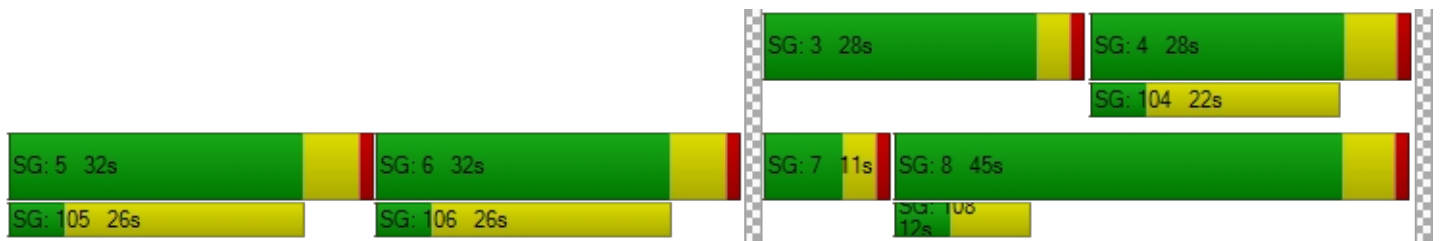
d_M, Delay for Movement [s/veh]	58.39	58.39	58.39	53.44	0.00	46.31	61.06	14.65	12.76	62.51	19.55	24.55
Movement LOS	E	E	E	D		D	E	B	B	E	B	C
d_A, Approach Delay [s/veh]	58.39			51.66			27.04			24.00		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	33.22											
Intersection LOS	C											
Intersection V/C	0.524											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	1.871	2.735	2.829	2.986
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	433	655	372
d_b, Bicycle Delay [s]	36.82	36.82	27.14	39.77
I_b,int, Bicycle LOS Score for Intersection	1.702	1.560	2.095	2.359
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 14: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	26.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.743

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			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 On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	193	0	361	0	602	384	125	716	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	193	0	361	0	602	384	125	716	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9460	0.9460	0.9460	1.0000	0.9460	0.9460	0.9460	0.9460	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	51	0	95	0	159	101	33	189	0
Total Analysis Volume [veh/h]	0	0	0	204	0	382	0	636	406	132	757	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	Semi-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	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	10	0	0	10	0	7	10	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	67	0	0	42	0	11	53	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	14	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	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]		120	120	120	120	120	120
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]		31	31	63	63	11	78
g / C, Green / Cycle		0.26	0.26	0.53	0.53	0.09	0.65
(v / s)_i Volume / Saturation Flow Rate		0.11	0.24	0.33	0.25	0.07	0.21
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		471	421	1000	850	160	2344
d1, Uniform Delay [s]		36.99	42.99	20.23	17.98	53.80	9.40
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]		0.63	7.73	3.09	1.92	10.24	0.37
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		0.43	0.91	0.64	0.48	0.83	0.32
d, Delay for Lane Group [s/veh]		37.62	50.72	23.32	19.90	64.03	9.77
Lane Group LOS		D	D	C	B	E	A
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		4.94	11.47	12.32	6.96	4.24	3.91
50th-Percentile Queue Length [ft/ln]		123.43	286.70	308.05	173.93	105.95	97.69
95th-Percentile Queue Length [veh/ln]		8.58	17.02	18.08	11.28	7.61	7.03
95th-Percentile Queue Length [ft/ln]		214.54	425.54	451.97	282.07	190.36	175.84

Movement, Approach, & Intersection Results

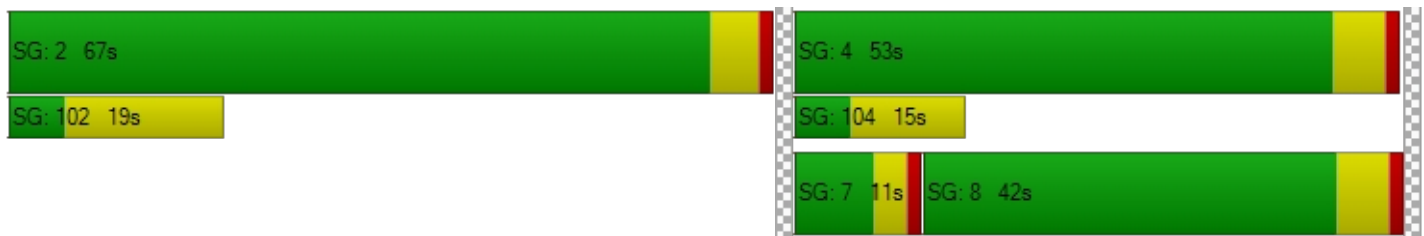
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	37.62	37.62	50.72	0.00	23.32	19.90	64.03	9.77	0.00
Movement LOS				D	D	D		C	B	E	A	
d_A, Approach Delay [s/veh]	0.00			46.16			21.99			17.83		
Approach LOS	A			D			C			B		
d_I, Intersection Delay [s/veh]	26.15											
Intersection LOS	C											
Intersection V/C	0.743											

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	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.241	0.000	2.849
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	1028	605	788
d_b, Bicycle Delay [s]	60.00	14.16	29.19	22.02
I_b,int, Bicycle LOS Score for Intersection	4.132	2.527	3.279	2.293
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 15: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	36.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.749

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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]	45.00			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 Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	426	2	198	0	0	0	246	570	0	0	413	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	426	2	198	0	0	0	246	570	0	0	413	195
Peak Hour Factor	0.9570	0.9570	0.9570	1.0000	1.0000	1.0000	0.9570	0.9570	1.0000	1.0000	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]	111	1	52	0	0	0	64	149	0	0	108	51
Total Analysis Volume [veh/h]	445	2	207	0	0	0	257	596	0	0	432	204
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	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

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	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	48	0	0	0	0	24	72	0	0	41	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	10	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	3.3	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]	5.30	5.30		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]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	32	32		19	77	54
g / C, Green / Cycle	0.27	0.27		0.16	0.64	0.45
(v / s)_i Volume / Saturation Flow Rate	0.25	0.13		0.14	0.31	0.35
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1798
c, Capacity [veh/h]	486	434		289	1216	804
d1, Uniform Delay [s]	42.63	36.82		49.41	11.34	28.39
k, delay calibration	0.22	0.11		0.13	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	13.61	0.82		10.69	1.42	7.84
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	0.92	0.48		0.89	0.49	0.79
d, Delay for Lane Group [s/veh]	56.24	37.63		60.10	12.76	36.23
Lane Group LOS	E	D		E	B	D
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	14.20	5.04		8.11	7.61	16.15
50th-Percentile Queue Length [ft/ln]	354.90	126.03		202.83	190.23	403.85
95th-Percentile Queue Length [veh/ln]	20.38	8.72		12.78	12.13	22.75
95th-Percentile Queue Length [ft/ln]	509.38	218.09		319.61	303.33	568.64

Movement, Approach, & Intersection Results

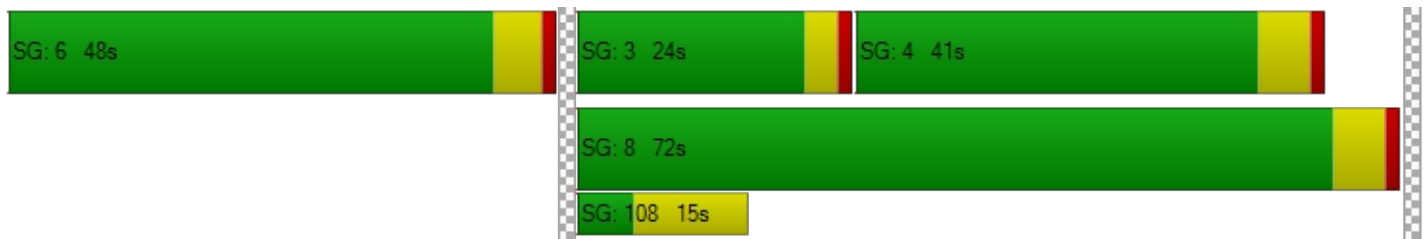
d_M, Delay for Movement [s/veh]	56.24	56.24	37.63	0.00	0.00	0.00	60.10	12.76	0.00	0.00	36.23	36.23
Movement LOS	E	E	D				E	B			D	D
d_A, Approach Delay [s/veh]	50.35			0.00			27.02			36.23		
Approach LOS	D			A			C			D		
d_I, Intersection Delay [s/veh]	36.87											
Intersection LOS	D											
Intersection V/C	0.749											

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	2.274	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]	712	0	1105	588
d_b, Bicycle Delay [s]	24.90	60.00	12.02	29.89
I_b,int, Bicycle LOS Score for Intersection	2.639	4.132	2.967	2.609
Bicycle LOS	B	D	C	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Trumble Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	28.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.522

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	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	84	5	37	30	15	141	73	588	33	44	361	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	84	5	37	30	15	141	73	588	33	44	361	4
Peak Hour Factor	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	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]	23	1	10	8	4	39	20	162	9	12	99	1
Total Analysis Volume [veh/h]	92	5	41	33	16	155	80	646	36	48	397	4
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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	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]	12	19	0	33	40	0	30	57	0	11	38	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	2	0	0	11	0	0	11	0
Pedestrian Clearance [s]	0	10	0	0	14	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	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	4.00	4.00	4.00	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	2.00	2.00	2.00	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	8	18	5	15	7	74	74	6	73
g / C, Green / Cycle	0.06	0.15	0.04	0.12	0.06	0.62	0.62	0.05	0.61
(v / s)_i Volume / Saturation Flow Rate	0.05	0.03	0.02	0.10	0.04	0.34	0.02	0.03	0.21
s, saturation flow rate [veh/h]	1810	1642	1810	1638	1810	1900	1615	1810	1897
c, Capacity [veh/h]	115	239	73	201	105	1177	1001	84	1153
d1, Uniform Delay [s]	55.41	45.05	56.26	51.58	55.67	13.16	8.88	56.02	11.69
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]	11.79	0.39	4.27	9.73	10.59	1.84	0.07	5.89	0.83
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	0.80	0.19	0.45	0.85	0.76	0.55	0.04	0.57	0.35
d, Delay for Lane Group [s/veh]	67.20	45.43	60.54	61.31	66.26	15.00	8.95	61.91	12.52
Lane Group LOS	E	D	E	E	E	B	A	E	B
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.12	1.24	1.07	5.58	2.62	9.29	0.35	1.52	4.97
50th-Percentile Queue Length [ft/ln]	78.07	30.90	26.65	139.46	65.53	232.22	8.64	37.96	124.20
95th-Percentile Queue Length [veh/ln]	5.62	2.22	1.92	9.45	4.72	14.29	0.62	2.73	8.62
95th-Percentile Queue Length [ft/ln]	140.53	55.62	47.97	236.30	117.96	357.18	15.54	68.32	215.58

Movement, Approach, & Intersection Results

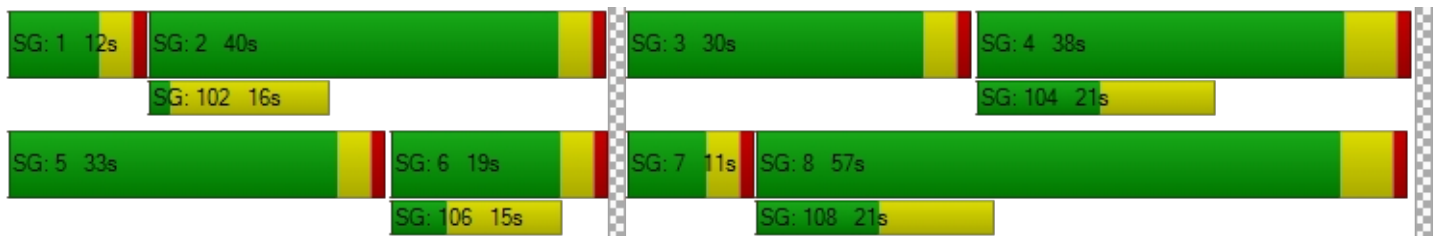
d_M, Delay for Movement [s/veh]	67.20	45.43	45.43	60.54	61.31	61.31	66.26	15.00	8.95	61.91	12.52	12.52
Movement LOS	E	D	D	E	E	E	E	B	A	E	B	B
d_A, Approach Delay [s/veh]	59.94			61.19			20.09			17.80		
Approach LOS	E			E			C			B		
d_I, Intersection Delay [s/veh]	28.37											
Intersection LOS	C											
Intersection V/C	0.522											

Other Modes

g_Walk,mi, Effective Walk Time [s]	15.0	15.0	6.0	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]	45.94	45.94	54.15	51.34
l_p,int, Pedestrian LOS Score for Intersection	2.028	2.046	2.720	2.589
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	250	600	855	538
d_b, Bicycle Delay [s]	45.94	29.40	19.67	32.05
l_b,int, Bicycle LOS Score for Intersection	1.787	1.896	2.817	2.300
Bicycle LOS	A	A	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Sherman Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	38.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.169

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews 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	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews Rd		
Base Volume Input [veh/h]	19	5	2	4	2	191	271	173	15	2	95	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	5	2	4	2	191	271	173	15	2	95	3
Peak Hour Factor	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760
Other Adjustment Factor	1.0000	1.0000	1.0000	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	1	1	1	55	77	49	4	1	27	1
Total Analysis Volume [veh/h]	22	6	2	5	2	218	309	197	17	2	108	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	0.17	0.03	0.00	0.03	0.01	0.23	0.21	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	38.67	28.70	15.26	24.91	24.41	10.31	8.04	0.00	0.00	7.64	0.00	0.00
Movement LOS	E	D	C	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.72	0.72	0.72	1.07	1.07	1.07	0.78	0.78	0.78	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	18.01	18.01	18.01	26.68	26.68	26.68	19.50	19.50	19.50	0.11	0.11	0.11
d_A, Approach Delay [s/veh]	35.12			10.76			4.75			0.14		
Approach LOS	E			B			A			A		
d_I, Intersection Delay [s/veh]	6.71											
Intersection LOS	E											

Intersection Level Of Service Report
Intersection 18: Byers Rd at McLaughlin Rd

Control Type:	All-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Byers Rd			Byers 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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Byers Rd			Byers Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	923	923	923	923
Degree of Utilization, x	0.00	0.00	0.00	0.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	0.00	0.00	0.00	0.00
Approach Delay [s/veh]	0.00	0.00	0.00	0.00
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	0.00			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 19: Murrieta Rd at McLaughlin Rd

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):	0.025

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	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]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	2	297	3	25	368	7	6	0	3	7	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	297	3	25	368	7	6	0	3	7	0	23
Peak Hour Factor	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	84	1	7	104	2	2	0	1	2	0	7
Total Analysis Volume [veh/h]	2	336	3	28	416	8	7	0	3	8	0	26
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	0.02	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.04
d_M, Delay for Movement [s/veh]	8.15	0.00	0.00	7.99	0.00	0.00	18.40	17.15	10.98	17.89	17.32	10.54
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	0.07	0.00	0.00	0.09	0.09	0.09	0.21	0.21	0.21
95th-Percentile Queue Length [ft/ln]	0.13	0.00	0.00	1.74	0.00	0.00	2.32	2.32	2.32	5.13	5.13	5.13
d_A, Approach Delay [s/veh]	0.05			0.50			16.18			12.27		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	0.98											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 20: Murrieta Rd at Rouse Rd

Control Type:	Two-way stop	Delay (sec / veh):	18.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.036

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	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	4	227	12	65	297	26	9	8	2	4	10	61
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	227	12	65	297	26	9	8	2	4	10	61
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	61	3	17	79	7	2	2	1	1	3	16
Total Analysis Volume [veh/h]	4	243	13	70	318	28	10	9	2	4	11	65
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	0.05	0.00	0.00	0.04	0.03	0.00	0.01	0.03	0.08
d_M, Delay for Movement [s/veh]	7.95	0.00	0.00	7.88	0.00	0.00	18.26	16.03	9.96	16.43	16.33	9.89
Movement LOS	A	A	A	A	A	A	C	C	A	C	C	A
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.17	0.00	0.00	0.11	0.08	0.01	0.04	0.10	0.26
95th-Percentile Queue Length [ft/ln]	0.25	0.00	0.00	4.19	0.00	0.00	2.75	2.06	0.21	0.95	2.59	6.61
d_A, Approach Delay [s/veh]	0.12			1.33			16.51			11.10		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	2.34											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 21: Murrieta Rd at Chambers Ave

Control Type:	All-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.427

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	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	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Base Volume Input [veh/h]	50	256	9	44	222	38	11	24	24	6	31	57
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	256	9	44	222	38	11	24	24	6	31	57
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]	13	67	2	12	58	10	3	6	6	2	8	15
Total Analysis Volume [veh/h]	53	269	9	46	234	40	12	25	25	6	33	60
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings**Lanes**

Capacity per Entry Lane [veh/h]	576	626	631	579	641	575	544	588	663
Degree of Utilization, x	0.09	0.22	0.22	0.08	0.43	0.11	0.01	0.06	0.09

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.30	0.84	0.84	0.26	2.14	0.36	0.03	0.18	0.30
95th-Percentile Queue Length [ft]	7.57	21.11	20.90	6.45	53.47	9.01	0.84	4.45	7.44
Approach Delay [s/veh]	9.97			12.01		10.01	8.89		
Approach LOS	A			B		B	A		
Intersection Delay [s/veh]	10.65								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 22: Murrieta Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	37.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.352

Intersection Setup

Name	Murrieta Rd			Murrieta 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	3	184	130	80	115	48	38	121	1	77	153	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	184	130	80	115	48	38	121	1	77	153	125
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	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	48	34	21	30	13	10	32	0	20	40	33
Total Analysis Volume [veh/h]	3	193	137	84	121	50	40	127	1	81	161	131
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	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	15	27	0	18	30	0	0	24	0	0	51	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	14	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	0.0	2.0	3.3	0.0	0.0	2.6	0.0	0.0	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	L	C	R	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]	4.00	5.30	4.00	5.30	5.30	4.60	4.60	4.60	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	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	2.00	3.30	3.30	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	1	72	7	78	78	10	10	10	13	13	13
g / C, Green / Cycle	0.01	0.60	0.06	0.65	0.65	0.08	0.08	0.08	0.11	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.00	0.19	0.05	0.06	0.03	0.02	0.03	0.03	0.04	0.08	0.09
s, saturation flow rate [veh/h]	1810	1770	1810	1900	1615	1810	1900	1895	1810	1900	1629
c, Capacity [veh/h]	11	1054	107	1233	1048	151	158	158	195	204	175
d1, Uniform Delay [s]	59.39	12.06	55.68	7.89	7.63	51.56	52.18	52.18	50.02	51.97	52.24
k, delay calibration	0.11	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	13.73	0.78	11.66	0.16	0.09	0.93	1.66	1.67	1.42	5.42	7.81
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.31	0.78	0.10	0.05	0.27	0.40	0.41	0.42	0.75	0.79
d, Delay for Lane Group [s/veh]	73.12	12.84	67.34	8.05	7.71	52.48	53.83	53.85	51.44	57.40	60.05
Lane Group LOS	E	B	E	A	A	D	D	D	D	E	E
Critical Lane Group	No	Yes	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.13	4.24	2.80	1.10	0.44	1.16	1.89	1.89	2.34	4.75	4.42
50th-Percentile Queue Length [ft/ln]	3.24	106.05	69.90	27.57	11.09	29.04	47.29	47.26	58.40	118.67	110.61
95th-Percentile Queue Length [veh/ln]	0.23	7.62	5.03	1.99	0.80	2.09	3.41	3.40	4.20	8.32	7.87
95th-Percentile Queue Length [ft/ln]	5.83	190.49	125.82	49.63	19.97	52.28	85.13	85.07	105.12	208.00	196.84

Movement, Approach, & Intersection Results

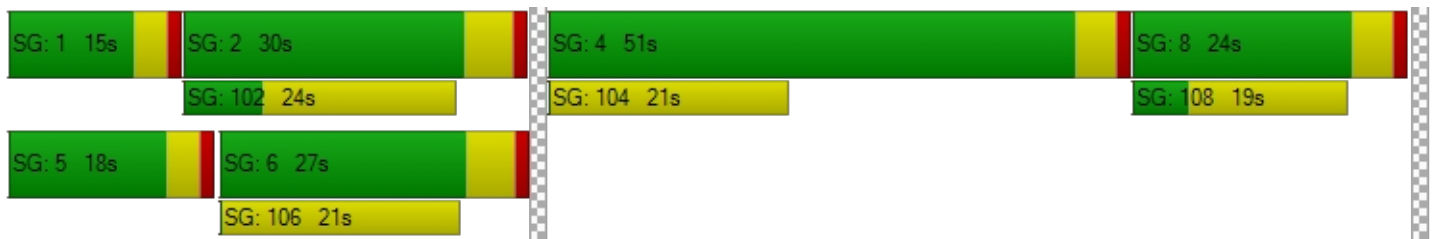
d_M, Delay for Movement [s/veh]	73.12	12.84	12.84	67.34	8.05	7.71	52.48	53.84	53.85	51.44	57.53	60.05
Movement LOS	E	B	B	E	A	A	D	D	D	D	E	E
d_A, Approach Delay [s/veh]	13.38			27.51			53.52			57.09		
Approach LOS	B			C			D			E		
d_I, Intersection Delay [s/veh]	36.99											
Intersection LOS	D											
Intersection V/C	0.352											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	4.0	11.0	4.0
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	56.07	49.50	56.07
I_p,int, Pedestrian LOS Score for Intersection	2.217	2.623	2.401	2.608
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	362	412	323	773
d_b, Bicycle Delay [s]	40.26	37.84	42.17	22.57
I_b,int, Bicycle LOS Score for Intersection	2.109	1.980	1.698	1.867
Bicycle LOS	B	A	A	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 23: Sun City Blvd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	27.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.334

Intersection Setup

Name	Sun City Blvd			Sun City Blvd			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	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sun City Blvd			Sun City Blvd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	80	121	148	65	77	10	25	324	59	67	416	228
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	80	121	148	65	77	10	25	324	59	67	416	228
Peak Hour Factor	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	31	38	16	20	3	6	82	15	17	105	58
Total Analysis Volume [veh/h]	81	123	150	66	78	10	25	329	60	68	422	231
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	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	36	0	0	27	0	11	44	0	13	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	17	0	0	17	0	0	17	0	0	14	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	C	C	R	C	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	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	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	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	10	10	4	73	73	6	75	75
g / C, Green / Cycle	0.11	0.11	0.11	0.08	0.08	0.03	0.61	0.61	0.05	0.63	0.63
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.09	0.04	0.04	0.01	0.10	0.11	0.04	0.18	0.18
s, saturation flow rate [veh/h]	1830	1729	1615	1825	1688	1810	1900	1800	1810	1900	1678
c, Capacity [veh/h]	210	199	186	153	141	60	1154	1093	95	1190	1051
d1, Uniform Delay [s]	49.88	49.84	51.82	52.70	52.67	56.87	10.33	10.35	55.97	10.23	10.24
k, delay calibration	0.11	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]	1.85	1.90	8.08	2.80	2.95	4.54	0.32	0.35	9.62	0.62	0.71
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	0.50	0.81	0.53	0.52	0.42	0.17	0.17	0.72	0.29	0.29
d, Delay for Lane Group [s/veh]	51.74	51.74	59.90	55.50	55.62	61.41	10.65	10.70	65.59	10.84	10.95
Lane Group LOS	D	D	E	E	E	E	B	B	E	B	B
Critical Lane Group	No	No	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.09	2.88	4.82	2.45	2.24	0.81	2.30	2.23	2.27	4.14	3.71
50th-Percentile Queue Length [ft/ln]	77.36	72.04	120.50	61.18	56.10	20.35	57.60	55.79	56.64	103.39	92.78
95th-Percentile Queue Length [veh/ln]	5.57	5.19	8.42	4.41	4.04	1.47	4.15	4.02	4.08	7.44	6.68
95th-Percentile Queue Length [ft/ln]	139.24	129.68	210.51	110.13	100.99	36.63	103.68	100.43	101.95	186.10	167.01

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	51.74	51.74	59.90	55.50	55.60	55.62	61.41	10.67	10.70	65.59	10.86	10.95
Movement LOS	D	D	E	E	E	E	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	55.20			55.56			13.74			16.05		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	27.61											
Intersection LOS	C											
Intersection V/C	0.334											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.424	2.276	2.526	2.603
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	530	380	657	690
d_b, Bicycle Delay [s]	32.41	39.37	27.07	25.74
I_b,int, Bicycle LOS Score for Intersection	1.852	1.687	1.901	2.154
Bicycle LOS	A	A	A	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 24: Bradley Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	31.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.706

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	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	57	84	516	115	89	3	26	509	67	568	667	120
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	57	84	516	115	89	3	26	509	67	568	667	120
Peak Hour Factor	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	22	132	29	23	1	7	131	17	146	171	31
Total Analysis Volume [veh/h]	58	86	529	118	91	3	27	522	69	583	684	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]	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	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	10	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [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
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	31	31	0	22	0	26	19	0	48	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	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	21	0	17	0	0	14	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	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	2.0	2.0	0.0	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	
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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	62	10	10	4	36	36	42	75	75
g / C, Green / Cycle	0.13	0.13	0.51	0.08	0.08	0.04	0.30	0.30	0.35	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.03	0.05	0.33	0.07	0.05	0.01	0.16	0.16	0.32	0.22	0.22
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1889	1810	1900	1823	1810	1900	1801
c, Capacity [veh/h]	229	241	828	152	158	64	576	553	639	1179	1118
d1, Uniform Delay [s]	47.31	47.97	21.17	53.90	53.02	56.69	34.63	34.66	37.06	11.03	11.06
k, delay calibration	0.11	0.11	0.50	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]	0.57	0.90	3.75	8.27	3.51	4.31	3.36	3.54	5.56	0.82	0.88
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	0.36	0.64	0.78	0.59	0.42	0.52	0.52	0.91	0.35	0.35
d, Delay for Lane Group [s/veh]	47.89	48.86	24.93	62.17	56.53	61.00	37.99	38.20	42.63	11.85	11.93
Lane Group LOS	D	D	C	E	E	E	D	D	D	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.61	2.42	11.37	3.84	2.89	0.87	7.72	7.48	16.87	5.28	5.08
50th-Percentile Queue Length [ft/ln]	40.22	60.58	284.29	96.04	72.30	21.84	193.10	187.11	421.70	131.93	126.97
95th-Percentile Queue Length [veh/ln]	2.90	4.36	16.90	6.92	5.21	1.57	12.28	11.97	23.60	9.04	8.77
95th-Percentile Queue Length [ft/ln]	72.39	109.05	422.55	172.88	130.13	39.31	307.04	299.27	590.09	226.11	219.36

Movement, Approach, & Intersection Results

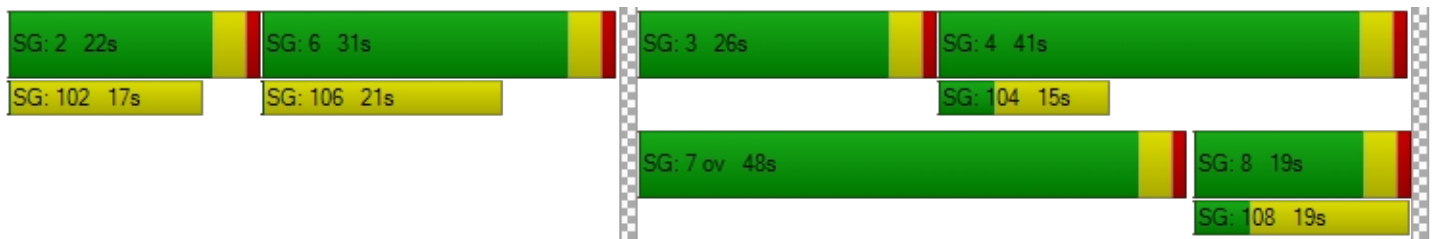
d_M, Delay for Movement [s/veh]	47.89	48.86	24.93	62.17	56.53	56.53	61.00	38.08	38.20	42.63	11.88	11.93
Movement LOS	D	D	C	E	E	E	E	D	D	D	B	B
d_A, Approach Delay [s/veh]	29.96			59.67			39.10			24.78		
Approach LOS	C			E			D			C		
d_I, Intersection Delay [s/veh]	31.60											
Intersection LOS	C											
Intersection V/C	0.706											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	4.0	4.0
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]	51.35	51.35	56.08	56.08
I_p,int, Pedestrian LOS Score for Intersection	2.491	2.101	2.629	2.957
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	450	300	250	617
d_b, Bicycle Delay [s]	36.05	43.37	45.95	28.72
I_b,int, Bicycle LOS Score for Intersection	2.670	1.909	2.069	2.706
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level of Service Report
Intersection 25: I-215 SB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	33.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.684

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	358	3	462	0	845	315	285	794	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	358	3	462	0	845	315	285	794	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9890	0.9890	0.9890	1.0000	0.9890	0.9890	0.9890	0.9890	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	90	1	117	0	214	80	72	201	0
Total Analysis Volume [veh/h]	0	0	0	362	3	467	0	854	319	288	803	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	Semi-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	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Unsigna	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	10	0	0	10	0	7	10	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	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	51	0	0	41	0	28	69	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	21	0	0	3	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	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	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	L	C
C, Cycle Length [s]		120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	2.60	2.00	2.60
g_i, Effective Green Time [s]		37	37	47	21	73
g / C, Green / Cycle		0.31	0.31	0.39	0.18	0.61
(v / s)_i Volume / Saturation Flow Rate		0.20	0.29	0.24	0.16	0.22
s, saturation flow rate [veh/h]		1810	1615	3618	1810	3618
c, Capacity [veh/h]		566	505	1422	323	2189
d1, Uniform Delay [s]		35.52	39.90	28.92	48.15	12.03
k, delay calibration		0.11	0.27	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		1.24	16.19	1.88	8.44	0.48
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		0.65	0.93	0.60	0.89	0.37
d, Delay for Lane Group [s/veh]		36.76	56.09	30.80	56.59	12.51
Lane Group LOS		D	E	C	E	B
Critical Lane Group		No	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		9.05	14.99	9.92	9.07	5.33
50th-Percentile Queue Length [ft/ln]		226.23	374.82	248.11	226.87	133.15
95th-Percentile Queue Length [veh/ln]		13.98	21.34	15.09	14.02	9.11
95th-Percentile Queue Length [ft/ln]		349.56	533.57	377.28	350.38	227.77

Movement, Approach, & Intersection Results

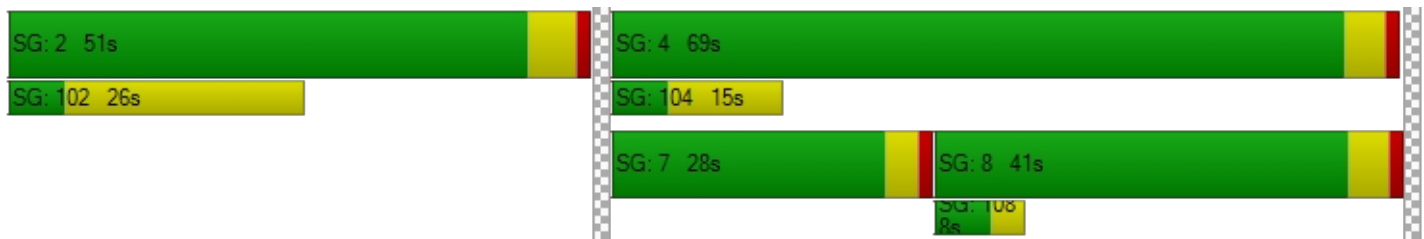
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	36.76	36.76	56.09	0.00	30.80	0.00	56.59	12.51	0.00
Movement LOS				D	D	E		C		E	B	
d_A, Approach Delay [s/veh]	0.00			47.61			30.80			24.14		
Approach LOS	A			D			C			C		
d_I, Intersection Delay [s/veh]	33.22											
Intersection LOS	C											
Intersection V/C	0.684											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	1.722	2.361	2.798	2.905
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	762	607	1073
d_b, Bicycle Delay [s]	60.00	23.00	29.12	12.88
I_b,int, Bicycle LOS Score for Intersection	4.132	2.932	2.264	2.460
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: I-215 NB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	31.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.668

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	383	4	480	0	0	0	283	897	0	0	740	244
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	383	4	480	0	0	0	283	897	0	0	740	244
Peak Hour Factor	0.9860	0.9860	0.9860	1.0000	1.0000	1.0000	0.9860	0.9860	1.0000	1.0000	0.9860	0.9860
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	97	1	122	0	0	0	72	227	0	0	188	62
Total Analysis Volume [veh/h]	388	4	487	0	0	0	287	910	0	0	751	247
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	Semi-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	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	65	0	0	0	0	26	55	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	21	0	0	0	0	0	10	0	0	3	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	3.3	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
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	2.60	2.60
g_i, Effective Green Time [s]	39	39		21	71	46
g / C, Green / Cycle	0.33	0.33		0.18	0.59	0.38
(v / s)_i Volume / Saturation Flow Rate	0.22	0.30		0.16	0.25	0.21
s, saturation flow rate [veh/h]	1810	1615		1810	3618	3618
c, Capacity [veh/h]	594	530		320	2132	1371
d1, Uniform Delay [s]	34.55	38.76		48.30	13.53	29.21
k, delay calibration	0.11	0.17		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	1.26	10.01		8.80	0.63	1.58
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	0.66	0.92		0.90	0.43	0.55
d, Delay for Lane Group [s/veh]	35.81	48.77		57.10	14.15	30.79
Lane Group LOS	D	D		E	B	C
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	9.64	14.62		9.08	6.60	8.63
50th-Percentile Queue Length [ft/ln]	241.01	365.48		226.97	165.06	215.64
95th-Percentile Queue Length [veh/ln]	14.73	20.89		14.02	10.82	13.44
95th-Percentile Queue Length [ft/ln]	368.31	522.24		350.51	270.41	336.05

Movement, Approach, & Intersection Results

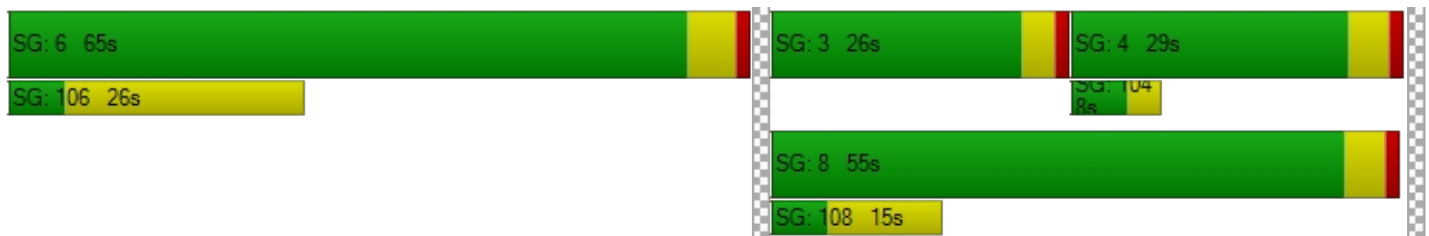
d_M, Delay for Movement [s/veh]	35.81	35.81	48.77	0.00	0.00	0.00	57.10	14.15	0.00	0.00	30.79	0.00
Movement LOS	D	D	D				E	B			C	
d_A, Approach Delay [s/veh]	42.99			0.00			24.45			30.79		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	31.90											
Intersection LOS	C											
Intersection V/C	0.668											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.384	1.722	2.847	2.875
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	995	0	840	407
d_b, Bicycle Delay [s]	15.15	60.00	20.18	38.08
I_b,int, Bicycle LOS Score for Intersection	3.010	4.132	2.547	2.179
Bicycle LOS	C	D	B	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: Encanto Dr at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	24.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.515

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]	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	172	19	40	30	17	140	184	982	261	32	671	22
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	172	19	40	30	17	140	184	982	261	32	671	22
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]	44	5	10	8	4	36	48	254	67	8	173	6
Total Analysis Volume [veh/h]	178	20	41	31	18	145	190	1014	270	33	693	23
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	Semi-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	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	10	0	0	10	0	7	10	0	7	10	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	3.0	0.0	3.0	3.0	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	32	0	0	32	0	68	77	0	11	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	21	0	0	17	0	0	14	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	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	4.20	4.20	4.20	4.00	4.00	4.00	4.00	4.00	4.00
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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	28	28	28	28	28	15	75	75	5	65	65
g / C, Green / Cycle	0.23	0.23	0.23	0.23	0.23	0.12	0.63	0.63	0.04	0.54	0.54
(v / s)_i Volume / Saturation Flow Rate	0.14	0.01	0.03	0.02	0.10	0.11	0.35	0.35	0.02	0.19	0.19
s, saturation flow rate [veh/h]	1242	1900	1615	1363	1642	1810	1900	1765	1810	1900	1879
c, Capacity [veh/h]	222	440	374	342	380	225	1192	1108	71	1031	1019
d1, Uniform Delay [s]	52.88	35.80	36.34	38.63	39.32	51.41	12.74	12.88	56.43	15.50	15.50
k, delay calibration	0.13	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]	8.10	0.04	0.13	0.11	0.76	8.40	1.85	2.08	4.72	0.93	0.95
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.80	0.05	0.11	0.09	0.43	0.84	0.55	0.56	0.47	0.35	0.35
d, Delay for Lane Group [s/veh]	60.97	35.84	36.47	38.74	40.09	59.81	14.60	14.95	61.16	16.44	16.45
Lane Group LOS	E	D	D	D	D	E	B	B	E	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.92	0.46	0.97	0.76	4.19	6.07	10.01	9.63	1.06	5.65	5.59
50th-Percentile Queue Length [ft/ln]	147.98	11.61	24.23	18.95	104.84	151.67	250.19	240.66	26.62	141.21	139.80
95th-Percentile Queue Length [veh/ln]	9.91	0.84	1.74	1.36	7.55	10.11	15.20	14.71	1.92	9.55	9.47
95th-Percentile Queue Length [ft/ln]	247.73	20.90	43.62	34.11	188.70	252.65	379.89	367.86	47.92	238.65	236.75

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	60.97	35.84	36.47	38.74	40.09	40.09	59.81	14.72	14.95	61.16	16.44	16.45
Movement LOS	E	D	D	D	D	D	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	54.67			39.87			20.58			18.41		
Approach LOS	D			D			C			B		
d_I, Intersection Delay [s/veh]	24.44											
Intersection LOS	C											
Intersection V/C	0.515											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.283	2.094	3.135	2.860
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	463	463	1217	267
d_b, Bicycle Delay [s]	35.42	35.42	9.20	45.07
I_b,int, Bicycle LOS Score for Intersection	1.954	1.880	2.776	2.178
Bicycle LOS	A	A	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 at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.301

Intersection Setup

Name	Sherman Rd			Sherman 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	26	1	8	32	3	18	12	907	23	14	622	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	1	8	32	3	18	12	907	23	14	622	13
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]	7	0	2	9	1	5	3	245	6	4	168	4
Total Analysis Volume [veh/h]	28	1	9	35	3	19	13	978	25	15	671	14
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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	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	3.6	0.0	3.0	3.6	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	31	0	15	27	0	11	63	0	11	63	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	10	0	0	14	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	2.6	0.0	2.0	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.20	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]	2.00	2.20	2.00	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	4	5	5	5	5	2	91	91	3	91	91
g / C, Green / Cycle	0.04	0.04	0.04	0.04	0.04	0.02	0.76	0.76	0.02	0.76	0.76
(v / s)_i Volume / Saturation Flow Rate	0.02	0.01	0.02	0.00	0.01	0.01	0.27	0.27	0.01	0.18	0.18
s, saturation flow rate [veh/h]	1810	1640	1810	1900	1615	1810	1900	1883	1810	1900	1886
c, Capacity [veh/h]	65	64	73	83	71	37	1439	1426	42	1443	1433
d1, Uniform Delay [s]	56.66	55.72	56.34	54.94	55.50	57.96	4.81	4.81	57.74	4.23	4.23
k, delay calibration	0.11	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]	4.51	1.11	4.80	0.17	2.00	5.44	0.67	0.68	5.12	0.39	0.39
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	0.43	0.16	0.48	0.04	0.27	0.35	0.35	0.35	0.36	0.24	0.24
d, Delay for Lane Group [s/veh]	61.17	56.83	61.14	55.11	57.50	63.41	5.48	5.49	62.86	4.62	4.62
Lane Group LOS	E	E	E	E	E	E	A	A	E	A	A
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.91	0.31	1.14	0.09	0.60	0.44	3.67	3.64	0.50	2.20	2.19
50th-Percentile Queue Length [ft/ln]	22.83	7.83	28.41	2.28	14.92	11.08	91.74	91.00	12.62	55.09	54.76
95th-Percentile Queue Length [veh/ln]	1.64	0.56	2.05	0.16	1.07	0.80	6.61	6.55	0.91	3.97	3.94
95th-Percentile Queue Length [ft/ln]	41.10	14.09	51.13	4.10	26.86	19.95	165.14	163.80	22.72	99.17	98.57

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	61.17	56.83	56.83	61.14	55.11	57.50	63.41	5.48	5.49	62.86	4.62	4.62
Movement LOS	E	E	E	E	E	E	E	A	A	E	A	A
d_A, Approach Delay [s/veh]	60.03			59.61			6.23			5.87		
Approach LOS	E			E			A			A		
d_I, Intersection Delay [s/veh]	8.90											
Intersection LOS	A											
Intersection V/C	0.301											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	1.982	2.167	2.710	2.795
Crosswalk LOS	A	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	447	380	973	973
d_b, Bicycle Delay [s]	36.19	39.37	15.81	15.81
I_b,int, Bicycle LOS Score for Intersection	1.622	1.654	2.398	2.137
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX C-2

INTERSECTION ANALYSIS
WORKSHEETS -
EXISTING PLUS PROJECT

CADO Warehouse Project

Vistro File: K:\...\Menifee CADO_AM.vistro

Scenario 2 EX WP AM

Report File: K:\...\2 EX WP AM.pdf

7/27/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Case Rd	Signalized	HCM 6th Edition	NB Right	0.388	38.9	D
2	Murrieta Rd at Case Rd	All-way stop	HCM 6th Edition	NB Left	0.263	9.4	A
3	Goetz Rd at Mapes Rd	Signalized	HCM 6th Edition	SB Left	0.456	35.2	D
4	I-215 SB Ramps/SR-74 at Bonnie Dr	Signalized	HCM 6th Edition	NB Left	0.386	15.7	B
5	I-215 NB Ramps at SR-74	Signalized	HCM 6th Edition	EB Left	0.273	10.5	B
6	Sherman Rd at SR-74	Signalized	HCM 6th Edition	EB Left	0.495	26.9	C
7	Goetz Rd at Fieldstone Dr	Signalized	HCM 6th Edition	WB Left	0.346	15.7	B
8	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.593	45.0	D
9	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.106	50.3	F
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.052	53.3	F
11	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.535	32.8	C
12	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.004	12.0	B
13	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.523	30.1	C
14	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	SB Right	0.872	32.0	C
15	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	WB Thru	0.839	48.9	D
16	Trumble Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.510	28.5	C
17	Sherman Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.140	57.8	F
			HCM 6th				

18	Byers Rd at McLaughlin Rd	All-way stop	HCM 6th Edition	SB Left	0.026	6.4	A
19	Murrieta Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	EB Left	0.015	14.4	B
20	Murrieta Rd at Rouse Rd	Two-way stop	HCM 6th Edition	EB Left	0.040	14.4	B
21	Murrieta Rd at Chambers Ave	All-way stop	HCM 6th Edition	SB Thru	0.360	10.5	B
22	Murrieta Rd at McCall Blvd	Signalized	HCM 6th Edition	SB Left	0.327	36.7	D
23	Sun City Blvd at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.265	26.1	C
24	Bradley Rd at McCall Blvd	Signalized	HCM 6th Edition	EB Left	0.625	31.7	C
25	I-215 SB Ramps at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.697	32.6	C
26	I-215 NB Ramps at McCall Blvd	Signalized	HCM 6th Edition	NB Right	0.594	26.7	C
27	Encanto Dr at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.571	26.5	C
28	Sherman Rd at McCall Blvd	Signalized	HCM 6th Edition	SB Left	0.479	18.8	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: Goetz Rd at Case Rd

Control Type:	Signalized	Delay (sec / veh):	38.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.388

Intersection Setup

Name	Goetz Rd		Case Rd		Case 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	1	0	1	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]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Goetz Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	233	251	153	115	188	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	6	0	0	28	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]	239	251	153	143	188	136
Peak Hour Factor	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	70	43	40	53	38
Total Analysis Volume [veh/h]	267	280	171	160	210	152
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	Semi-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	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	10	0	7	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.7	0.0	5.0	0.0	3.0	5.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	37	0	18	0	65	83
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]	3.7	0.0	4.0	0.0	2.0	4.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.70	5.70	6.00	6.00	4.00	6.00
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]	3.70	3.70	4.00	4.00	2.00	4.00
g_i, Effective Green Time [s]	23	23	65	65	16	85
g / C, Green / Cycle	0.19	0.19	0.54	0.54	0.13	0.71
(v / s)_i Volume / Saturation Flow Rate	0.15	0.17	0.09	0.10	0.12	0.08
s, saturation flow rate [veh/h]	1810	1615	1900	1615	1810	1900
c, Capacity [veh/h]	352	314	1025	871	245	1345
d1, Uniform Delay [s]	45.68	47.11	13.98	14.12	50.77	5.56
k, delay calibration	0.11	0.18	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]	3.52	13.49	0.35	0.46	8.51	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	0.76	0.89	0.17	0.18	0.86	0.11
d, Delay for Lane Group [s/veh]	49.20	60.59	14.33	14.58	59.28	5.73
Lane Group LOS	D	E	B	B	E	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	7.57	8.99	2.22	2.12	6.48	1.01
50th-Percentile Queue Length [ft/ln]	189.19	224.70	55.60	52.99	161.92	25.16
95th-Percentile Queue Length [veh/ln]	12.08	13.90	4.00	3.82	10.65	1.81
95th-Percentile Queue Length [ft/ln]	301.97	347.62	100.08	95.38	266.26	45.29

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	49.20	60.59	14.33	14.58	59.28	5.73
Movement LOS	D	E	B	B	E	A
d_A, Approach Delay [s/veh]	55.03		14.45		36.80	
Approach LOS	E		B		D	
d_I, Intersection Delay [s/veh]	38.87					
Intersection LOS	D					
Intersection V/C	0.388					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
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	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.452	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	522	200	1283
d_b, Bicycle Delay [s]	32.78	48.60	7.70
I_b,int, Bicycle LOS Score for Intersection	1.560	2.106	2.157
Bicycle LOS	A	B	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Murrieta Rd at Case Rd**

Control Type:	All-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.263

Intersection Setup

Name	Murrieta Rd		Case Rd		Case 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	1	0	1	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]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Murrieta Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	123	18	177	35	13	140
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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	17	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]	123	18	177	35	30	140
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]	32	5	46	9	8	36
Total Analysis Volume [veh/h]	128	19	185	36	31	146
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings**Lanes**

Capacity per Entry Lane [veh/h]	605	758	703	814	636	697
Degree of Utilization, x	0.21	0.03	0.26	0.04	0.05	0.21

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.79	0.08	1.06	0.14	0.15	0.78
95th-Percentile Queue Length [ft]	19.85	1.93	26.39	3.47	3.84	19.62
Approach Delay [s/veh]	9.89		9.27		9.12	
Approach LOS	A		A		A	
Intersection Delay [s/veh]	9.39					
Intersection LOS	A					

**Intersection Level Of Service Report
Intersection 3: Goetz Rd at Mapes Rd**

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):	0.456

Intersection Setup

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes 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	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes Rd		
Base Volume Input [veh/h]	268	278	14	3	141	165	146	0	187	0	0	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	6	0	0	28	0	0	0	14	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	271	284	14	3	169	165	146	0	201	0	0	1
Peak Hour Factor	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	82	86	4	1	51	50	44	0	61	0	0	0
Total Analysis Volume [veh/h]	328	343	17	4	204	200	177	0	243	0	0	1
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	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	0	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	0.0	3.2	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	55	64	0	12	21	0	17	44	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	0.0	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	17	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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	0.0	2.2	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	C	L	C	R	L	C	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.20	4.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.20	2.20
g_i, Effective Green Time [s]	24	85	85	1	62	62	13	20	3	3
g / C, Green / Cycle	0.20	0.71	0.71	0.01	0.52	0.52	0.11	0.17	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.18	0.10	0.10	0.00	0.11	0.12	0.10	0.15	0.00	0.00
s, saturation flow rate [veh/h]	1810	1900	1869	1810	1900	1615	1810	1615	786	1615
c, Capacity [veh/h]	362	1344	1321	14	978	831	196	273	52	44
d1, Uniform Delay [s]	46.87	5.69	5.69	59.21	15.83	16.13	52.88	48.75	0.00	56.77
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	8.53	0.21	0.21	10.72	0.48	0.68	13.98	9.58	0.00	0.20
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	0.91	0.13	0.14	0.29	0.21	0.24	0.90	0.89	0.00	0.02
d, Delay for Lane Group [s/veh]	55.40	5.90	5.90	69.93	16.32	16.81	66.85	58.33	0.00	56.98
Lane Group LOS	E	A	A	E	B	B	E	E	A	E
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.02	1.27	1.25	0.16	2.96	2.98	6.03	7.83	0.00	0.03
50th-Percentile Queue Length [ft/ln]	250.53	31.79	31.35	3.98	73.98	74.56	150.66	195.63	0.00	0.80
95th-Percentile Queue Length [veh/ln]	15.21	2.29	2.26	0.29	5.33	5.37	10.05	12.41	0.00	0.06
95th-Percentile Queue Length [ft/ln]	380.32	57.22	56.42	7.16	133.16	134.20	251.31	310.32	0.00	1.44

Movement, Approach, & Intersection Results

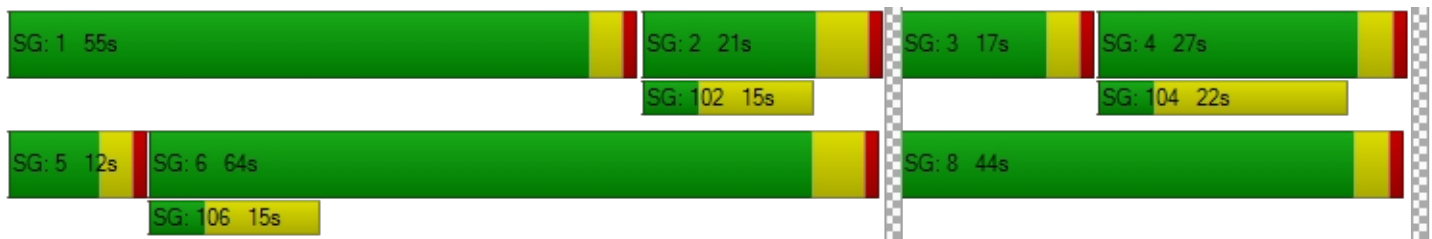
d_M, Delay for Movement [s/veh]	55.40	5.90	5.90	69.93	16.32	16.81	66.85	58.33	58.33	0.00	0.00	56.98
Movement LOS	E	A	A	E	B	B	E	E	E	A	A	E
d_A, Approach Delay [s/veh]	29.50			17.09			61.92			56.98		
Approach LOS	C			B			E			E		
d_I, Intersection Delay [s/veh]	35.15											
Intersection LOS	D											
Intersection V/C	0.456											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	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]	0.00	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.617	2.264	1.963
Crosswalk LOS	F	B	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	972	255	663	380
d_b, Bicycle Delay [s]	15.86	45.68	26.80	39.37
I_b,int, Bicycle LOS Score for Intersection	2.127	2.233	2.253	1.561
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: I-215 SB Ramps/SR-74 at Bonnie Dr

Control Type:	Signalized	Delay (sec / veh):	15.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.386

Intersection Setup

Name	SR-74		I-215 SB Ramps		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]	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]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	SR-74		I-215 SB Ramps		Bonnie Dr	
Base Volume Input [veh/h]	184	385	486	18	29	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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	24	0	17	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]	184	409	486	35	29	136
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	48	106	126	9	7	35
Total Analysis Volume [veh/h]	190	423	502	36	30	140
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	Semi-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	Protected	Permissive	Overlap	Permissive	Permissive	Unsignalized
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups			2			
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	10	10	0	7	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	4.3	4.3	0.0	4.3	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	18	77	59	0	43	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	14	0
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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	0.0	3.3	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L
C, Cycle Length [s]	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	3.30	3.30
g_i, Effective Green Time [s]	14	105	87	87	4
g / C, Green / Cycle	0.12	0.87	0.72	0.72	0.04
(v / s)_i Volume / Saturation Flow Rate	0.11	0.22	0.26	0.02	0.02
s, saturation flow rate [veh/h]	1810	1900	1900	1615	1810
c, Capacity [veh/h]	211	1660	1375	1169	69
d1, Uniform Delay [s]	52.31	1.23	6.22	4.68	56.47
k, delay calibration	0.11	0.50	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.89	0.37	0.75	0.05	4.32
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	0.90	0.25	0.37	0.03	0.44
d, Delay for Lane Group [s/veh]	65.20	1.60	6.98	4.73	60.79
Lane Group LOS	E	A	A	A	E
Critical Lane Group	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	6.25	0.51	4.13	0.22	0.95
50th-Percentile Queue Length [ft/ln]	156.24	12.79	103.14	5.58	23.81
95th-Percentile Queue Length [veh/ln]	10.35	0.92	7.43	0.40	1.71
95th-Percentile Queue Length [ft/ln]	258.74	23.03	185.65	10.04	42.86

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	65.20	1.60	6.98	4.73	60.79	0.00
Movement LOS	E	A	A	A	E	
d_A, Approach Delay [s/veh]	21.31		6.83		60.79	
Approach LOS	C		A		E	
d_I, Intersection Delay [s/veh]	15.72					
Intersection LOS	B					
Intersection V/C	0.386					

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	2.554	2.439	2.080
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1195	895	628
d_b, Bicycle Delay [s]	9.72	18.32	28.22
I_b,int, Bicycle LOS Score for Intersection	2.571	2.447	1.560
Bicycle LOS	B	B	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: I-215 NB Ramps at SR-74

Control Type:	Signalized	Delay (sec / veh):	10.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.273

Intersection Setup

Name	I-215 NB Ramps		SR-74		SR-74	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB Ramps		SR-74		SR-74	
Base Volume Input [veh/h]	131	11	8	629	531	676
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	3	0	0	0	24	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]	134	11	8	629	555	676
Peak Hour Factor	0.9330	0.9330	0.9330	0.9330	0.9330	0.9330
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	3	2	169	149	181
Total Analysis Volume [veh/h]	144	12	9	674	595	725
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	Semi-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	Protected	Permissive	Permissive	Unsignalized
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	4.3	0.0	3.0	5.0	5.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	54	0	11	66	55	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	21	0	0	10	7	0
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	0.0
I2, Clearance Lost Time [s]	3.3	0.0	2.0	4.0	4.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C
C, Cycle Length [s]	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	2.00	4.00	4.00
g_i, Effective Green Time [s]	13	2	96	90
g / C, Green / Cycle	0.10	0.02	0.80	0.75
(v / s)_i Volume / Saturation Flow Rate	0.09	0.00	0.19	0.16
s, saturation flow rate [veh/h]	1793	1810	3618	3618
c, Capacity [veh/h]	189	28	2895	2719
d1, Uniform Delay [s]	52.59	58.45	2.94	4.43
k, delay calibration	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.74	6.46	0.19	0.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.32	0.23	0.22
d, Delay for Lane Group [s/veh]	61.32	64.91	3.13	4.62
Lane Group LOS	E	E	A	A
Critical Lane Group	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.95	0.31	1.16	1.58
50th-Percentile Queue Length [ft/ln]	123.71	7.77	28.94	39.43
95th-Percentile Queue Length [veh/ln]	8.60	0.56	2.08	2.84
95th-Percentile Queue Length [ft/ln]	214.91	13.98	52.09	70.97

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	61.32	61.32	64.91	3.13	4.62	0.00
Movement LOS	E	E	E	A	A	
d_A, Approach Delay [s/veh]	61.32		3.94		4.62	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	10.46					
Intersection LOS	B					
Intersection V/C	0.273					

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	1.851	2.776	2.889
Crosswalk LOS	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	812	1000	817
d_b, Bicycle Delay [s]	21.18	15.00	21.00
I_b,int, Bicycle LOS Score for Intersection	1.817	2.123	2.050
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Sherman Rd at SR-74**

Control Type:	Signalized	Delay (sec / veh):	26.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.495

Intersection Setup

Name	Sherman Rd			Sherman 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	1	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	40.00			40.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	46	1	250	0	4	1	5	623	15	239	860	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	0	0	0	0	3	10	0	24	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	48	1	250	0	4	1	5	626	25	239	884	1
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	0	67	0	1	0	1	168	7	64	237	0
Total Analysis Volume [veh/h]	51	1	268	0	4	1	5	670	27	256	946	1
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	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	5.0	0.0	3.0	5.0	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	41	0	0	27	0	11	21	0	31	41	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	21	0	0	17	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			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	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	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	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	22	22	2	1	57	57	19	75	75
g / C, Green / Cycle	0.19	0.19	0.01	0.01	0.48	0.48	0.16	0.63	0.63
(v / s)_i Volume / Saturation Flow Rate	0.03	0.17	0.00	0.00	0.18	0.18	0.14	0.25	0.25
s, saturation flow rate [veh/h]	1811	1615	1835	1810	1900	1874	1810	1900	1899
c, Capacity [veh/h]	336	300	25	17	907	895	287	1191	1190
d1, Uniform Delay [s]	40.95	47.69	58.55	59.07	20.10	20.11	49.50	11.14	11.14
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.13	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]	0.21	9.12	3.95	9.86	1.25	1.26	11.21	0.99	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
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	0.15	0.89	0.20	0.30	0.39	0.39	0.89	0.40	0.40
d, Delay for Lane Group [s/veh]	41.17	56.81	62.51	68.93	21.35	21.37	60.71	12.14	12.14
Lane Group LOS	D	E	E	E	C	C	E	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.29	8.41	0.18	0.19	6.07	6.00	8.06	5.63	5.63
50th-Percentile Queue Length [ft/ln]	32.35	210.22	4.38	4.77	151.79	150.03	201.48	140.85	140.80
95th-Percentile Queue Length [veh/ln]	2.33	13.16	0.32	0.34	10.11	10.02	12.71	9.53	9.52
95th-Percentile Queue Length [ft/ln]	58.24	329.11	7.89	8.59	252.81	250.47	317.87	238.16	238.10

Movement, Approach, & Intersection Results

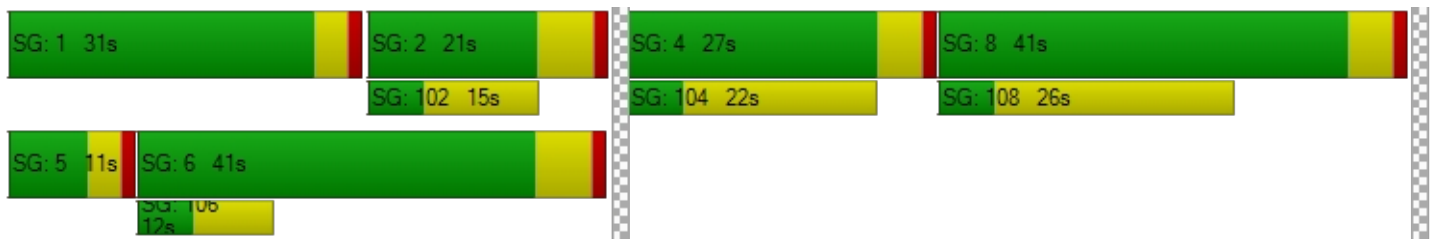
d_M, Delay for Movement [s/veh]	41.17	41.17	56.81	62.51	62.51	62.51	68.93	21.36	21.37	60.71	12.14	12.14
Movement LOS	D	D	E	E	E	E	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	54.27			62.51			21.70			22.47		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	26.88											
Intersection LOS	C											
Intersection V/C	0.495											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.218	1.738	2.923	3.106
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	602	368	250	583
d_b, Bicycle Delay [s]	29.33	39.94	45.94	30.10
I_b,int, Bicycle LOS Score for Intersection	2.088	1.568	2.139	2.552
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Goetz Rd at Fieldstone Dr

Control Type:	Signalized	Delay (sec / veh):	15.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.346

Intersection Setup

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Base Volume Input [veh/h]	18	516	7	12	276	17	68	4	60	3	0	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	0	0	42	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]	18	525	7	12	318	17	68	4	60	3	0	15
Peak Hour Factor	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530
Other Adjustment Factor	1.0000	1.0000	1.0000	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	138	2	3	83	4	18	1	16	1	0	4
Total Analysis Volume [veh/h]	19	551	7	13	334	18	71	4	63	3	0	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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	3.0	3.2	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]	40	44	0	11	15	0	31	34	0	31	34	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	24	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	2.0	2.2	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	L	C	R
C, Cycle Length [s]	121	121	121	121	121	121	121	121	121	121	121
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.00	4.20	4.20
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	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.00	2.20	2.20
g_i, Effective Green Time [s]	3	89	89	2	88	88	6	10	1	4	4
g / C, Green / Cycle	0.03	0.74	0.74	0.02	0.73	0.73	0.05	0.08	0.01	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.01	0.29	0.00	0.01	0.06	0.06	0.04	0.04	0.00	0.00	0.01
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1851	1810	1630	1810	1900	1615
c, Capacity [veh/h]	50	1398	1188	37	2635	1348	96	133	11	66	56
d1, Uniform Delay [s]	57.79	5.96	4.25	58.46	4.77	4.78	56.49	53.21	59.88	0.00	56.93
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
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]	4.60	0.84	0.01	5.52	0.07	0.13	10.72	2.92	13.28	0.00	2.73
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	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	0.38	0.39	0.01	0.35	0.09	0.09	0.74	0.50	0.28	0.00	0.28
d, Delay for Lane Group [s/veh]	62.39	6.79	4.26	63.98	4.84	4.91	67.20	56.13	73.16	0.00	59.66
Lane Group LOS	E	A	A	E	A	A	E	E	E	A	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.62	4.27	0.04	0.44	0.68	0.73	2.42	2.06	0.13	0.00	0.52
50th-Percentile Queue Length [ft/ln]	15.48	106.68	0.97	10.96	17.06	18.33	60.61	51.59	3.29	0.00	13.01
95th-Percentile Queue Length [veh/ln]	1.11	7.65	0.07	0.79	1.23	1.32	4.36	3.71	0.24	0.00	0.94
95th-Percentile Queue Length [ft/ln]	27.86	191.37	1.74	19.73	30.70	32.99	109.10	92.86	5.92	0.00	23.42

Movement, Approach, & Intersection Results

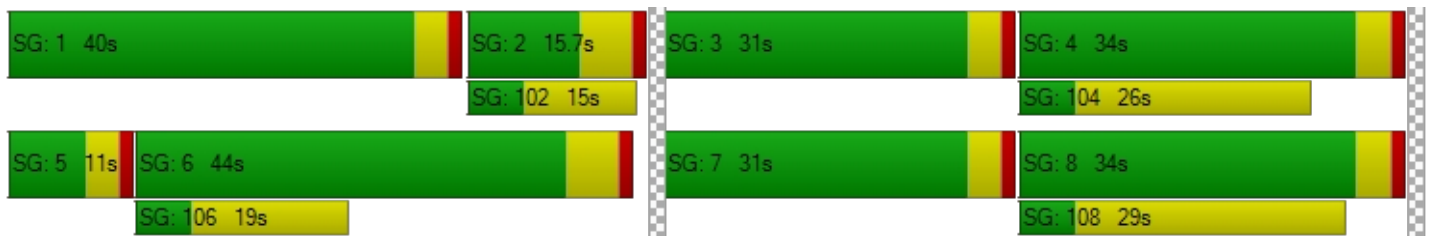
d_M, Delay for Movement [s/veh]	62.39	6.79	4.26	63.98	4.86	4.91	67.20	56.13	56.13	73.16	0.00	59.66
Movement LOS	E	A	A	E	A	A	E	E	E	E	A	E
d_A, Approach Delay [s/veh]	8.59			6.97			61.83			61.79		
Approach LOS	A			A			E			E		
d_I, Intersection Delay [s/veh]	15.66											
Intersection LOS	B											
Intersection V/C	0.346											

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]	51.83	51.83	51.83	51.83
I_p,int, Pedestrian LOS Score for Intersection	2.836	2.740	2.013	2.157
Crosswalk LOS	C	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	633	165	493	493
d_b, Bicycle Delay [s]	28.26	50.91	34.37	34.37
I_b,int, Bicycle LOS Score for Intersection	2.512	1.760	1.787	1.591
Bicycle LOS	B	A	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 8: Goetz Rd at Ethanac Rd**

Control Type:	Signalized	Delay (sec / veh):	45.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.593

Intersection Setup

Name	Goetz Rd			Goetz 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	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	2	229	371	224	110	8	16	88	6	167	70	271
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	14	42	0	0	0	5	0	3	1	9
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	2	229	385	266	110	8	16	93	6	170	71	280
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	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	60	100	69	29	2	4	24	2	44	19	73
Total Analysis Volume [veh/h]	2	239	402	278	115	8	17	97	6	177	74	292
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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	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]	47	55	0	26	34	0	11	28	0	11	28	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	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	3.7	0.0	2.0	3.7	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	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	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	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	0	33	33	20	52	52	3	34	34	14	45	45
g / C, Green / Cycle	0.00	0.27	0.27	0.17	0.44	0.44	0.03	0.28	0.28	0.11	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.00	0.13	0.25	0.15	0.03	0.00	0.01	0.03	0.00	0.10	0.04	0.18
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	1900	1615
c, Capacity [veh/h]	8	516	438	305	1576	704	46	1029	459	206	709	602
d1, Uniform Delay [s]	59.53	36.43	42.41	48.99	19.74	19.21	57.54	31.56	30.83	52.23	24.55	28.80
k, delay calibration	0.11	0.11	0.14	0.17	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	1.00
d2, Incremental Delay [s]	15.24	0.65	10.25	14.77	0.02	0.01	4.93	0.18	0.05	9.99	0.30	2.78
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	0.25	0.46	0.92	0.91	0.07	0.01	0.37	0.09	0.01	0.86	0.10	0.48
d, Delay for Lane Group [s/veh]	74.77	37.08	52.66	63.76	19.76	19.21	62.48	31.75	30.88	62.23	24.84	31.58
Lane Group LOS	E	D	D	E	B	B	E	C	C	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.09	5.70	12.22	9.11	0.90	0.12	0.56	1.03	0.13	5.62	1.38	6.56
50th-Percentile Queue Length [ft/ln]	2.32	142.40	305.42	227.71	22.39	3.05	13.88	25.66	3.19	140.50	34.39	164.07
95th-Percentile Queue Length [veh/ln]	0.17	9.61	17.95	14.06	1.61	0.22	1.00	1.85	0.23	9.51	2.48	10.76
95th-Percentile Queue Length [ft/ln]	4.18	240.25	448.72	351.45	40.30	5.49	24.98	46.19	5.74	237.70	61.90	269.10

Movement, Approach, & Intersection Results

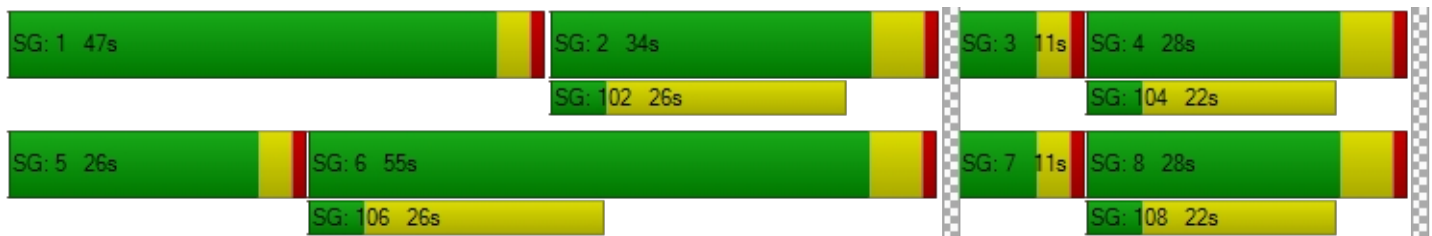
d_M, Delay for Movement [s/veh]	74.77	37.08	52.66	63.76	19.76	19.21	62.48	31.75	30.88	62.23	24.84	31.58
Movement LOS	E	D	D	E	B	B	E	C	C	E	C	C
d_A, Approach Delay [s/veh]	46.94			50.25			36.06			40.65		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	44.95											
Intersection LOS	D											
Intersection V/C	0.593											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.621	2.624	2.523	2.826
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	822	472	372	372
d_b, Bicycle Delay [s]	20.83	35.04	39.77	39.77
I_b,int, Bicycle LOS Score for Intersection	2.621	1.890	1.659	2.008
Bicycle LOS	B	A	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 9: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	50.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.106

Intersection Setup

Name	Wheat St		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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	0	689	0	0	510
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	9	76	6	55	234	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	76	695	55	234	514
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	19	178	14	60	132
Total Analysis Volume [veh/h]	9	78	712	56	240	527
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	0.11	0.13	0.01	0.00	0.28	0.01
d_M, Delay for Movement [s/veh]	50.33	13.68	0.00	0.00	10.85	0.00
Movement LOS	F	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.88	0.88	0.00	0.00	1.15	0.00
95th-Percentile Queue Length [ft/ln]	22.11	22.11	0.00	0.00	28.84	0.00
d_A, Approach Delay [s/veh]	17.47		0.00		3.39	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	2.54					
Intersection LOS	F					

**Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	53.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.052

Intersection Setup

Name	Byers 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	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		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	6	692	2	6	512
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	4	31	76	6	194	234
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]	4	37	768	8	200	746
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	9	197	2	51	191
Total Analysis Volume [veh/h]	4	38	787	8	205	764
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	0.05	0.06	0.01	0.00	0.25	0.01
d_M, Delay for Movement [s/veh]	53.35	12.20	0.00	0.00	10.70	0.00
Movement LOS	F	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.39	0.39	0.00	0.00	0.96	0.00
95th-Percentile Queue Length [ft/ln]	9.64	9.64	0.00	0.00	24.09	0.00
d_A, Approach Delay [s/veh]	16.12		0.00		2.26	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.59					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 11: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	32.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.535

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	0	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
	97	90	162	67	34	9	6	665	51	78	357	48
Base Volume Input [veh/h]	97	90	162	67	34	9	6	665	51	78	357	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	27	0	0	0	0	17	0	96	11	0	385	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	124	90	162	67	34	26	6	761	62	78	742	48
Peak Hour Factor	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	23	42	17	9	7	2	197	16	20	192	12
Total Analysis Volume [veh/h]	129	93	168	70	35	27	6	789	64	81	770	50
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	Semi-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	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	4.7	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	29	0	0	35	0	18	41	0	15	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	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	7	0	0	14	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	3.7	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	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	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
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	29	10	10	10	1	54	54	7	59	59
g / C, Green / Cycle	0.24	0.08	0.08	0.08	0.01	0.45	0.45	0.06	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.22	0.04	0.02	0.02	0.00	0.23	0.23	0.04	0.22	0.22
s, saturation flow rate [veh/h]	1739	1810	1900	1615	1810	1900	1850	1810	1900	1860
c, Capacity [veh/h]	421	151	159	135	21	849	827	105	938	918
d1, Uniform Delay [s]	44.41	52.41	51.33	51.24	58.83	23.78	23.78	55.71	19.68	19.68
k, delay calibration	0.17	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]	12.99	2.19	0.69	0.72	7.55	2.18	2.24	11.07	1.51	1.54
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	0.46	0.22	0.20	0.29	0.51	0.51	0.77	0.44	0.44
d, Delay for Lane Group [s/veh]	57.40	54.61	52.02	51.96	66.38	25.95	26.02	66.78	21.19	21.23
Lane Group LOS	E	D	D	D	E	C	C	E	C	C
Critical Lane Group	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	12.42	2.06	0.99	0.77	0.22	8.70	8.49	2.66	7.32	7.17
50th-Percentile Queue Length [ft/ln]	310.51	51.46	24.83	19.21	5.47	217.48	212.23	66.62	182.94	179.28
95th-Percentile Queue Length [veh/ln]	18.20	3.71	1.79	1.38	0.39	13.54	13.27	4.80	11.75	11.56
95th-Percentile Queue Length [ft/ln]	455.00	92.63	44.70	34.58	9.85	338.41	331.69	119.91	293.86	289.08

Movement, Approach, & Intersection Results

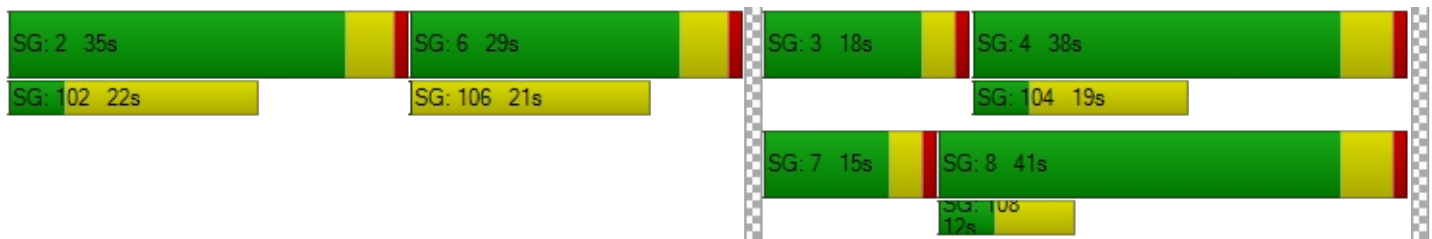
d_M, Delay for Movement [s/veh]	57.40	57.40	57.40	54.61	52.02	51.96	66.38	25.98	26.02	66.78	21.21	21.23
Movement LOS	E	E	E	D	D	D	E	C	C	E	C	C
d_A, Approach Delay [s/veh]	57.40			53.38			26.27			25.31		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	32.78											
Intersection LOS	C											
Intersection V/C	0.535											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	4.0
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	56.07
l_p,int, Pedestrian LOS Score for Intersection	2.147	2.249	2.895	2.994
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	395	495	588	538
d_b, Bicycle Delay [s]	38.64	33.98	29.89	32.05
l_b,int, Bicycle LOS Score for Intersection	2.203	1.777	2.268	2.303
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Evans Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	12.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Evans 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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	2	854	1	0	549
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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	96	0	0	385
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	950	1	0	934
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	0	1	252	0	0	248
Total Analysis Volume [veh/h]	0	2	1008	1	0	992
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	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	36.55	11.98	0.00	0.00	10.18	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.29	0.29	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.98		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.01					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 13: Barnett Rd/Case Rd at Ethanac 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):	0.523

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		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	29	6	85	324	0	60	151	608	24	70	475	350
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	96	0	0	385	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	6	85	324	0	60	151	704	24	70	860	350
Peak Hour Factor	0.9270	0.9270	0.9270	0.9270	1.0000	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]	8	2	23	87	0	16	41	190	6	19	232	94
Total Analysis Volume [veh/h]	31	6	92	350	0	65	163	759	26	76	928	378
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	Semi-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	Permiss	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	5	0	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	7	0	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	30	0	0	30	30	0	30	30	0
Amber [s]	0.0	5.0	0.0	5.0	0.0	0.0	3.0	4.7	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	26	0	29	0	0	28	36	0	29	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	0	0	1	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	21	0	0	0	7	0	0	17	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	4.0	0.0	4.0	0.0	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	L	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	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]	4.00	4.00	4.00	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	11	15	15	13	66	66	7	60	60
g / C, Green / Cycle	0.09	0.12	0.12	0.11	0.55	0.55	0.06	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.08	0.10	0.02	0.09	0.21	0.02	0.04	0.26	0.23
s, saturation flow rate [veh/h]	1670	3514	2859	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	156	425	346	195	1986	887	101	1797	802
d1, Uniform Delay [s]	53.42	51.48	47.43	52.48	15.45	12.41	55.86	20.45	19.85
k, delay calibration	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
d2, Incremental Delay [s]	10.39	4.05	0.26	8.99	0.56	0.06	10.88	1.06	1.98
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	0.83	0.82	0.19	0.84	0.38	0.03	0.76	0.52	0.47
d, Delay for Lane Group [s/veh]	63.81	55.53	47.69	61.47	16.01	12.47	66.75	21.51	21.83
Lane Group LOS	E	E	D	E	B	B	E	C	C
Critical Lane Group	Yes	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.11	5.15	0.85	5.14	5.54	0.31	2.50	8.36	6.84
50th-Percentile Queue Length [ft/ln]	102.84	128.82	21.33	128.41	138.51	7.79	62.55	208.98	171.05
95th-Percentile Queue Length [veh/ln]	7.40	8.88	1.54	8.85	9.40	0.56	4.50	13.10	11.13
95th-Percentile Queue Length [ft/ln]	185.12	221.89	38.40	221.33	235.01	14.02	112.59	327.52	278.29

Movement, Approach, & Intersection Results

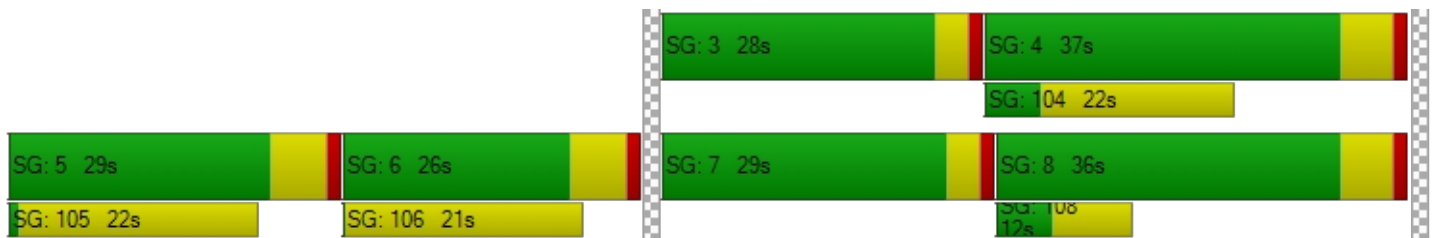
d_M, Delay for Movement [s/veh]	63.81	63.81	63.81	55.53	0.00	47.69	61.47	16.01	12.47	66.75	21.51	21.83
Movement LOS	E	E	E	E		D	E	B	B	E	C	C
d_A, Approach Delay [s/veh]	63.81			54.30			23.73			24.08		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	30.11											
Intersection LOS	C											
Intersection V/C	0.523											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	5.0	4.0
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	55.10	56.07
I_p,int, Pedestrian LOS Score for Intersection	1.937	2.659	3.005	3.171
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	333	383	505	522
d_b, Bicycle Delay [s]	41.67	39.20	33.53	32.78
I_b,int, Bicycle LOS Score for Intersection	1.772	1.560	2.342	2.700
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 14: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	32.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.872

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			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 On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	124	0	245	0	722	499	105	703	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	198	0	60	36	0	187	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	124	0	443	0	782	535	105	890	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9850	0.9850	0.9850	1.0000	0.9850	0.9850	0.9850	0.9850	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	0	112	0	198	136	27	226	0
Total Analysis Volume [veh/h]	0	0	0	126	0	450	0	794	543	107	904	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	Semi-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	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	10	0	0	10	0	7	10	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	40	0	0	69	0	11	80	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	14	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	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]		120	120	120	120	120	120
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]		35	35	61	61	9	74
g / C, Green / Cycle		0.29	0.29	0.51	0.51	0.07	0.62
(v / s)_i Volume / Saturation Flow Rate		0.07	0.28	0.42	0.34	0.06	0.25
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		523	467	973	827	133	2240
d1, Uniform Delay [s]		32.59	42.03	24.53	21.51	54.72	11.60
k, delay calibration		0.11	0.41	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]		0.24	29.54	7.52	4.05	10.61	0.54
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		0.24	0.96	0.82	0.66	0.80	0.40
d, Delay for Lane Group [s/veh]		32.82	71.57	32.05	25.56	65.33	12.14
Lane Group LOS		C	E	C	C	E	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		2.76	16.39	19.06	11.14	3.47	5.53
50th-Percentile Queue Length [ft/ln]		69.01	409.73	476.46	278.56	86.78	138.32
95th-Percentile Queue Length [veh/ln]		4.97	23.03	26.22	16.62	6.25	9.39
95th-Percentile Queue Length [ft/ln]		124.22	575.71	655.45	415.42	156.21	234.76

Movement, Approach, & Intersection Results

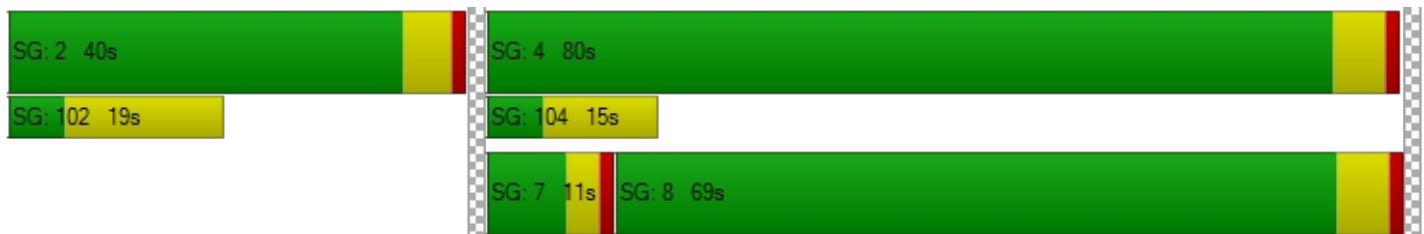
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	32.82	32.82	71.57	0.00	32.05	25.56	65.33	12.14	0.00
Movement LOS				C	C	E		C	C	E	B	
d_A, Approach Delay [s/veh]	0.00			63.09			29.41			17.77		
Approach LOS	A			E			C			B		
d_I, Intersection Delay [s/veh]	32.02											
Intersection LOS	C											
Intersection V/C	0.872											

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	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.236	0.000	2.931
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	578	1055	1238
d_b, Bicycle Delay [s]	60.00	30.32	13.40	8.70
I_b,int, Bicycle LOS Score for Intersection	4.132	2.510	3.766	2.394
Bicycle LOS	D	B	D	B

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	48.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.839

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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]	45.00			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 Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	351	0	135	0	0	0	270	580	0	0	456	143
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	158	0	0	0	0	0	52	8	0	0	29	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	509	0	135	0	0	0	322	588	0	0	485	143
Peak Hour Factor	0.9650	0.9650	0.9650	1.0000	1.0000	1.0000	0.9650	0.9650	1.0000	1.0000	0.9650	0.9650
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	132	0	35	0	0	0	83	152	0	0	126	37
Total Analysis Volume [veh/h]	527	0	140	0	0	0	334	609	0	0	503	148
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	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

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	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	51	0	0	0	0	27	69	0	0	42	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	10	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	3.3	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]	5.30	5.30		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]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	37	37		24	72	44
g / C, Green / Cycle	0.31	0.31		0.20	0.60	0.36
(v / s)_i Volume / Saturation Flow Rate	0.29	0.09		0.18	0.32	0.36
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1827
c, Capacity [veh/h]	564	503		363	1134	662
d1, Uniform Delay [s]	40.11	31.13		47.00	14.36	37.88
k, delay calibration	0.28	0.11		0.24	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	16.18	0.30		18.07	1.83	31.06
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.93	0.28		0.92	0.54	0.98
d, Delay for Lane Group [s/veh]	56.29	31.43		65.07	16.19	68.94
Lane Group LOS	E	C		E	B	E
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	16.95	3.01		11.18	9.21	23.37
50th-Percentile Queue Length [ft/ln]	423.87	75.36		279.40	230.32	584.28
95th-Percentile Queue Length [veh/ln]	23.71	5.43		16.66	14.19	31.30
95th-Percentile Queue Length [ft/ln]	592.69	135.65		416.46	354.77	782.49

Movement, Approach, & Intersection Results

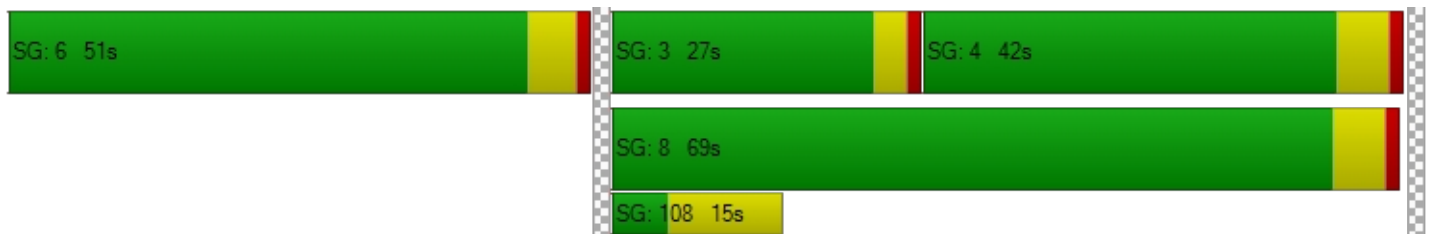
d_M, Delay for Movement [s/veh]	56.29	56.29	31.43	0.00	0.00	0.00	65.07	16.19	0.00	0.00	68.94	68.94
Movement LOS	E	E	C				E	B			E	E
d_A, Approach Delay [s/veh]	51.07			0.00			33.50			68.94		
Approach LOS	D			A			C			E		
d_I, Intersection Delay [s/veh]	48.89											
Intersection LOS	D											
Intersection V/C	0.839											

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	2.281	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]	762	0	1055	605
d_b, Bicycle Delay [s]	23.00	60.00	13.40	29.19
I_b,int, Bicycle LOS Score for Intersection	2.660	4.132	3.116	2.634
Bicycle LOS	B	D	C	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Trumble Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	28.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.510

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	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	99	9	34	8	9	109	87	558	34	61	341	11
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	8	0	0	29	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	99	9	34	8	9	109	87	566	34	61	370	11
Peak Hour Factor	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	3	9	2	3	30	24	158	9	17	103	3
Total Analysis Volume [veh/h]	110	10	38	9	10	121	97	630	38	68	412	12
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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	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]	31	15	0	35	19	0	55	59	0	11	15	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	14	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	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]	121	121	121	121	121	121	121	121	121
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	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	2.00	2.00	2.00	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	9	19	2	12	8	75	75	6	73
g / C, Green / Cycle	0.08	0.16	0.02	0.10	0.07	0.62	0.62	0.05	0.60
(v / s)_i Volume / Saturation Flow Rate	0.06	0.03	0.00	0.08	0.05	0.33	0.02	0.04	0.22
s, saturation flow rate [veh/h]	1810	1667	1810	1634	1810	1900	1615	1810	1891
c, Capacity [veh/h]	138	261	29	158	125	1179	1002	94	1141
d1, Uniform Delay [s]	54.96	44.30	58.87	53.69	55.39	13.02	8.91	56.50	12.26
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]	9.97	0.33	5.91	10.64	9.75	1.74	0.07	9.98	0.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.80	0.18	0.31	0.83	0.77	0.53	0.04	0.72	0.37
d, Delay for Lane Group [s/veh]	64.94	44.63	64.77	64.33	65.13	14.76	8.99	66.48	13.19
Lane Group LOS	E	D	E	E	E	B	A	E	B
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.68	1.28	0.32	4.38	3.16	9.00	0.37	2.24	5.49
50th-Percentile Queue Length [ft/ln]	92.04	32.05	8.02	109.50	78.96	225.09	9.20	56.11	137.34
95th-Percentile Queue Length [veh/ln]	6.63	2.31	0.58	7.81	5.69	13.92	0.66	4.04	9.34
95th-Percentile Queue Length [ft/ln]	165.67	57.69	14.44	195.31	142.13	348.11	16.56	100.99	233.44

Movement, Approach, & Intersection Results

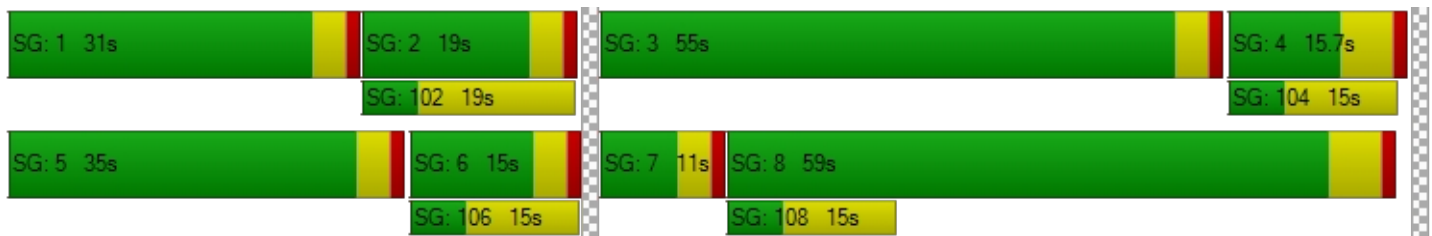
d_M, Delay for Movement [s/veh]	64.94	44.63	44.63	64.77	64.33	64.33	65.13	14.76	8.99	66.48	13.19	13.19
Movement LOS	E	D	D	E	E	E	E	B	A	E	B	B
d_A, Approach Delay [s/veh]	58.77			64.36			20.86			20.56		
Approach LOS	E			E			C			C		
d_I, Intersection Delay [s/veh]	28.53											
Intersection LOS	C											
Intersection V/C	0.510											

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]	51.83	51.83	51.83	51.83
l_p,int, Pedestrian LOS Score for Intersection	2.045	2.040	2.719	2.589
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	182	248	881	165
d_b, Bicycle Delay [s]	50.00	46.43	18.94	50.91
l_b,int, Bicycle LOS Score for Intersection	1.820	1.791	2.822	2.371
Bicycle LOS	A	A	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Sherman Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	57.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.140

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews 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	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews Rd		
Base Volume Input [veh/h]	4	3	2	5	7	196	229	222	14	0	246	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	10	2	5	1	0	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
Total Hourly Volume [veh/h]	9	3	2	5	7	206	231	227	15	0	260	8
Peak Hour Factor	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540
Other Adjustment Factor	1.0000	1.0000	1.0000	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	1	1	1	2	60	68	66	4	0	76	2
Total Analysis Volume [veh/h]	11	4	2	6	8	241	270	266	18	0	304	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	0.14	0.03	0.00	0.04	0.05	0.33	0.21	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	57.83	35.56	16.78	34.23	32.88	14.15	8.64	0.00	0.00	7.79	0.00	0.00
Movement LOS	F	E	C	D	D	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.58	0.58	0.58	2.09	2.09	2.09	0.81	0.81	0.81	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	14.40	14.40	14.40	52.15	52.15	52.15	20.35	20.35	20.35	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	47.76			15.21			4.21			0.00		
Approach LOS	E			C			A			A		
d_I, Intersection Delay [s/veh]	6.17											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 18: Byers Rd at McLaughlin Rd

Control Type:	All-way stop	Delay (sec / veh):	6.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.026

Intersection Setup

Name	Byers Rd			Byers 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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Byers Rd			Byers Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	0	0	0	0	0	0	28
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	2	0	0	0	0	0	0	0	28
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	0	0	0	0	0	0	7
Total Analysis Volume [veh/h]	0	0	0	2	0	0	0	0	0	0	0	28
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	911	868	917	1090
Degree of Utilization, x	0.00	0.00	0.00	0.03

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.00	0.01	0.00	0.08
95th-Percentile Queue Length [ft]	0.00	0.17	0.00	1.98
Approach Delay [s/veh]	0.00	7.16	0.00	6.39
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	6.44			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 19: Murrieta Rd at McLaughlin Rd

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):	0.015

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	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]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	1	298	2	12	147	2	6	0	3	0	0	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	28	27	0	0	11	0	0	0	2	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	325	2	12	158	2	6	0	5	0	0	31
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	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	83	1	3	40	1	2	0	1	0	0	8
Total Analysis Volume [veh/h]	30	333	2	12	162	2	6	0	5	0	0	32
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	0.02	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.04
d_M, Delay for Movement [s/veh]	7.58	0.00	0.00	7.94	0.00	0.00	14.39	13.84	9.21	13.93	13.93	10.29
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	B
95th-Percentile Queue Length [veh/ln]	0.06	0.00	0.00	0.03	0.00	0.00	0.06	0.06	0.06	0.14	0.14	0.14
95th-Percentile Queue Length [ft/ln]	1.61	0.00	0.00	0.74	0.00	0.00	1.61	1.61	1.61	3.52	3.52	3.52
d_A, Approach Delay [s/veh]	0.62			0.54			12.03			10.29		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.34											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 20: Murrieta Rd at Rouse Rd

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):	0.040

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	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	3	234	7	28	120	4	14	18	6	10	3	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	49	0	1	12	0	0	0	0	0	0	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]	3	283	7	29	132	4	14	18	6	10	3	45
Peak Hour Factor	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950
Other Adjustment Factor	1.0000	1.0000	1.0000	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	2	8	37	1	4	5	2	3	1	13
Total Analysis Volume [veh/h]	3	316	8	32	147	4	16	20	7	11	3	50
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	0.04	0.05	0.01	0.03	0.01	0.07
d_M, Delay for Movement [s/veh]	7.50	0.00	0.00	7.96	0.00	0.00	14.40	13.60	9.01	13.76	13.23	10.30
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	0.08	0.00	0.00	0.13	0.14	0.02	0.08	0.02	0.22
95th-Percentile Queue Length [ft/ln]	0.16	0.00	0.00	1.97	0.00	0.00	3.13	3.58	0.58	2.01	0.51	5.51
d_A, Approach Delay [s/veh]	0.07			1.39			13.15			11.03		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.51											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 21: Murrieta Rd at Chambers Ave

Control Type:	All-way stop	Delay (sec / veh):	10.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.360

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	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	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Base Volume Input [veh/h]	36	211	2	36	188	8	28	44	51	7	10	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	39	0	1	10	1	5	0	0	0	0	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]	36	250	2	37	198	9	33	44	51	7	10	20
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]	10	68	1	10	54	2	9	12	14	2	3	5
Total Analysis Volume [veh/h]	39	272	2	40	215	10	36	48	55	8	11	22
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings**Lanes**

Capacity per Entry Lane [veh/h]	578	628	629	573	626	598	544	588	663
Degree of Utilization, x	0.07	0.22	0.22	0.07	0.36	0.23	0.01	0.02	0.03

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.22	0.83	0.82	0.22	1.63	0.89	0.04	0.06	0.10
95th-Percentile Queue Length [ft]	5.41	20.64	20.60	5.61	40.79	22.36	1.12	1.43	2.57
Approach Delay [s/veh]	9.94			11.32		10.83	8.70		
Approach LOS	A			B		B	A		
Intersection Delay [s/veh]	10.52								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 22: Murrieta Rd at McCall Blvd

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):	0.327

Intersection Setup

Name	Murrieta Rd			Murrieta 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	149	111	50	90	92	79	191	1	25	113	76
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	0	7	3	0	0	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]	0	163	111	57	93	92	79	191	1	25	113	101
Peak Hour Factor	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160
Other Adjustment Factor	1.0000	1.0000	1.0000	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	44	30	16	25	25	22	52	0	7	31	28
Total Analysis Volume [veh/h]	0	178	121	62	102	100	86	209	1	27	123	110
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	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	11	50	0	17	56	0	0	24	0	0	29	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	14	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	0.0	2.0	3.3	0.0	0.0	2.6	0.0	0.0	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	L	C	R	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]	4.00	5.30	4.00	5.30	5.30	4.60	4.60	4.60	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	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	2.00	3.30	3.30	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	0	75	6	81	81	10	10	10	11	11	11
g / C, Green / Cycle	0.00	0.62	0.05	0.67	0.67	0.08	0.08	0.08	0.09	0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.00	0.17	0.03	0.05	0.06	0.05	0.06	0.06	0.01	0.06	0.07
s, saturation flow rate [veh/h]	1810	1773	1810	1900	1615	1810	1900	1897	1810	1900	1619
c, Capacity [veh/h]	1	1102	93	1277	1086	152	159	159	161	169	144
d1, Uniform Delay [s]	0.00	10.34	55.91	6.81	6.87	52.86	53.30	53.30	50.54	53.17	53.49
k, delay calibration	0.11	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	0.00	0.61	7.94	0.12	0.17	3.29	4.57	4.59	0.48	5.52	8.62
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	0.00	0.27	0.67	0.08	0.09	0.57	0.66	0.66	0.17	0.71	0.78
d, Delay for Lane Group [s/veh]	0.00	10.95	63.85	6.93	7.03	56.15	57.87	57.89	51.03	58.70	62.11
Lane Group LOS	A	B	E	A	A	E	E	E	D	E	E
Critical Lane Group	No	Yes	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	3.43	2.01	0.83	0.83	2.62	3.25	3.25	0.77	3.78	3.63
50th-Percentile Queue Length [ft/ln]	0.00	85.81	50.17	20.83	20.80	65.39	81.32	81.27	19.22	94.57	90.65
95th-Percentile Queue Length [veh/ln]	0.00	6.18	3.61	1.50	1.50	4.71	5.86	5.85	1.38	6.81	6.53
95th-Percentile Queue Length [ft/ln]	0.00	154.45	90.31	37.50	37.44	117.71	146.38	146.29	34.60	170.22	163.17

Movement, Approach, & Intersection Results

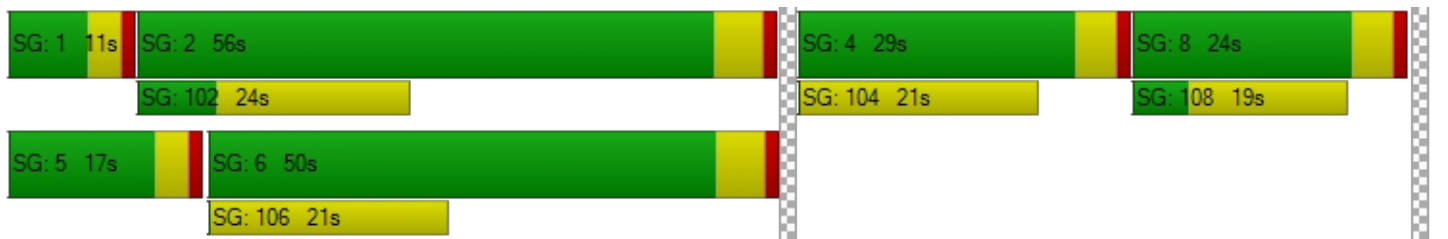
d_M, Delay for Movement [s/veh]	0.00	10.95	10.95	63.85	6.93	7.03	56.15	57.88	57.89	51.03	58.75	62.11
Movement LOS	A	B	B	E	A	A	E	E	E	D	E	E
d_A, Approach Delay [s/veh]	10.95			20.34			57.37			59.37		
Approach LOS	B			C			E			E		
d_I, Intersection Delay [s/veh]	36.70											
Intersection LOS	D											
Intersection V/C	0.327											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	4.0	11.0	4.0
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	56.07	49.50	56.07
I_p,int, Pedestrian LOS Score for Intersection	2.165	2.627	2.432	2.595
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	745	845	323	407
d_b, Bicycle Delay [s]	23.63	20.01	42.17	38.08
I_b,int, Bicycle LOS Score for Intersection	2.053	1.995	1.804	1.774
Bicycle LOS	B	A	A	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 23: Sun City Blvd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	26.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.265

Intersection Setup

Name	Sun City Blvd			Sun City Blvd			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	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sun City Blvd			Sun City Blvd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	31	53	58	54	45	8	25	371	32	136	306	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	7	0	0	25	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	53	58	54	45	8	25	378	32	136	331	42
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	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	14	15	14	12	2	7	99	8	36	87	11
Total Analysis Volume [veh/h]	33	56	61	57	47	8	26	397	34	143	348	44
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	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	37	0	0	17	0	29	21	0	45	37	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	0	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	14	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	C	C	R	C	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	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	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	2.20	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	10	10	10	10	10	4	72	72	12	79	79
g / C, Green / Cycle	0.08	0.08	0.08	0.08	0.08	0.03	0.60	0.60	0.10	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.03	0.02	0.04	0.03	0.03	0.01	0.11	0.12	0.08	0.10	0.11
s, saturation flow rate [veh/h]	1835	1729	1615	1812	1685	1810	1900	1848	1810	1900	1826
c, Capacity [veh/h]	153	144	135	148	137	62	1134	1103	174	1252	1203
d1, Uniform Delay [s]	51.70	51.67	52.37	52.31	52.29	56.75	11.01	11.02	53.19	7.80	7.81
k, delay calibration	0.11	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]	1.10	1.12	2.36	1.72	1.80	4.38	0.38	0.39	9.12	0.27	0.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.30	0.45	0.40	0.39	0.42	0.19	0.19	0.82	0.16	0.16
d, Delay for Lane Group [s/veh]	52.80	52.79	54.73	54.04	54.09	61.12	11.38	11.41	62.32	8.07	8.09
Lane Group LOS	D	D	D	D	D	E	B	B	E	A	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.36	1.25	1.84	1.75	1.60	0.84	2.65	2.60	4.64	1.93	1.87
50th-Percentile Queue Length [ft/ln]	34.09	31.37	46.07	43.68	40.03	21.08	66.27	65.10	115.93	48.15	46.79
95th-Percentile Queue Length [veh/ln]	2.45	2.26	3.32	3.15	2.88	1.52	4.77	4.69	8.17	3.47	3.37
95th-Percentile Queue Length [ft/ln]	61.36	56.46	82.93	78.63	72.05	37.94	119.28	117.18	204.21	86.66	84.21

Movement, Approach, & Intersection Results

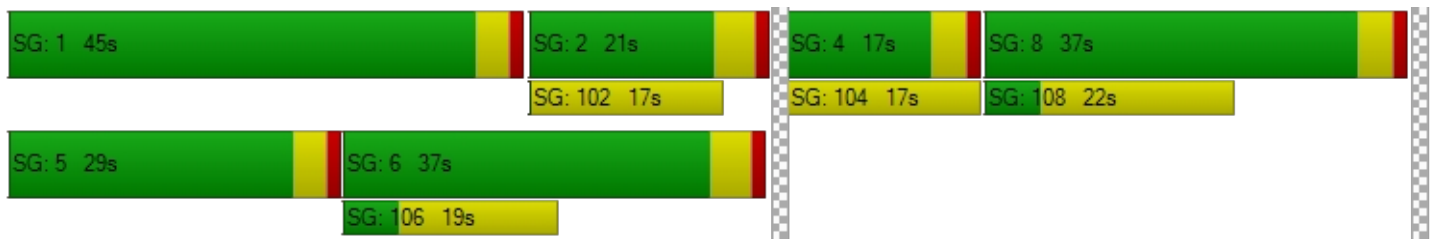
d_M, Delay for Movement [s/veh]	52.80	52.80	54.73	54.04	54.08	54.09	61.12	11.39	11.41	62.32	8.08	8.09
Movement LOS	D	D	D	D	D	D	E	B	B	E	A	A
d_A, Approach Delay [s/veh]	53.58			54.06			14.22			22.58		
Approach LOS	D			D			B			C		
d_I, Intersection Delay [s/veh]	26.05											
Intersection LOS	C											
Intersection V/C	0.265											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	9.0	4.0	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]	56.07	51.34	56.07	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.392	2.204	2.511	2.554
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	547	213	273	540
d_b, Bicycle Delay [s]	31.68	47.88	44.72	31.97
I_b,int, Bicycle LOS Score for Intersection	1.683	1.652	1.937	2.001
Bicycle LOS	A	A	A	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 24: Bradley Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	31.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.625

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	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	41	44	337	141	51	4	17	466	48	480	464	94
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	7	0	0	25	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	41	44	337	141	51	4	17	473	48	480	489	94
Peak Hour Factor	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550
Other Adjustment Factor	1.0000	1.0000	1.0000	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	12	88	37	13	1	4	124	13	126	128	25
Total Analysis Volume [veh/h]	43	46	353	148	53	4	18	495	50	503	512	98
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	Semi-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	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	10	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [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
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	21	21	0	30	0	23	58	0	11	46	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	0	0	0	0	0	0	5	0	0	6	0
Pedestrian Clearance [s]	0	21	21	0	17	0	0	14	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	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	2.0	2.0	0.0	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	
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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	10	51	12	12	3	45	45	36	79	79
g / C, Green / Cycle	0.09	0.09	0.42	0.10	0.10	0.03	0.38	0.38	0.30	0.65	0.65
(v / s)_i Volume / Saturation Flow Rate	0.02	0.02	0.22	0.08	0.03	0.01	0.15	0.15	0.28	0.16	0.17
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1877	1810	1900	1840	1810	1900	1795
c, Capacity [veh/h]	155	163	682	181	187	48	718	696	548	1244	1175
d1, Uniform Delay [s]	51.35	51.38	25.64	52.95	50.15	57.45	27.15	27.18	40.38	8.57	8.57
k, delay calibration	0.11	0.11	0.34	0.11	0.11	0.11	0.50	0.50	0.15	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]	0.95	0.93	1.90	8.83	0.91	4.86	1.56	1.62	8.96	0.49	0.52
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.28	0.52	0.82	0.30	0.38	0.38	0.39	0.92	0.25	0.25
d, Delay for Lane Group [s/veh]	52.31	52.31	27.54	61.78	51.05	62.31	28.71	28.80	49.34	9.06	9.09
Lane Group LOS	D	D	C	E	D	E	C	C	D	A	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.26	1.34	7.75	4.81	1.64	0.60	6.01	5.87	15.37	3.32	3.15
50th-Percentile Queue Length [ft/ln]	31.41	33.58	193.76	120.37	41.04	14.95	150.23	146.69	384.15	82.98	78.74
95th-Percentile Queue Length [veh/ln]	2.26	2.42	12.32	8.41	2.95	1.08	10.03	9.84	21.79	5.97	5.67
95th-Percentile Queue Length [ft/ln]	56.55	60.44	307.90	210.33	73.87	26.91	250.74	246.01	544.87	149.36	141.74

Movement, Approach, & Intersection Results

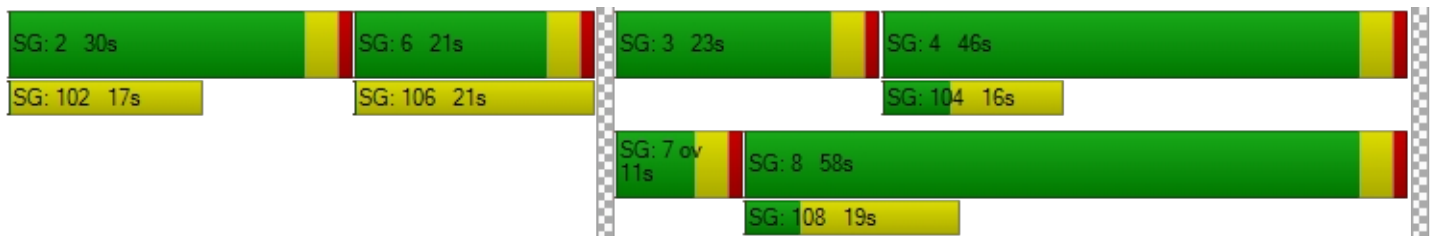
d_M, Delay for Movement [s/veh]	52.31	52.31	27.54	61.78	51.05	51.05	62.31	28.75	28.80	49.34	9.07	9.09
Movement LOS	D	D	C	E	D	D	E	C	C	D	A	A
d_A, Approach Delay [s/veh]	32.53			58.80			29.83			27.27		
Approach LOS	C			E			C			C		
d_I, Intersection Delay [s/veh]	31.67											
Intersection LOS	C											
Intersection V/C	0.625											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	10.0	4.0	4.0
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	50.42	56.07	56.07
I_p,int, Pedestrian LOS Score for Intersection	2.402	2.074	2.574	2.871
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	283	433	900	700
d_b, Bicycle Delay [s]	44.20	36.82	18.15	25.35
I_b,int, Bicycle LOS Score for Intersection	2.289	1.898	2.024	2.478
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: I-215 SB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	32.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.697

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	363	3	477	0	844	318	287	813	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	7	0	0	0	4	3	0	25	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	370	3	477	0	848	321	287	838	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9880	0.9880	0.9880	1.0000	0.9880	0.9880	0.9880	0.9880	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	121	0	215	81	73	212	0
Total Analysis Volume [veh/h]	0	0	0	374	3	483	0	858	325	290	848	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	Semi-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	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Unsigna	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	10	0	0	10	0	7	10	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	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	64	0	0	31	0	25	56	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	21	0	0	3	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	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	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	L	C
C, Cycle Length [s]		120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	2.60	2.00	2.60
g_i, Effective Green Time [s]		39	39	46	21	71
g / C, Green / Cycle		0.32	0.32	0.38	0.18	0.59
(v / s)_i Volume / Saturation Flow Rate		0.21	0.30	0.24	0.16	0.23
s, saturation flow rate [veh/h]		1810	1615	3618	1810	3618
c, Capacity [veh/h]		589	526	1374	324	2142
d1, Uniform Delay [s]		34.48	38.94	30.26	48.17	13.05
k, delay calibration		0.11	0.17	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		1.16	10.27	2.15	8.70	0.55
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		0.64	0.92	0.62	0.90	0.40
d, Delay for Lane Group [s/veh]		35.64	49.22	32.41	56.87	13.60
Lane Group LOS		D	D	C	E	B
Critical Lane Group		No	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		9.21	14.56	10.27	9.16	5.96
50th-Percentile Queue Length [ft/ln]		230.29	363.88	256.87	228.97	148.94
95th-Percentile Queue Length [veh/ln]		14.19	20.81	15.53	14.12	9.96
95th-Percentile Queue Length [ft/ln]		354.73	520.30	388.29	353.06	249.02

Movement, Approach, & Intersection Results

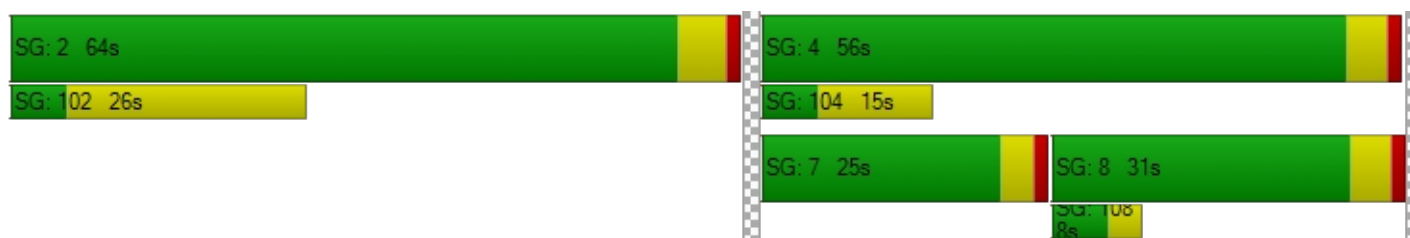
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	35.64	35.64	49.22	0.00	32.41	0.00	56.87	13.60	0.00
Movement LOS				D	D	D		C		E	B	
d_A, Approach Delay [s/veh]	0.00			43.27			32.41			24.62		
Approach LOS	A			D			C			C		
d_I, Intersection Delay [s/veh]	32.58											
Intersection LOS	C											
Intersection V/C	0.697											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	1.724	2.375	2.813	2.917
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	978	440	857
d_b, Bicycle Delay [s]	60.00	15.66	36.50	19.61
I_b,int, Bicycle LOS Score for Intersection	4.132	2.979	2.267	2.498
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: I-215 NB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	26.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.594

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	201	0	256	0	0	0	234	603	0	0	957	495
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	0	0	0	0	0	0	11	0	0	19	29
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	207	0	256	0	0	0	234	614	0	0	976	524
Peak Hour Factor	0.9390	0.9390	0.9390	1.0000	1.0000	1.0000	0.9390	0.9390	1.0000	1.0000	0.9390	0.9390
Other Adjustment Factor	1.0000	1.0000	1.0000	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	0	68	0	0	0	62	163	0	0	260	140
Total Analysis Volume [veh/h]	220	0	273	0	0	0	249	654	0	0	1039	558
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	Semi-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	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	36	0	0	0	0	29	84	0	0	55	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	21	0	0	0	0	0	10	0	0	3	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	3.3	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
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	2.60	2.60
g_i, Effective Green Time [s]	23	23		19	87	65
g / C, Green / Cycle	0.19	0.19		0.16	0.73	0.54
(v / s)_i Volume / Saturation Flow Rate	0.12	0.17		0.14	0.18	0.29
s, saturation flow rate [veh/h]	1810	1615		1810	3618	3618
c, Capacity [veh/h]	344	307		282	2632	1947
d1, Uniform Delay [s]	44.82	47.38		49.56	5.44	17.95
k, delay calibration	0.11	0.18		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	1.99	13.65		8.82	0.23	1.05
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	0.64	0.89		0.88	0.25	0.53
d, Delay for Lane Group [s/veh]	46.80	61.03		58.38	5.66	19.01
Lane Group LOS	D	E		E	A	B
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	6.06	8.87		7.92	2.46	9.22
50th-Percentile Queue Length [ft/ln]	151.57	221.69		198.00	61.52	230.45
95th-Percentile Queue Length [veh/ln]	10.10	13.75		12.54	4.43	14.20
95th-Percentile Queue Length [ft/ln]	252.52	343.79		313.39	110.73	354.93

Movement, Approach, & Intersection Results

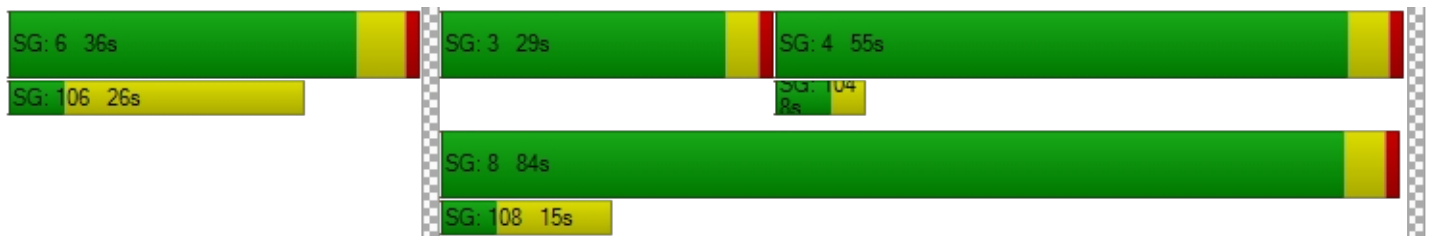
d_M, Delay for Movement [s/veh]	46.80	46.80	61.03	0.00	0.00	0.00	58.38	5.66	0.00	0.00	19.01	0.00
Movement LOS	D	D	E				E	A			B	
d_A, Approach Delay [s/veh]	54.68			0.00			20.20			19.01		
Approach LOS	D			A			C			B		
d_I, Intersection Delay [s/veh]	26.67											
Intersection LOS	C											
Intersection V/C	0.594											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.196	1.681	2.807	2.841
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	512	0	1323	840
d_b, Bicycle Delay [s]	33.23	60.00	6.87	20.18
I_b,int, Bicycle LOS Score for Intersection	2.373	4.132	2.305	2.417
Bicycle LOS	B	D	B	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 27: Encanto Dr at McCall Blvd**

Control Type:	Signalized	Delay (sec / veh):	26.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.571

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]	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	196	28	80	30	18	121	113	653	76	72	1129	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	19	0	0	0	0	0	0	6	5	0	29	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	215	28	80	30	18	121	113	659	81	72	1158	31
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	7	21	8	5	32	29	172	21	19	302	8
Total Analysis Volume [veh/h]	224	29	84	31	19	126	118	688	85	75	1209	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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	10	0	0	10	0	7	10	0	7	10	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	3.0	0.0	3.0	3.0	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	35	0	0	35	0	31	62	0	23	54	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	21	0	0	17	0	0	14	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	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	4.20	4.20	4.20	4.00	4.00	4.00	4.00	4.00	4.00
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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	31	31	31	31	31	10	70	70	7	67	67
g / C, Green / Cycle	0.26	0.26	0.26	0.26	0.26	0.08	0.59	0.59	0.05	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.18	0.02	0.05	0.02	0.09	0.07	0.21	0.21	0.04	0.33	0.33
s, saturation flow rate [veh/h]	1263	1900	1615	1300	1647	1810	1900	1828	1810	1900	1883
c, Capacity [veh/h]	273	488	415	357	423	149	1114	1072	100	1063	1053
d1, Uniform Delay [s]	50.41	33.67	34.97	36.59	36.35	54.06	12.94	12.94	55.88	17.33	17.34
k, delay calibration	0.22	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]	11.76	0.05	0.24	0.10	0.48	9.08	0.88	0.92	10.73	2.37	2.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.06	0.20	0.09	0.34	0.79	0.35	0.35	0.75	0.59	0.59
d, Delay for Lane Group [s/veh]	62.16	33.72	35.21	36.69	36.83	63.14	13.82	13.86	66.60	19.70	19.74
Lane Group LOS	E	C	D	D	D	E	B	B	E	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	7.65	0.65	1.97	0.74	3.54	3.85	5.56	5.36	2.52	11.41	11.33
50th-Percentile Queue Length [ft/ln]	191.33	16.29	49.19	18.38	88.43	96.20	139.09	134.10	63.01	285.13	283.20
95th-Percentile Queue Length [veh/ln]	12.19	1.17	3.54	1.32	6.37	6.93	9.43	9.16	4.54	16.94	16.85
95th-Percentile Queue Length [ft/ln]	304.75	29.32	88.53	33.09	159.18	173.15	235.80	229.06	113.42	423.60	421.19

Movement, Approach, & Intersection Results

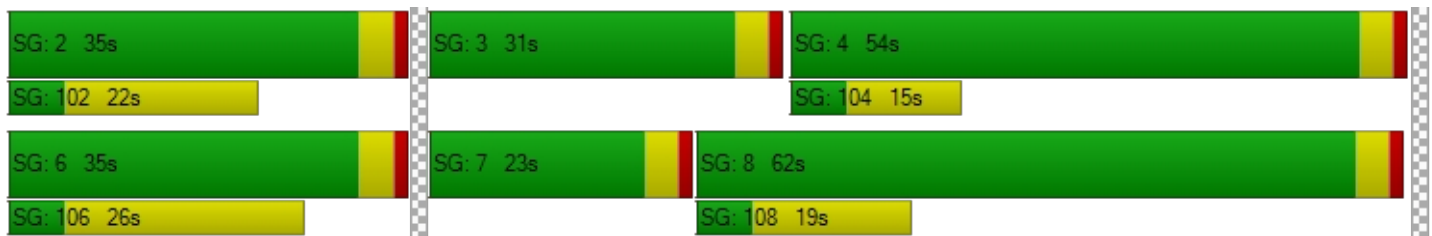
d_M, Delay for Movement [s/veh]	62.16	33.72	35.21	36.69	36.83	36.83	63.14	13.84	13.86	66.60	19.72	19.74
Movement LOS	E	C	D	D	D	D	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	53.00			36.81			20.37			22.39		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	26.45											
Intersection LOS	C											
Intersection V/C	0.571											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.272	2.071	3.191	2.914
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	513	513	967	833
d_b, Bicycle Delay [s]	33.15	33.15	16.02	20.42
I_b,int, Bicycle LOS Score for Intersection	2.116	1.850	2.295	2.645
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 28: Sherman Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	18.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.479

Intersection Setup

Name	Sherman Rd			Sherman 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	26	6	26	53	10	81	112	563	19	22	1024	54
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	5	1	5	0	0	24	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	6	26	53	10	86	113	568	19	22	1048	54
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]	7	2	7	15	3	24	32	160	5	6	294	15
Total Analysis Volume [veh/h]	29	7	29	60	11	97	127	638	21	25	1178	61
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	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

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]	7	10	0	7	10	0	7	10	0	7	10	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	3.6	0.0	3.0	3.6	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	11	31	0	23	67	0	11	55	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	10	0	0	14	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	2.6	0.0	2.0	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.20	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]	2.00	2.20	2.00	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	4	8	6	10	10	10	85	85	4	79	79
g / C, Green / Cycle	0.04	0.07	0.05	0.08	0.08	0.09	0.71	0.71	0.03	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.02	0.02	0.03	0.01	0.06	0.07	0.17	0.17	0.01	0.33	0.33
s, saturation flow rate [veh/h]	1810	1664	1810	1900	1615	1810	1900	1879	1810	1900	1867
c, Capacity [veh/h]	66	113	91	156	133	157	1346	1331	60	1244	1223
d1, Uniform Delay [s]	56.63	53.27	55.95	50.84	53.77	53.81	6.18	6.18	56.87	10.66	10.66
k, delay calibration	0.11	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]	4.59	1.60	7.75	0.19	7.50	9.42	0.44	0.44	4.54	1.45	1.48
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	0.32	0.66	0.07	0.73	0.81	0.25	0.25	0.42	0.50	0.50
d, Delay for Lane Group [s/veh]	61.22	54.87	63.70	51.03	61.27	63.23	6.62	6.62	61.41	12.10	12.14
Lane Group LOS	E	D	E	D	E	E	A	A	E	B	B
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.95	1.09	1.98	0.31	3.14	4.14	2.81	2.78	0.81	8.29	8.17
50th-Percentile Queue Length [ft/ln]	23.64	27.20	49.55	7.87	78.45	103.62	70.15	69.45	20.35	207.18	204.30
95th-Percentile Queue Length [veh/ln]	1.70	1.96	3.57	0.57	5.65	7.46	5.05	5.00	1.47	13.01	12.86
95th-Percentile Queue Length [ft/ln]	42.55	48.96	89.18	14.17	141.21	186.51	126.27	125.00	36.63	325.21	321.51

Movement, Approach, & Intersection Results

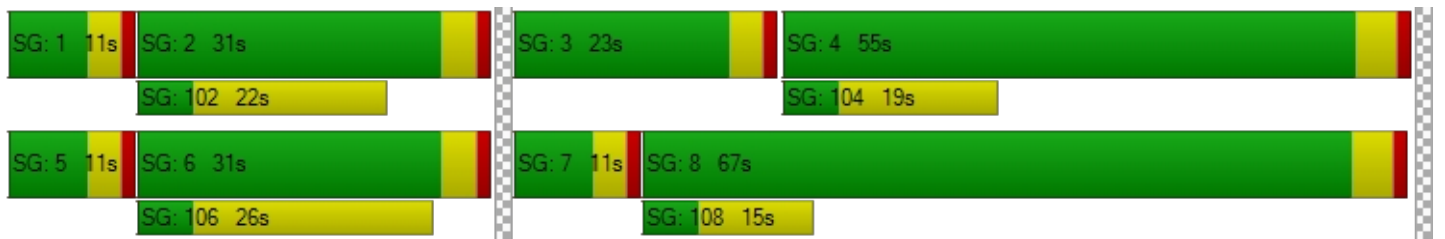
d_M, Delay for Movement [s/veh]	61.22	54.87	54.87	63.70	51.03	61.27	63.23	6.62	6.62	61.41	12.12	12.14
Movement LOS	E	D	D	E	D	E	E	A	A	E	B	B
d_A, Approach Delay [s/veh]	57.70			61.47			15.77			13.10		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	18.85											
Intersection LOS	B											
Intersection V/C	0.479											

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]	51.34	51.34	51.34	51.34
l_p,int, Pedestrian LOS Score for Intersection	1.995	2.235	2.791	2.846
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	447	447	1040	840
d_b, Bicycle Delay [s]	36.19	36.19	13.82	20.18
l_b,int, Bicycle LOS Score for Intersection	1.667	1.837	2.208	2.602
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



CADO Warehouse Project

Vistro File: K:\...\Menifee CADO_PM.vistro

Scenario 2 EX WP PM

Report File: K:\...\2 EX WP PM.pdf

7/27/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Case Rd	Signalized	HCM 6th Edition	NB Right	0.376	30.6	C
2	Murrieta Rd at Case Rd	All-way stop	HCM 6th Edition	EB Thru	0.432	10.9	B
3	Goetz Rd at Mapes Rd	Signalized	HCM 6th Edition	SB Left	0.557	37.7	D
4	I-215 SB Ramps/SR-74 at Bonnie Dr	Signalized	HCM 6th Edition	NB Left	0.520	16.9	B
5	I-215 NB Ramps at SR-74	Signalized	HCM 6th Edition	EB Left	0.431	14.1	B
6	Sherman Rd at SR-74	Signalized	HCM 6th Edition	EB Left	0.543	26.8	C
7	Goetz Rd at Fieldstone Dr	Signalized	HCM 6th Edition	SB Left	0.248	11.1	B
8	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.499	44.0	D
9	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.302	50.5	F
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.334	64.4	F
11	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	0.664	38.6	D
12	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.004	12.2	B
13	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.524	30.7	C
14	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	EB Thru	1.003	47.9	D
15	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	0.943	83.3	F
16	Trumble Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.545	28.4	C
17	Sherman Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.222	46.5	E
			HCM 6th				

18	Byers Rd at McLaughlin Rd	All-way stop	HCM 6th Edition	SB Left	0.017	6.6	A
19	Murrieta Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	EB Left	0.031	21.6	C
20	Murrieta Rd at Rouse Rd	Two-way stop	HCM 6th Edition	EB Left	0.043	21.1	C
21	Murrieta Rd at Chambers Ave	All-way stop	HCM 6th Edition	SB Thru	0.523	11.8	B
22	Murrieta Rd at McCall Blvd	Signalized	HCM 6th Edition	NB Left	0.383	37.6	D
23	Sun City Blvd at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.338	27.2	C
24	Bradley Rd at McCall Blvd	Signalized	HCM 6th Edition	SB Left	0.715	31.7	C
25	I-215 SB Ramps at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.690	33.4	C
26	I-215 NB Ramps at McCall Blvd	Signalized	HCM 6th Edition	EB Left	0.671	33.0	C
27	Encanto Dr at McCall Blvd	Signalized	HCM 6th Edition	NB Left	0.541	25.1	C
28	Sherman Rd at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.313	9.4	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: Goetz Rd at Case 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):	0.376

Intersection Setup

Name	Goetz Rd		Case Rd		Case 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	1	0	1	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]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Goetz Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	132	156	199	189	206	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	30	0	0	20	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]	162	156	199	209	206	260
Peak Hour Factor	0.9050	0.9050	0.9050	0.9050	0.9050	0.9050
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	45	43	55	58	57	72
Total Analysis Volume [veh/h]	179	172	220	231	228	287
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	Semi-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	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	10	0	7	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.7	0.0	5.0	0.0	3.0	5.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	28	0	21	0	71	92
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]	3.7	0.0	4.0	0.0	2.0	4.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.70	5.70	6.00	6.00	4.00	6.00
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]	3.70	3.70	4.00	4.00	2.00	4.00
g_i, Effective Green Time [s]	15	15	72	72	17	93
g / C, Green / Cycle	0.13	0.13	0.60	0.60	0.14	0.78
(v / s)_i Volume / Saturation Flow Rate	0.10	0.11	0.12	0.14	0.13	0.15
s, saturation flow rate [veh/h]	1810	1615	1900	1615	1810	1900
c, Capacity [veh/h]	227	203	1137	966	263	1476
d1, Uniform Delay [s]	50.90	51.33	10.96	11.30	50.15	3.52
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]	5.94	9.35	0.38	0.58	8.47	0.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.85	0.19	0.24	0.87	0.19
d, Delay for Lane Group [s/veh]	56.84	60.68	11.34	11.89	58.62	3.82
Lane Group LOS	E	E	B	B	E	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	5.41	5.41	2.45	2.68	7.01	1.28
50th-Percentile Queue Length [ft/ln]	135.30	135.19	61.15	66.92	175.19	31.89
95th-Percentile Queue Length [veh/ln]	9.23	9.22	4.40	4.82	11.35	2.30
95th-Percentile Queue Length [ft/ln]	230.68	230.54	110.07	120.46	283.72	57.40

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.84	60.68	11.34	11.89	58.62	3.82
Movement LOS	E	E	B	B	E	A
d_A, Approach Delay [s/veh]	58.72		11.62		28.08	
Approach LOS	E		B		C	
d_I, Intersection Delay [s/veh]	30.61					
Intersection LOS	C					
Intersection V/C	0.376					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
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	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.394	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	372	250	1433
d_b, Bicycle Delay [s]	39.77	45.94	4.82
I_b,int, Bicycle LOS Score for Intersection	1.560	2.304	2.409
Bicycle LOS	A	B	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Murrieta Rd at Case Rd**

Control Type:	All-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):	0.432

Intersection Setup

Name	Murrieta Rd		Case Rd		Case 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	1	0	1	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]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Murrieta Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	104	10	269	104	14	232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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	11	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]	104	10	269	104	25	232
Peak Hour Factor	0.9020	0.9020	0.9020	0.9020	0.9020	0.9020
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	3	75	29	7	64
Total Analysis Volume [veh/h]	115	11	298	115	28	257
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings**Lanes**

Capacity per Entry Lane [veh/h]	546	668	690	798	618	675
Degree of Utilization, x	0.21	0.02	0.43	0.14	0.05	0.38

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.79	0.05	2.18	0.50	0.14	1.78
95th-Percentile Queue Length [ft]	19.70	1.25	54.59	12.56	3.56	44.53
Approach Delay [s/veh]	10.79		10.75		11.02	
Approach LOS	B		B		B	
Intersection Delay [s/veh]	10.85					
Intersection LOS	B					

**Intersection Level Of Service Report
Intersection 3: Goetz Rd at Mapes Rd**

Control Type:	Signalized	Delay (sec / veh):	37.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.557

Intersection Setup

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes 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	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes Rd		
Base Volume Input [veh/h]	210	161	0	3	323	63	64	0	317	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	30	0	0	20	0	0	0	10	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	225	191	0	3	343	63	64	0	327	0	0	0
Peak Hour Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Other Adjustment Factor	1.0000	1.0000	1.0000	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	52	0	1	94	17	18	0	90	0	0	0
Total Analysis Volume [veh/h]	247	209	0	3	376	69	70	0	359	0	0	0
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	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	0	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	0.0	3.2	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	42	56	0	14	28	0	23	50	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	0.0	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	17	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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	0.0	2.2	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	C	L	C	R	L	C	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.20	4.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.20	2.20
g_i, Effective Green Time [s]	19	76	76	1	59	59	6	29	19	19
g / C, Green / Cycle	0.15	0.64	0.64	0.01	0.49	0.49	0.05	0.24	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.14	0.06	0.06	0.00	0.20	0.04	0.04	0.22	0.00	0.00
s, saturation flow rate [veh/h]	1810	1900	1900	1810	1900	1615	1810	1615	1697	1615
c, Capacity [veh/h]	281	1208	1208	12	926	787	98	390	291	249
d1, Uniform Delay [s]	49.57	8.42	8.42	59.29	19.68	16.49	55.82	44.37	0.00	0.00
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.15	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
d2, Incremental Delay [s]	8.63	0.14	0.14	10.01	1.32	0.22	9.14	12.04	0.00	0.00
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
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	0.88	0.09	0.09	0.25	0.41	0.09	0.71	0.92	0.00	0.00
d, Delay for Lane Group [s/veh]	58.20	8.57	8.57	69.30	21.00	16.71	64.96	56.41	0.00	0.00
Lane Group LOS	E	A	A	E	C	B	E	E	A	A
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.65	0.97	0.97	0.12	6.57	1.01	2.34	11.65	0.00	0.00
50th-Percentile Queue Length [ft/ln]	191.18	24.19	24.19	3.06	164.13	25.13	58.42	291.15	0.00	0.00
95th-Percentile Queue Length [veh/ln]	12.18	1.74	1.74	0.22	10.77	1.81	4.21	17.24	0.00	0.00
95th-Percentile Queue Length [ft/ln]	304.56	43.54	43.54	5.50	269.19	45.23	105.16	431.07	0.00	0.00

Movement, Approach, & Intersection Results

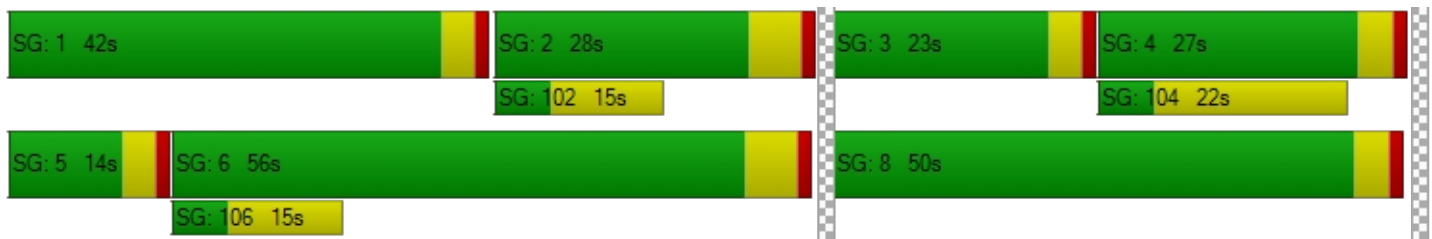
d_M, Delay for Movement [s/veh]	58.20	8.57	8.57	69.30	21.00	16.71	64.96	56.41	56.41	0.00	0.00	0.00
Movement LOS	E	A	A	E	C	B	E	E	E	A	A	A
d_A, Approach Delay [s/veh]	35.45			20.66			57.81			0.00		
Approach LOS	D			C			E			A		
d_I, Intersection Delay [s/veh]	37.67											
Intersection LOS	D											
Intersection V/C	0.557											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			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]	0.00			51.34			51.34			51.34		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.551			2.198			1.956		
Crosswalk LOS	F			B			B			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	838			372			763			380		
d_b, Bicycle Delay [s]	20.24			39.77			22.94			39.37		
I_b,int, Bicycle LOS Score for Intersection	1.936			2.299			2.267			1.560		
Bicycle LOS	A			B			B			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: I-215 SB Ramps/SR-74 at Bonnie Dr

Control Type:	Signalized	Delay (sec / veh):	16.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.520

Intersection Setup

Name	SR-74		I-215 SB Ramps		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]	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]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	SR-74		I-215 SB Ramps		Bonnie Dr	
Base Volume Input [veh/h]	194	320	706	44	38	264
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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	16	0	11	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]	194	336	706	55	38	264
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	50	87	183	14	10	69
Total Analysis Volume [veh/h]	202	349	734	57	40	274
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	Semi-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	Protected	Permissive	Overlap	Permissive	Permissive	Unsignalized
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups			2			
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	10	10	0	7	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	4.3	4.3	0.0	4.3	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	19	77	58	0	43	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	14	0
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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	0.0	3.3	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L
C, Cycle Length [s]	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	3.30	3.30
g_i, Effective Green Time [s]	15	104	85	85	5
g / C, Green / Cycle	0.13	0.87	0.71	0.71	0.04
(v / s)_i Volume / Saturation Flow Rate	0.11	0.18	0.39	0.04	0.02
s, saturation flow rate [veh/h]	1810	1900	1900	1615	1810
c, Capacity [veh/h]	226	1649	1348	1146	80
d1, Uniform Delay [s]	51.71	1.29	8.26	5.26	56.07
k, delay calibration	0.11	0.50	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.57	0.29	1.59	0.08	4.82
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	0.89	0.21	0.54	0.05	0.50
d, Delay for Lane Group [s/veh]	63.28	1.58	9.85	5.34	60.90
Lane Group LOS	E	A	A	A	E
Critical Lane Group	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	6.55	0.49	7.90	0.39	1.27
50th-Percentile Queue Length [ft/ln]	163.71	12.21	197.43	9.67	31.63
95th-Percentile Queue Length [veh/ln]	10.75	0.88	12.51	0.70	2.28
95th-Percentile Queue Length [ft/ln]	268.63	21.98	312.65	17.41	56.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	63.28	1.58	9.85	5.34	60.90	0.00
Movement LOS	E	A	A	A	E	
d_A, Approach Delay [s/veh]	24.20		9.52		60.90	
Approach LOS	C		A		E	
d_I, Intersection Delay [s/veh]	16.86					
Intersection LOS	B					
Intersection V/C	0.520					

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	2.616	2.531	2.101
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1195	878	628
d_b, Bicycle Delay [s]	9.72	18.87	28.22
I_b,int, Bicycle LOS Score for Intersection	2.469	2.865	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 5: I-215 NB Ramps at SR-74

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):	0.431

Intersection Setup

Name	I-215 NB Ramps		SR-74		SR-74	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB Ramps		SR-74		SR-74	
Base Volume Input [veh/h]	207	21	14	955	503	602
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	15	0	0	0	16	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]	222	21	14	955	519	602
Peak Hour Factor	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	60	6	4	257	140	162
Total Analysis Volume [veh/h]	239	23	15	1029	559	649
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	Semi-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	Protected	Permissive	Permissive	Unsignalized
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	4.3	0.0	3.0	5.0	5.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	91	0	11	29	18	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	21	0	0	10	7	0
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	0.0
I2, Clearance Lost Time [s]	3.3	0.0	2.0	4.0	4.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C
C, Cycle Length [s]	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	2.00	4.00	4.00
g_i, Effective Green Time [s]	20	3	89	82
g / C, Green / Cycle	0.17	0.02	0.74	0.68
(v / s)_i Volume / Saturation Flow Rate	0.15	0.01	0.28	0.15
s, saturation flow rate [veh/h]	1791	1810	3618	3618
c, Capacity [veh/h]	297	42	2676	2472
d1, Uniform Delay [s]	48.89	57.72	5.68	7.12
k, delay calibration	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.40	5.05	0.42	0.21
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.36	0.38	0.23
d, Delay for Lane Group [s/veh]	57.29	62.77	6.10	7.33
Lane Group LOS	E	E	A	A
Critical Lane Group	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	8.14	0.49	3.48	2.23
50th-Percentile Queue Length [ft/ln]	203.46	12.27	87.11	55.63
95th-Percentile Queue Length [veh/ln]	12.82	0.88	6.27	4.01
95th-Percentile Queue Length [ft/ln]	320.42	22.08	156.80	100.13

Movement, Approach, & Intersection Results

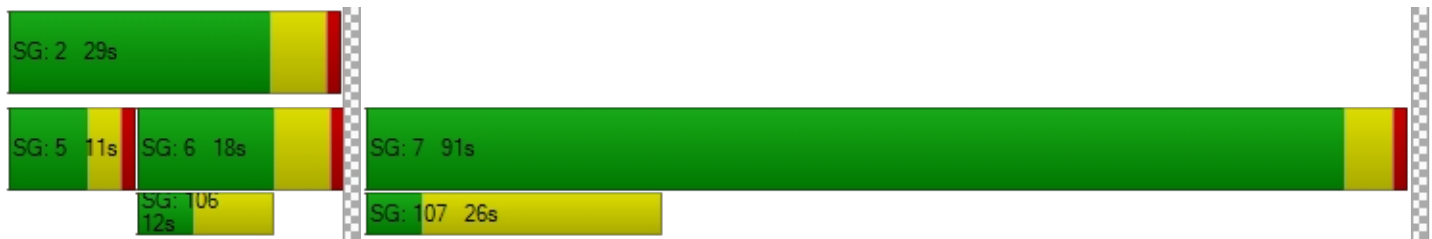
d_M, Delay for Movement [s/veh]	57.29	57.29	62.77	6.10	7.33	0.00
Movement LOS	E	E	E	A	A	
d_A, Approach Delay [s/veh]	57.29		6.91		7.33	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	14.11					
Intersection LOS	B					
Intersection V/C	0.431					

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	1.933	2.896	3.012
Crosswalk LOS	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1428	383	200
d_b, Bicycle Delay [s]	4.90	39.20	48.60
I_b,int, Bicycle LOS Score for Intersection	1.992	2.421	2.021
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Sherman Rd at SR-74**

Control Type:	Signalized	Delay (sec / veh):	26.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.543

Intersection Setup

Name	Sherman Rd			Sherman 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	1	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	40.00			40.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	76	0	243	2	2	2	19	936	36	183	688	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	0	0	0	0	0	0	15	6	0	16	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	86	0	243	2	2	2	19	951	42	183	704	2
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	0	64	1	1	1	5	249	11	48	184	1
Total Analysis Volume [veh/h]	90	0	255	2	2	2	20	997	44	192	738	2
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	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	5.0	0.0	3.0	5.0	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	32	0	0	27	0	11	34	0	27	50	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	21	0	0	17	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			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	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	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	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	21	21	2	3	62	62	15	74	74
g / C, Green / Cycle	0.18	0.18	0.02	0.03	0.52	0.52	0.12	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.05	0.16	0.00	0.01	0.28	0.28	0.11	0.19	0.19
s, saturation flow rate [veh/h]	1810	1615	1767	1810	1900	1872	1810	1900	1898
c, Capacity [veh/h]	322	288	29	52	983	969	222	1162	1161
d1, Uniform Delay [s]	42.65	48.13	58.24	57.25	19.29	19.29	51.64	11.23	11.23
k, delay calibration	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
d2, Incremental Delay [s]	0.47	8.98	3.46	4.65	2.07	2.10	9.56	0.72	0.72
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	0.28	0.89	0.21	0.39	0.53	0.53	0.86	0.32	0.32
d, Delay for Lane Group [s/veh]	43.12	57.11	61.70	61.90	21.36	21.39	61.19	11.95	11.95
Lane Group LOS	D	E	E	E	C	C	E	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.32	8.00	0.21	0.64	9.28	9.15	6.01	4.32	4.32
50th-Percentile Queue Length [ft/ln]	58.01	200.08	5.13	16.01	232.01	228.82	150.19	108.01	107.92
95th-Percentile Queue Length [veh/ln]	4.18	12.64	0.37	1.15	14.28	14.11	10.03	7.73	7.72
95th-Percentile Queue Length [ft/ln]	104.42	316.06	9.24	28.82	356.91	352.86	250.68	193.24	193.10

Movement, Approach, & Intersection Results

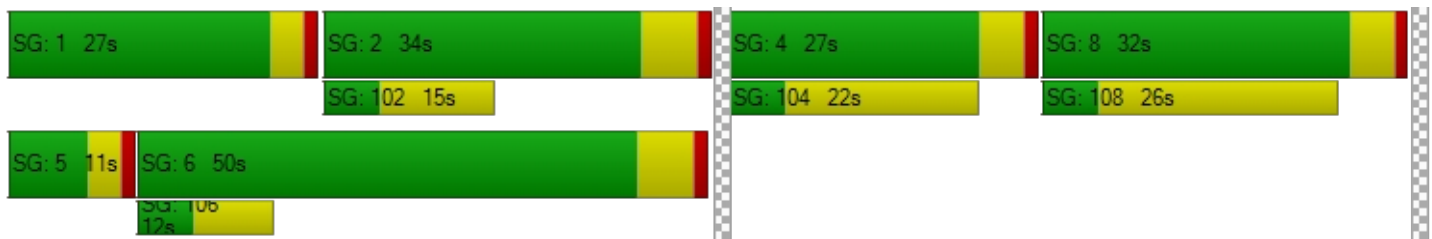
d_M, Delay for Movement [s/veh]	43.12	43.12	57.11	61.70	61.70	61.70	61.90	21.37	21.39	61.19	11.95	11.95
Movement LOS	D	D	E	E	E	E	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	53.46			61.70			22.14			22.09		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	26.83											
Intersection LOS	C											
Intersection V/C	0.543											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.208	1.748	2.991	3.119
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	452	368	467	733
d_b, Bicycle Delay [s]	35.96	39.94	35.27	24.07
I_b,int, Bicycle LOS Score for Intersection	2.129	1.570	2.435	2.329
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Goetz Rd at Fieldstone Dr

Control Type:	Signalized	Delay (sec / veh):	11.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.248

Intersection Setup

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Base Volume Input [veh/h]	31	319	2	16	552	64	35	1	25	0	3	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	45	0	0	30	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	364	2	16	582	64	35	1	25	0	3	13
Peak Hour Factor	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170
Other Adjustment Factor	1.0000	1.0000	1.0000	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	99	1	4	159	17	10	0	7	0	1	4
Total Analysis Volume [veh/h]	34	397	2	17	635	70	38	1	27	0	3	14
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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	3.0	3.2	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	45	0	11	45	0	33	53	0	11	31	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	13	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	24	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	2.0	2.2	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.00	4.20	4.20
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	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.00	2.20	2.20
g_i, Effective Green Time [s]	5	90	90	3	88	88	5	9	0	4	4
g / C, Green / Cycle	0.04	0.75	0.75	0.03	0.73	0.73	0.04	0.08	0.00	0.04	0.04
(v / s)_i Volume / Saturation Flow Rate	0.02	0.21	0.00	0.01	0.13	0.13	0.02	0.02	0.00	0.00	0.01
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1806	1810	1624	1810	1900	1615
c, Capacity [veh/h]	72	1417	1205	46	2647	1321	77	129	0	70	59
d1, Uniform Delay [s]	56.40	4.89	3.88	57.54	4.96	4.97	56.17	51.76	0.00	55.76	56.15
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
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]	4.79	0.49	0.00	4.90	0.15	0.30	4.78	0.84	0.00	0.25	2.01
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	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	0.47	0.28	0.00	0.37	0.18	0.18	0.49	0.22	0.00	0.04	0.24
d, Delay for Lane Group [s/veh]	61.19	5.39	3.88	62.44	5.11	5.27	60.95	52.60	0.00	56.01	58.16
Lane Group LOS	E	A	A	E	A	A	E	D	A	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.07	2.53	0.01	0.55	1.43	1.50	1.23	0.82	0.00	0.09	0.45
50th-Percentile Queue Length [ft/ln]	26.83	63.15	0.25	13.87	35.78	37.62	30.74	20.57	0.00	2.32	11.15
95th-Percentile Queue Length [veh/ln]	1.93	4.55	0.02	1.00	2.58	2.71	2.21	1.48	0.00	0.17	0.80
95th-Percentile Queue Length [ft/ln]	48.30	113.67	0.46	24.97	64.41	67.71	55.34	37.03	0.00	4.17	20.07

Movement, Approach, & Intersection Results

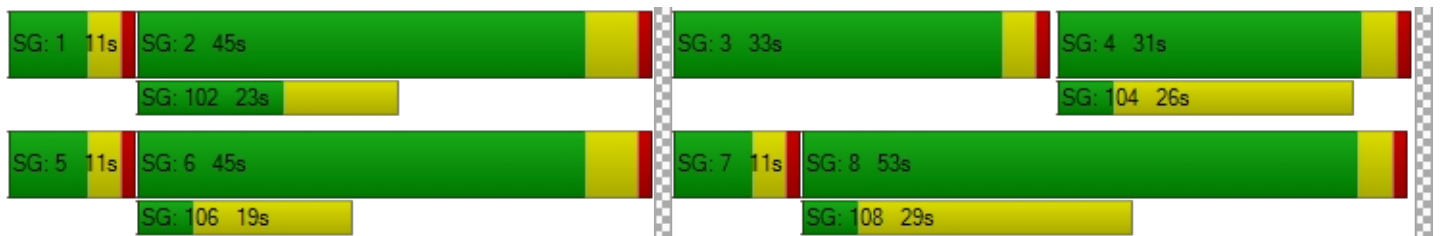
d_M, Delay for Movement [s/veh]	61.19	5.39	3.88	62.44	5.15	5.27	60.95	52.60	52.60	0.00	56.01	58.16
Movement LOS	E	A	A	E	A	A	E	D	D	A	E	E
d_A, Approach Delay [s/veh]	9.76			6.51			57.41			57.78		
Approach LOS	A			A			E			E		
d_I, Intersection Delay [s/veh]	11.06											
Intersection LOS	B											
Intersection V/C	0.248											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			17.0			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			44.20			51.34		
I_p,int, Pedestrian LOS Score for Intersection	2.863			2.785			2.006			2.155		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	655			655			813			447		
d_b, Bicycle Delay [s]	27.14			27.14			21.12			36.19		
I_b,int, Bicycle LOS Score for Intersection	2.274			1.957			1.669			1.588		
Bicycle LOS	B			A			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 8: Goetz Rd at Ethanac Rd**

Control Type:	Signalized	Delay (sec / veh):	44.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.499

Intersection Setup

Name	Goetz Rd			Goetz 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	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	7	134	227	254	245	30	17	63	5	275	67	239
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	10	30	0	0	0	3	0	15	5	45
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	7	134	237	284	245	30	17	66	5	290	72	284
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]	2	34	61	73	63	8	4	17	1	74	18	73
Total Analysis Volume [veh/h]	7	137	242	290	251	31	17	67	5	297	74	290
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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	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	32	0	32	53	0	11	28	0	28	45	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	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	3.7	0.0	2.0	3.7	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	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	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	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	2	20	20	21	40	40	3	37	37	22	56	56
g / C, Green / Cycle	0.01	0.17	0.17	0.18	0.33	0.33	0.03	0.31	0.31	0.18	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.00	0.07	0.15	0.16	0.07	0.02	0.01	0.02	0.00	0.16	0.04	0.18
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	1900	1615
c, Capacity [veh/h]	23	323	274	321	1209	540	47	1118	499	330	884	752
d1, Uniform Delay [s]	58.69	44.57	48.64	48.36	28.58	27.12	57.49	29.18	28.73	48.01	17.84	20.89
k, delay calibration	0.11	0.11	0.11	0.19	0.11	0.11	0.11	0.50	0.50	0.12	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	1.00
d2, Incremental Delay [s]	7.03	0.89	9.09	14.75	0.08	0.04	4.72	0.10	0.04	9.53	0.19	1.50
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	0.30	0.42	0.88	0.90	0.21	0.06	0.36	0.06	0.01	0.90	0.08	0.39
d, Delay for Lane Group [s/veh]	65.72	45.46	57.74	63.11	28.66	27.16	62.21	29.28	28.77	57.54	18.02	22.39
Lane Group LOS	E	D	E	E	C	C	E	C	C	E	B	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.25	3.61	7.49	9.48	2.50	0.59	0.55	0.67	0.10	9.21	1.12	5.26
50th-Percentile Queue Length [ft/ln]	6.25	90.15	187.29	236.92	62.38	14.70	13.84	16.81	2.54	230.28	28.10	131.57
95th-Percentile Queue Length [veh/ln]	0.45	6.49	11.98	14.53	4.49	1.06	1.00	1.21	0.18	14.19	2.02	9.03
95th-Percentile Queue Length [ft/ln]	11.26	162.27	299.51	363.14	112.28	26.46	24.90	30.25	4.57	354.72	50.58	225.63

Movement, Approach, & Intersection Results

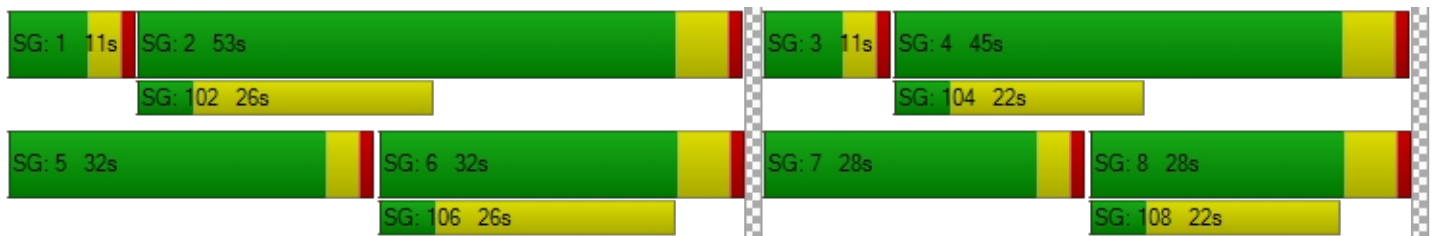
d_M, Delay for Movement [s/veh]	65.72	45.46	57.74	63.11	28.66	27.16	62.21	29.28	28.77	57.54	18.02	22.39
Movement LOS	E	D	E	E	C	C	E	C	C	E	B	C
d_A, Approach Delay [s/veh]	53.52			46.05			35.54			37.69		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	43.96											
Intersection LOS	D											
Intersection V/C	0.499											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.620	2.645	2.523	2.809
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	438	788	372	655
d_b, Bicycle Delay [s]	36.58	22.02	39.77	27.14
I_b,int, Bicycle LOS Score for Intersection	2.197	2.032	1.633	2.105
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 9: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	50.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.302

Intersection Setup

Name	Wheat St		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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	0	542	0	0	590
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	44	327	4	39	155	22
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]	44	327	546	39	155	612
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	84	140	10	40	157
Total Analysis Volume [veh/h]	45	335	559	40	159	627
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	0.30	0.48	0.01	0.00	0.16	0.01
d_M, Delay for Movement [s/veh]	50.46	31.46	0.00	0.00	9.34	0.00
Movement LOS	F	D	A	A	A	A
95th-Percentile Queue Length [veh/ln]	6.96	6.96	0.00	0.00	0.57	0.00
95th-Percentile Queue Length [ft/ln]	173.93	173.93	0.00	0.00	14.31	0.00
d_A, Approach Delay [s/veh]	33.71		0.00		1.89	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	8.10					
Intersection LOS	F					

**Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	64.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.334

Intersection Setup

Name	Byers 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	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		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	5	2	538	1	4	598
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	22	135	327	4	129	155
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	137	865	5	133	753
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]	7	36	225	1	35	196
Total Analysis Volume [veh/h]	28	143	902	5	139	785
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	0.33	0.26	0.01	0.00	0.18	0.01
d_M, Delay for Movement [s/veh]	64.37	27.85	0.00	0.00	10.81	0.00
Movement LOS	F	D	A	A	B	A
95th-Percentile Queue Length [veh/ln]	3.49	3.49	0.00	0.00	0.67	0.00
95th-Percentile Queue Length [ft/ln]	87.36	87.36	0.00	0.00	16.68	0.00
d_A, Approach Delay [s/veh]	33.83		0.00		1.63	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	3.64					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 11: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	38.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.664

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	0	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	106	76	143	45	75	13	6	402	108	212	484	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	0	0	0	11	0	409	54	0	255	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	124	76	143	45	75	24	6	811	162	212	739	42
Peak Hour Factor	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	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]	33	20	38	12	20	6	2	218	44	57	199	11
Total Analysis Volume [veh/h]	133	82	154	48	81	26	6	873	174	228	795	45
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	Semi-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	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	4.7	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	47	0	0	28	0	16	18	0	27	29	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	21	0	0	17	0	0	7	0	0	14	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	3.7	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	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	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
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	28	10	10	10	1	45	45	17	61	61
g / C, Green / Cycle	0.23	0.08	0.08	0.08	0.01	0.37	0.37	0.14	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.21	0.03	0.04	0.02	0.00	0.28	0.28	0.13	0.22	0.22
s, saturation flow rate [veh/h]	1740	1810	1900	1615	1810	1900	1792	1810	1900	1864
c, Capacity [veh/h]	402	151	159	135	20	706	666	261	959	941
d1, Uniform Delay [s]	45.00	51.75	52.62	51.20	58.85	33.07	33.08	50.26	18.95	18.95
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]	8.66	1.19	2.51	0.68	7.76	7.66	8.11	8.85	1.48	1.51
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	0.92	0.32	0.51	0.19	0.29	0.76	0.76	0.87	0.44	0.44
d, Delay for Lane Group [s/veh]	53.67	52.94	55.13	51.89	66.61	40.73	41.18	59.11	20.43	20.46
Lane Group LOS	D	D	E	D	E	D	D	E	C	C
Critical Lane Group	Yes	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	11.30	1.38	2.39	0.74	0.22	14.39	13.66	7.09	7.32	7.19
50th-Percentile Queue Length [ft/ln]	282.50	34.52	59.87	18.47	5.49	359.72	341.44	177.35	182.98	179.78
95th-Percentile Queue Length [veh/ln]	16.81	2.49	4.31	1.33	0.40	20.61	19.72	11.46	11.76	11.59
95th-Percentile Queue Length [ft/ln]	420.33	62.14	107.76	33.25	9.88	515.24	492.96	286.55	293.91	289.73

Movement, Approach, & Intersection Results

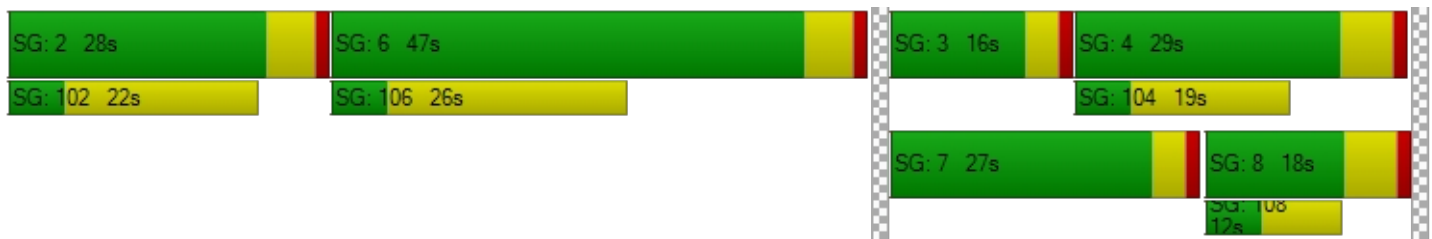
d_M, Delay for Movement [s/veh]	53.67	53.67	53.67	52.94	55.13	51.89	66.61	40.91	41.18	59.11	20.44	20.46
Movement LOS	D	D	D	D	E	D	E	D	D	E	C	C
d_A, Approach Delay [s/veh]	53.67			53.91			41.10			28.70		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	38.60											
Intersection LOS	D											
Intersection V/C	0.664											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.353	2.252	2.967	3.049
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	695	378	205	388
d_b, Bicycle Delay [s]	25.55	39.45	48.33	38.96
I_b,int, Bicycle LOS Score for Intersection	2.168	1.815	2.428	2.441
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Evans Rd at Ethanac Rd

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):	0.004

Intersection Setup

Name	Evans 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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	2	602	3	4	754
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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	409	0	0	255
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	1011	3	4	1009
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]	0	1	261	1	1	260
Total Analysis Volume [veh/h]	0	2	1043	3	4	1041
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	0.01	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	40.22	12.17	0.00	0.00	10.38	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.02	0.00
95th-Percentile Queue Length [ft/ln]	0.30	0.30	0.00	0.00	0.45	0.00
d_A, Approach Delay [s/veh]	12.17		0.00		0.04	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.03					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 13: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	30.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.524

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		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	26	9	48	425	0	141	169	442	18	51	493	394
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	409	0	0	255	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	9	48	425	0	141	169	851	18	51	748	394
Peak Hour Factor	0.9690	0.9690	0.9690	0.9690	1.0000	0.9690	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	2	12	110	0	36	44	220	5	13	193	102
Total Analysis Volume [veh/h]	27	9	50	439	0	146	174	878	19	53	772	407
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	Semi-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	Permiss	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	5	0	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	7	0	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	30	0	0	30	30	0	30	30	0
Amber [s]	0.0	5.0	0.0	5.0	0.0	0.0	3.0	4.7	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	32	0	32	0	0	28	45	0	11	28	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	21	0	21	0	0	0	7	0	0	17	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	4.0	0.0	4.0	0.0	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	L	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	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]	4.00	4.00	4.00	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	9	18	18	14	65	65	6	57	57
g / C, Green / Cycle	0.08	0.15	0.15	0.11	0.54	0.54	0.05	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.05	0.12	0.05	0.10	0.24	0.01	0.03	0.21	0.25
s, saturation flow rate [veh/h]	1699	3514	2859	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	135	522	425	206	1962	876	88	1725	770
d1, Uniform Delay [s]	53.53	49.70	45.83	52.10	16.59	12.71	55.97	20.88	21.96
k, delay calibration	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
d2, Incremental Delay [s]	4.86	3.73	0.48	8.96	0.74	0.05	6.54	0.84	2.59
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	0.64	0.84	0.34	0.84	0.45	0.02	0.60	0.45	0.53
d, Delay for Lane Group [s/veh]	58.39	53.44	46.31	61.06	17.33	12.76	62.51	21.72	24.55
Lane Group LOS	E	D	D	E	B	B	E	C	C
Critical Lane Group	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.60	6.38	1.90	5.47	6.83	0.23	1.68	6.89	7.97
50th-Percentile Queue Length [ft/ln]	64.98	159.55	47.56	136.74	170.78	5.77	42.10	172.14	199.13
95th-Percentile Queue Length [veh/ln]	4.68	10.52	3.42	9.30	11.12	0.42	3.03	11.19	12.59
95th-Percentile Queue Length [ft/ln]	116.96	263.12	85.61	232.62	277.94	10.39	75.79	279.73	314.84

Movement, Approach, & Intersection Results

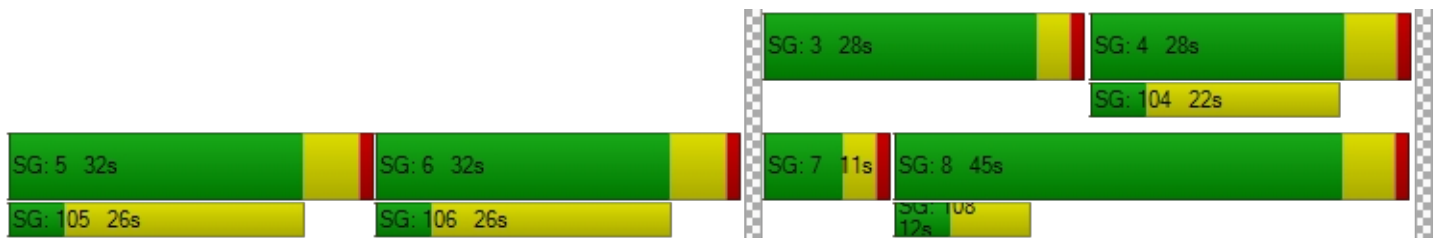
d_M, Delay for Movement [s/veh]	58.39	58.39	58.39	53.44	0.00	46.31	61.06	17.33	12.76	62.51	21.72	24.55
Movement LOS	E	E	E	D		D	E	B	B	E	C	C
d_A, Approach Delay [s/veh]	58.39			51.66			24.35			24.41		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	30.73											
Intersection LOS	C											
Intersection V/C	0.524											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	1.871	2.735	3.014	3.172
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	433	655	372
d_b, Bicycle Delay [s]	36.82	36.82	27.14	39.77
I_b,int, Bicycle LOS Score for Intersection	1.702	1.560	2.443	2.576
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 14: I-215 SB Ramps at Ethanac 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):	1.003

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			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 On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	193	0	361	0	602	384	125	716	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	131	0	251	158	0	124	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	193	0	492	0	853	542	125	840	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9460	0.9460	0.9460	1.0000	0.9460	0.9460	0.9460	0.9460	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	51	0	130	0	225	143	33	222	0
Total Analysis Volume [veh/h]	0	0	0	204	0	520	0	902	573	132	888	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	Semi-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	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	10	0	0	10	0	7	10	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	67	0	0	42	0	11	53	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	14	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	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]		120	120	120	120	120	120
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]		41	41	53	53	11	68
g / C, Green / Cycle		0.34	0.34	0.44	0.44	0.09	0.56
(v / s)_i Volume / Saturation Flow Rate		0.11	0.32	0.47	0.35	0.07	0.25
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		624	557	840	714	160	2039
d1, Uniform Delay [s]		29.03	37.99	33.48	28.96	53.80	15.15
k, delay calibration		0.11	0.18	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]		0.30	11.88	52.96	9.29	10.24	0.68
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		0.33	0.93	1.07	0.80	0.83	0.44
d, Delay for Lane Group [s/veh]		29.33	49.87	86.45	38.26	64.03	15.83
Lane Group LOS		C	D	F	D	E	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		4.26	15.86	34.66	15.01	4.24	6.52
50th-Percentile Queue Length [ft/ln]		106.39	396.46	866.57	375.27	105.95	162.95
95th-Percentile Queue Length [veh/ln]		7.64	22.39	46.78	21.36	7.61	10.71
95th-Percentile Queue Length [ft/ln]		190.97	559.73	1169.61	534.11	190.36	267.63

Movement, Approach, & Intersection Results

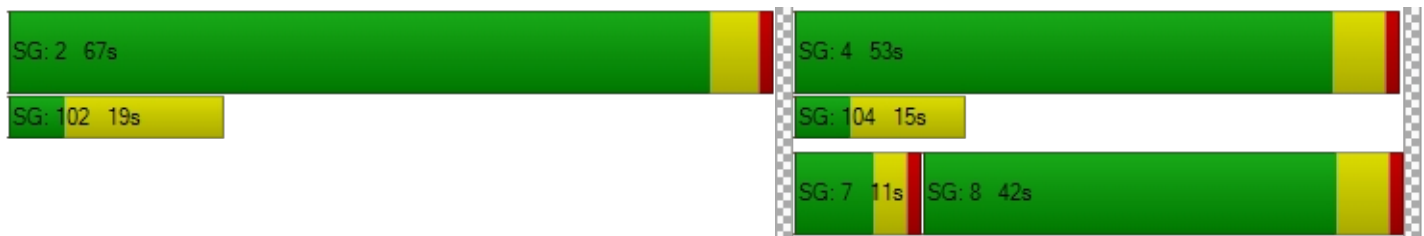
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	29.33	29.33	49.87	0.00	86.45	38.26	64.03	15.83	0.00
Movement LOS				C	C	D		F	D	E	B	
d_A, Approach Delay [s/veh]	0.00			44.09			67.73			22.07		
Approach LOS	A			D			E			C		
d_I, Intersection Delay [s/veh]	47.94											
Intersection LOS	D											
Intersection V/C	1.003											

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	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.308	0.000	3.010
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	1028	605	788
d_b, Bicycle Delay [s]	60.00	14.16	29.19	22.02
I_b,int, Bicycle LOS Score for Intersection	4.132	2.754	3.993	2.401
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 15: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	83.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.943

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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]	45.00			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 Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	426	2	198	0	0	0	246	570	0	0	413	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	105	0	0	0	0	0	211	40	0	0	19	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	531	2	198	0	0	0	457	610	0	0	432	195
Peak Hour Factor	0.9570	0.9570	0.9570	1.0000	1.0000	1.0000	0.9570	0.9570	1.0000	1.0000	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]	139	1	52	0	0	0	119	159	0	0	113	51
Total Analysis Volume [veh/h]	555	2	207	0	0	0	478	637	0	0	451	204
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	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

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	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	48	0	0	0	0	24	72	0	0	48	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	10	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	3.3	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]	5.30	5.30		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]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	39	39		24	70	42
g / C, Green / Cycle	0.33	0.33		0.20	0.58	0.35
(v / s)_i Volume / Saturation Flow Rate	0.31	0.13		0.26	0.34	0.36
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1801
c, Capacity [veh/h]	589	526		355	1107	637
d1, Uniform Delay [s]	39.44	31.31		48.23	15.70	38.79
k, delay calibration	0.35	0.11		0.49	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	20.14	0.48		173.60	2.18	43.29
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	0.95	0.39		1.35	0.58	1.03
d, Delay for Lane Group [s/veh]	59.58	31.79		221.84	17.88	82.08
Lane Group LOS	E	C		F	B	F
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	18.52	4.56		27.26	10.36	25.15
50th-Percentile Queue Length [ft/ln]	462.99	114.06		681.50	258.96	628.85
95th-Percentile Queue Length [veh/ln]	25.58	8.07		41.21	15.64	34.06
95th-Percentile Queue Length [ft/ln]	639.43	201.63		1030.28	390.92	851.44

Movement, Approach, & Intersection Results

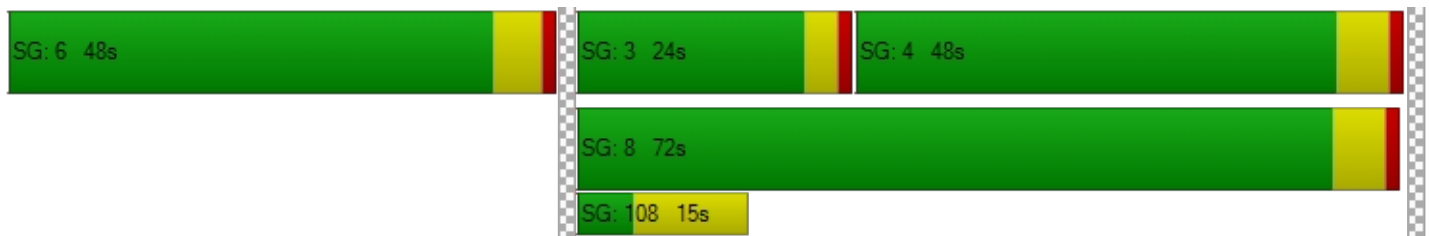
d_M, Delay for Movement [s/veh]	59.58	59.58	31.79	0.00	0.00	0.00	221.84	17.88	0.00	0.00	82.08	82.08
Movement LOS	E	E	C				F	B			F	F
d_A, Approach Delay [s/veh]	52.05			0.00			105.32			82.08		
Approach LOS	D			A			F			F		
d_I, Intersection Delay [s/veh]	83.25											
Intersection LOS	F											
Intersection V/C	0.943											

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	2.328	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]	712	0	1105	705
d_b, Bicycle Delay [s]	24.90	60.00	12.02	25.16
I_b,int, Bicycle LOS Score for Intersection	2.820	4.132	3.399	2.640
Bicycle LOS	C	D	C	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Trumble Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	28.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.545

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	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
	84	5	37	30	15	141	73	588	33	44	361	4
Base Volume Input [veh/h]	84	5	37	30	15	141	73	588	33	44	361	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	40	0	0	19	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	84	5	37	30	15	141	73	628	33	44	380	4
Peak Hour Factor	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	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]	23	1	10	8	4	39	20	173	9	12	104	1
Total Analysis Volume [veh/h]	92	5	41	33	16	155	80	690	36	48	418	4
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	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	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	41	0	11	41	0	31	51	0	17	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	14	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	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	4.00	4.00	4.00	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	2.00	2.00	2.00	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	7	17	5	15	7	75	75	6	74
g / C, Green / Cycle	0.06	0.14	0.04	0.12	0.06	0.63	0.63	0.05	0.61
(v / s)_i Volume / Saturation Flow Rate	0.05	0.03	0.02	0.10	0.04	0.36	0.02	0.03	0.22
s, saturation flow rate [veh/h]	1810	1642	1810	1638	1810	1900	1615	1810	1897
c, Capacity [veh/h]	106	232	71	200	105	1188	1010	85	1165
d1, Uniform Delay [s]	56.05	45.49	56.44	51.62	55.73	13.24	8.62	56.00	11.49
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]	18.85	0.41	4.75	9.88	10.97	2.08	0.07	5.84	0.88
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	0.87	0.20	0.47	0.85	0.76	0.58	0.04	0.57	0.36
d, Delay for Lane Group [s/veh]	74.91	45.90	61.19	61.49	66.69	15.32	8.69	61.84	12.37
Lane Group LOS	E	D	E	E	E	B	A	E	B
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.32	1.24	1.07	5.59	2.63	10.11	0.34	1.52	5.20
50th-Percentile Queue Length [ft/ln]	82.89	31.11	26.82	139.65	65.76	252.63	8.47	37.93	129.96
95th-Percentile Queue Length [veh/ln]	5.97	2.24	1.93	9.46	4.73	15.32	0.61	2.73	8.94
95th-Percentile Queue Length [ft/ln]	149.21	56.00	48.28	236.55	118.37	382.96	15.24	68.27	223.44

Movement, Approach, & Intersection Results

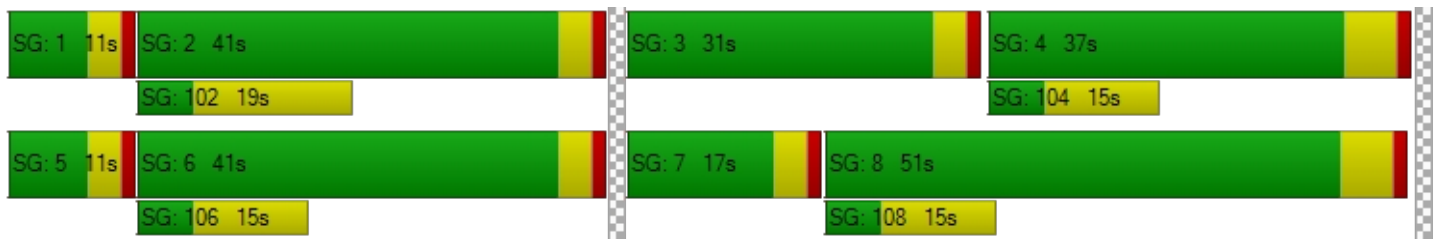
d_M, Delay for Movement [s/veh]	74.91	45.90	45.90	61.19	61.49	61.49	66.69	15.32	8.69	61.84	12.37	12.37
Movement LOS	E	D	D	E	E	E	E	B	A	E	B	B
d_A, Approach Delay [s/veh]	65.24			61.44			20.12			17.42		
Approach LOS	E			E			C			B		
d_I, Intersection Delay [s/veh]	28.39											
Intersection LOS	C											
Intersection V/C	0.545											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.033	2.051	2.744	2.624
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	617	617	755	522
d_b, Bicycle Delay [s]	28.70	28.70	23.25	32.78
I_b,int, Bicycle LOS Score for Intersection	1.787	1.896	2.890	2.335
Bicycle LOS	A	A	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Sherman Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	46.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.222

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews 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	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews Rd		
Base Volume Input [veh/h]	19	5	2	4	2	191	271	173	15	2	95	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	0	0	0	6	10	25	5	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
Total Hourly Volume [veh/h]	22	5	2	4	2	197	281	198	20	2	105	3
Peak Hour Factor	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760
Other Adjustment Factor	1.0000	1.0000	1.0000	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	1	1	1	56	80	57	6	1	30	1
Total Analysis Volume [veh/h]	25	6	2	5	2	225	321	226	23	2	120	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	0.22	0.03	0.00	0.03	0.01	0.24	0.22	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	46.49	34.37	18.96	27.54	26.84	10.54	8.11	0.00	0.00	7.71	0.00	0.00
Movement LOS	E	D	C	D	D	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.96	0.96	0.96	1.15	1.15	1.15	0.83	0.83	0.83	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	24.09	24.09	24.09	28.83	28.83	28.83	20.71	20.71	20.71	0.11	0.11	0.11
d_A, Approach Delay [s/veh]	42.62			11.05			4.57			0.12		
Approach LOS	E			B			A			A		
d_I, Intersection Delay [s/veh]	6.86											
Intersection LOS	E											

Intersection Level Of Service Report
Intersection 18: Byers Rd at McLaughlin Rd

Control Type:	All-way stop	Delay (sec / veh):	6.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

Intersection Setup

Name	Byers Rd			Byers 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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Byers Rd			Byers Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	9	0	0	0	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]	0	0	0	9	0	0	0	0	0	0	0	18
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	2	0	0	0	0	0	0	0	5
Total Analysis Volume [veh/h]	0	0	0	9	0	0	0	0	0	0	0	18
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	914	871	915	1084
Degree of Utilization, x	0.00	0.01	0.00	0.02

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.00	0.03	0.00	0.05
95th-Percentile Queue Length [ft]	0.00	0.78	0.00	1.27
Approach Delay [s/veh]	0.00	7.18	0.00	6.38
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	6.64			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 19: Murrieta Rd at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	21.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.031

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	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]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	2	297	3	25	368	7	6	0	3	7	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	18	0	0	54	0	0	0	9	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	315	3	25	422	7	6	0	12	7	0	23
Peak Hour Factor	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	89	1	7	119	2	2	0	3	2	0	7
Total Analysis Volume [veh/h]	23	356	3	28	477	8	7	0	14	8	0	26
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	0.02	0.00	0.00	0.02	0.00	0.00	0.03	0.00	0.02	0.03	0.00	0.04
d_M, Delay for Movement [s/veh]	8.38	0.00	0.00	8.04	0.00	0.00	21.63	19.76	11.66	21.31	19.86	10.81
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.06	0.00	0.00	0.07	0.00	0.00	0.17	0.17	0.17	0.23	0.23	0.23
95th-Percentile Queue Length [ft/ln]	1.62	0.00	0.00	1.77	0.00	0.00	4.35	4.35	4.35	5.84	5.84	5.84
d_A, Approach Delay [s/veh]	0.50			0.44			14.98			13.28		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.25											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 20: Murrieta Rd at Rouse Rd

Control Type:	Two-way stop	Delay (sec / veh):	21.1
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			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	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	4	227	12	65	297	26	9	8	2	4	10	61
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	33	0	5	57	0	0	0	0	0	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	260	12	70	354	26	9	8	2	4	10	64
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	70	3	19	95	7	2	2	1	1	3	17
Total Analysis Volume [veh/h]	4	278	13	75	379	28	10	9	2	4	11	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	0.06	0.00	0.00	0.04	0.03	0.00	0.01	0.04	0.09
d_M, Delay for Movement [s/veh]	8.11	0.00	0.00	7.98	0.00	0.00	21.09	17.83	10.37	18.60	18.19	10.17
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	0.19	0.00	0.00	0.13	0.10	0.01	0.05	0.12	0.30
95th-Percentile Queue Length [ft/ln]	0.26	0.00	0.00	4.65	0.00	0.00	3.34	2.40	0.22	1.13	3.01	7.40
d_A, Approach Delay [s/veh]	0.11			1.24			18.67			11.62		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	2.27											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 21: Murrieta Rd at Chambers Ave

Control Type:	All-way stop	Delay (sec / veh):	11.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.523

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	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	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Base Volume Input [veh/h]	50	256	9	44	222	38	11	24	24	6	31	57
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	27	0	5	47	5	3	0	0	0	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	50	283	9	49	269	43	14	24	24	6	31	60
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]	13	74	2	13	71	11	4	6	6	2	8	16
Total Analysis Volume [veh/h]	53	298	9	52	283	45	15	25	25	6	33	63
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings**Lanes**

Capacity per Entry Lane [veh/h]	559	606	610	569	628	550	526	566	636
Degree of Utilization, x	0.09	0.25	0.25	0.09	0.52	0.12	0.01	0.06	0.10

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.31	1.00	0.99	0.30	3.04	0.40	0.03	0.19	0.33
95th-Percentile Queue Length [ft]	7.82	25.00	24.77	7.51	75.95	9.98	0.87	4.63	8.22
Approach Delay [s/veh]	10.49			13.88		10.42	9.18		
Approach LOS	B			B		B	A		
Intersection Delay [s/veh]	11.76								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 22: Murrieta Rd at McCall Blvd

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):	0.383

Intersection Setup

Name	Murrieta Rd			Murrieta 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	3	184	130	80	115	48	38	121	1	77	153	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	10	0	32	15	0	0	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]	3	194	130	112	130	48	38	121	1	77	153	142
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	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	51	34	29	34	13	10	32	0	20	40	37
Total Analysis Volume [veh/h]	3	204	137	118	137	50	40	127	1	81	161	149
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing 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	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	25	27	0	28	30	0	0	24	0	0	41	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	14	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	0.0	2.0	3.3	0.0	0.0	2.6	0.0	0.0	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	L	C	R	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]	4.00	5.30	4.00	5.30	5.30	4.60	4.60	4.60	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	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	2.00	3.30	3.30	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	1	68	10	77	77	10	10	10	14	14	14
g / C, Green / Cycle	0.01	0.57	0.08	0.64	0.64	0.08	0.08	0.08	0.11	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.00	0.19	0.07	0.07	0.03	0.02	0.03	0.03	0.04	0.08	0.09
s, saturation flow rate [veh/h]	1810	1774	1810	1900	1615	1810	1900	1895	1810	1900	1615
c, Capacity [veh/h]	11	1006	146	1219	1037	151	158	158	207	217	185
d1, Uniform Delay [s]	59.36	13.92	54.22	8.29	7.94	51.56	52.18	52.18	49.26	51.41	51.83
k, delay calibration	0.11	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	12.14	0.91	9.90	0.19	0.09	0.93	1.66	1.67	1.20	4.90	8.01
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	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.34	0.81	0.11	0.05	0.27	0.40	0.41	0.39	0.74	0.81
d, Delay for Lane Group [s/veh]	71.50	14.83	64.12	8.48	8.03	52.48	53.83	53.85	50.46	56.30	59.85
Lane Group LOS	E	B	E	A	A	D	D	D	D	E	E
Critical Lane Group	No	Yes	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.13	4.83	3.82	1.30	0.46	1.16	1.89	1.89	2.31	4.94	4.75
50th-Percentile Queue Length [ft/ln]	3.17	120.87	95.51	32.41	11.41	29.04	47.29	47.26	57.72	123.55	118.67
95th-Percentile Queue Length [veh/ln]	0.23	8.44	6.88	2.33	0.82	2.09	3.41	3.40	4.16	8.59	8.32
95th-Percentile Queue Length [ft/ln]	5.71	211.03	171.92	58.34	20.53	52.28	85.13	85.07	103.90	214.69	208.00

Movement, Approach, & Intersection Results

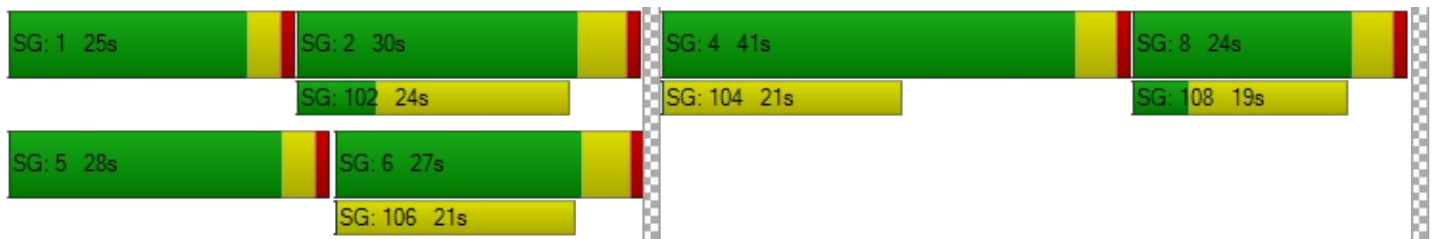
d_M, Delay for Movement [s/veh]	71.50	14.83	14.83	64.12	8.48	8.03	52.48	53.84	53.85	50.46	56.30	59.85
Movement LOS	E	B	B	E	A	A	D	D	D	D	E	E
d_A, Approach Delay [s/veh]	15.33			29.93			53.52			56.44		
Approach LOS	B			C			D			E		
d_I, Intersection Delay [s/veh]	37.63											
Intersection LOS	D											
Intersection V/C	0.383											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	4.0	11.0	4.0
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	56.07	49.50	56.07
I_p,int, Pedestrian LOS Score for Intersection	2.230	2.642	2.401	2.618
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	362	412	323	607
d_b, Bicycle Delay [s]	40.26	37.84	42.17	29.12
I_b,int, Bicycle LOS Score for Intersection	2.127	2.063	1.698	1.882
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 23: Sun City Blvd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	27.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.338

Intersection Setup

Name	Sun City Blvd			Sun City Blvd			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	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sun City Blvd			Sun City Blvd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	80	121	148	65	77	10	25	324	59	67	416	228
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	32	0	0	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	80	121	148	65	77	10	25	356	59	67	433	228
Peak Hour Factor	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	31	38	16	20	3	6	90	15	17	110	58
Total Analysis Volume [veh/h]	81	123	150	66	78	10	25	361	60	68	439	231
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	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	45	0	0	22	0	11	39	0	14	42	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	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	14	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	C	C	R	C	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	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	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	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	10	10	4	73	73	6	75	75
g / C, Green / Cycle	0.11	0.11	0.11	0.08	0.08	0.03	0.61	0.61	0.05	0.63	0.63
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.09	0.04	0.04	0.01	0.11	0.11	0.04	0.19	0.19
s, saturation flow rate [veh/h]	1830	1729	1615	1825	1688	1810	1900	1807	1810	1900	1683
c, Capacity [veh/h]	211	199	186	152	141	60	1154	1098	95	1191	1054
d1, Uniform Delay [s]	49.85	49.80	51.78	52.74	52.71	56.87	10.43	10.45	55.97	10.28	10.30
k, delay calibration	0.11	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]	1.84	1.89	7.96	2.83	2.98	4.54	0.36	0.38	9.57	0.64	0.73
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	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	0.49	0.81	0.53	0.52	0.42	0.19	0.19	0.72	0.30	0.30
d, Delay for Lane Group [s/veh]	51.69	51.69	59.74	55.57	55.70	61.41	10.79	10.83	65.53	10.92	11.03
Lane Group LOS	D	D	E	E	E	E	B	B	E	B	B
Critical Lane Group	No	No	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.09	2.88	4.81	2.45	2.25	0.81	2.52	2.44	2.26	4.26	3.83
50th-Percentile Queue Length [ft/ln]	77.33	72.01	120.35	61.22	56.14	20.35	62.94	61.00	56.62	106.61	95.81
95th-Percentile Queue Length [veh/ln]	5.57	5.19	8.41	4.41	4.04	1.47	4.53	4.39	4.08	7.65	6.90
95th-Percentile Queue Length [ft/ln]	139.19	129.63	210.31	110.19	101.05	36.63	113.28	109.79	101.91	191.27	172.46

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	51.69	51.69	59.74	55.57	55.67	55.70	61.41	10.81	10.83	65.53	10.94	11.03
Movement LOS	D	D	E	E	E	E	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	55.10			55.63			13.65			16.00		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	27.17											
Intersection LOS	C											
Intersection V/C	0.338											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	4.0	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	56.07	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.424	2.276	2.541	2.614
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	680	297	573	623
d_b, Bicycle Delay [s]	26.14	43.52	30.53	28.43
I_b,int, Bicycle LOS Score for Intersection	1.852	1.687	1.928	2.168
Bicycle LOS	A	A	A	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 24: Bradley Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	31.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.715

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	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	57	84	516	115	89	3	26	509	67	568	667	120
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	32	0	0	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	57	84	516	115	89	3	26	541	67	568	684	120
Peak Hour Factor	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	22	132	29	23	1	7	139	17	146	175	31
Total Analysis Volume [veh/h]	58	86	529	118	91	3	27	555	69	583	702	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	10	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [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
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	31	31	0	22	0	26	24	0	43	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	6	0
Pedestrian Clearance [s]	0	21	21	0	17	0	0	14	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	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	2.0	2.0	0.0	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	
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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	62	10	10	4	36	36	42	75	75
g / C, Green / Cycle	0.13	0.13	0.51	0.08	0.08	0.03	0.30	0.30	0.35	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.03	0.05	0.33	0.07	0.05	0.01	0.17	0.17	0.32	0.22	0.22
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1889	1810	1900	1827	1810	1900	1803
c, Capacity [veh/h]	229	241	828	151	158	64	577	555	638	1180	1120
d1, Uniform Delay [s]	47.28	47.94	21.18	53.91	53.03	56.70	34.92	34.95	37.08	11.06	11.09
k, delay calibration	0.11	0.11	0.50	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]	0.57	0.90	3.76	8.44	3.56	4.42	3.74	3.93	5.61	0.84	0.90
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	0.36	0.64	0.78	0.60	0.42	0.55	0.55	0.91	0.36	0.36
d, Delay for Lane Group [s/veh]	47.86	48.83	24.94	62.35	56.60	61.11	38.67	38.88	42.69	11.90	11.99
Lane Group LOS	D	D	C	E	E	E	D	D	D	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.61	2.42	11.37	3.85	2.89	0.87	8.26	8.01	16.88	5.42	5.22
50th-Percentile Queue Length [ft/ln]	40.20	60.56	284.31	96.18	72.33	21.87	206.44	200.18	421.89	135.41	130.59
95th-Percentile Queue Length [veh/ln]	2.89	4.36	16.90	6.92	5.21	1.57	12.97	12.65	23.61	9.23	8.97
95th-Percentile Queue Length [ft/ln]	72.37	109.01	422.58	173.12	130.19	39.36	324.26	316.20	590.32	230.84	224.29

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	47.86	48.83	24.94	62.35	56.60	56.60	61.11	38.76	38.88	42.69	11.94	11.99
Movement LOS	D	D	C	E	E	E	E	D	D	D	B	B
d_A, Approach Delay [s/veh]	29.97			59.80			39.70			24.68		
Approach LOS	C			E			D			C		
d_I, Intersection Delay [s/veh]	31.74											
Intersection LOS	C											
Intersection V/C	0.715											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	10.0	4.0	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	50.42	56.07	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.491	2.100	2.640	2.963
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	450	300	333	617
d_b, Bicycle Delay [s]	36.04	43.35	41.67	28.70
I_b,int, Bicycle LOS Score for Intersection	2.670	1.909	2.097	2.721
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: I-215 SB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	33.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.690

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	358	3	462	0	845	315	285	794	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	30	0	0	0	20	12	0	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	388	3	462	0	865	327	285	811	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9890	0.9890	0.9890	1.0000	0.9890	0.9890	0.9890	0.9890	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	98	1	117	0	219	83	72	205	0
Total Analysis Volume [veh/h]	0	0	0	392	3	467	0	875	331	288	820	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	Semi-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	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Unsigna	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	10	0	0	10	0	7	10	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	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	51	0	0	41	0	28	69	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	21	0	0	3	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	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	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	L	C
C, Cycle Length [s]		120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	2.60	2.00	2.60
g_i, Effective Green Time [s]		37	37	47	21	73
g / C, Green / Cycle		0.31	0.31	0.39	0.18	0.61
(v / s)_i Volume / Saturation Flow Rate		0.22	0.29	0.24	0.16	0.23
s, saturation flow rate [veh/h]		1810	1615	3618	1810	3618
c, Capacity [veh/h]		566	505	1421	323	2187
d1, Uniform Delay [s]		36.23	39.85	29.19	48.15	12.13
k, delay calibration		0.13	0.27	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		1.95	16.01	2.01	8.44	0.49
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		0.70	0.92	0.62	0.89	0.37
d, Delay for Lane Group [s/veh]		38.18	55.86	31.19	56.59	12.62
Lane Group LOS		D	E	C	E	B
Critical Lane Group		No	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		10.08	14.96	10.27	9.07	5.48
50th-Percentile Queue Length [ft/ln]		252.11	374.05	256.68	226.87	137.02
95th-Percentile Queue Length [veh/ln]		15.29	21.31	15.52	14.02	9.32
95th-Percentile Queue Length [ft/ln]		382.31	532.64	388.05	350.38	233.00

Movement, Approach, & Intersection Results

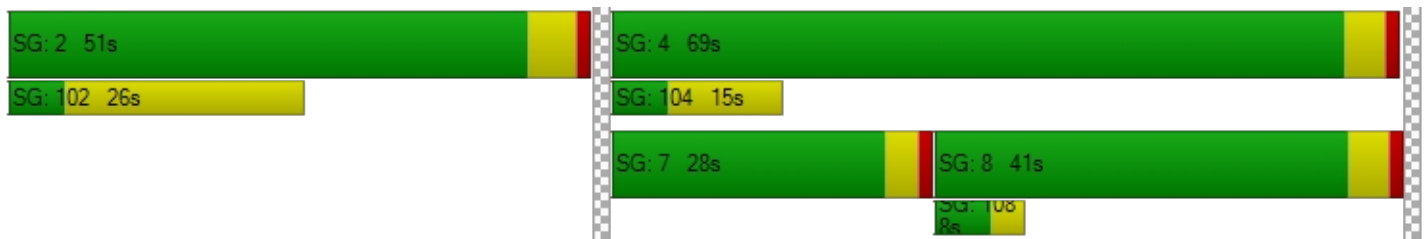
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	38.18	38.18	55.86	0.00	31.19	0.00	56.59	12.62	0.00
Movement LOS				D	D	E		C		E	B	
d_A, Approach Delay [s/veh]	0.00			47.76			31.19			24.05		
Approach LOS	A			D			C			C		
d_I, Intersection Delay [s/veh]	33.43											
Intersection LOS	C											
Intersection V/C	0.690											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	1.722	2.376	2.807	2.918
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	762	607	1073
d_b, Bicycle Delay [s]	60.00	23.00	29.12	12.88
I_b,int, Bicycle LOS Score for Intersection	4.132	2.982	2.281	2.474
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: I-215 NB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	33.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.671

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	383	4	480	0	0	0	283	897	0	0	740	244
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	0	0	0	0	50	0	0	13	19
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	387	4	480	0	0	0	283	947	0	0	753	263
Peak Hour Factor	0.9860	0.9860	0.9860	1.0000	1.0000	1.0000	0.9860	0.9860	1.0000	1.0000	0.9860	0.9860
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	98	1	122	0	0	0	72	240	0	0	191	67
Total Analysis Volume [veh/h]	392	4	487	0	0	0	287	960	0	0	764	267
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	Semi-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	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	51	0	0	0	0	40	69	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	21	0	0	0	0	0	10	0	0	3	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	3.3	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
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	2.60	2.60
g_i, Effective Green Time [s]	39	39		21	71	46
g / C, Green / Cycle	0.32	0.32		0.18	0.59	0.38
(v / s)_i Volume / Saturation Flow Rate	0.22	0.30		0.16	0.27	0.21
s, saturation flow rate [veh/h]	1810	1615		1810	3618	3618
c, Capacity [veh/h]	586	523		321	2147	1384
d1, Uniform Delay [s]	35.11	39.27		48.23	13.49	28.99
k, delay calibration	0.14	0.29		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	1.72	17.52		8.57	0.68	1.59
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	0.68	0.93		0.89	0.45	0.55
d, Delay for Lane Group [s/veh]	36.82	56.79		56.79	14.16	30.58
Lane Group LOS	D	E		E	B	C
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	9.90	15.77		9.06	7.02	8.76
50th-Percentile Queue Length [ft/ln]	247.41	394.36		226.45	175.48	218.97
95th-Percentile Queue Length [veh/ln]	15.06	22.29		13.99	11.36	13.61
95th-Percentile Queue Length [ft/ln]	376.39	557.20		349.84	284.11	340.31

Movement, Approach, & Intersection Results

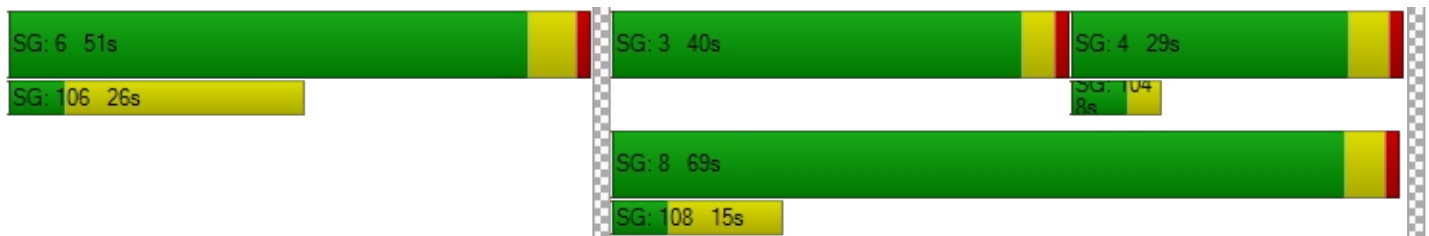
d_M, Delay for Movement [s/veh]	36.82	36.82	56.79	0.00	0.00	0.00	56.79	14.16	0.00	0.00	30.58	0.00
Movement LOS	D	D	E				E	B			C	
d_A, Approach Delay [s/veh]	47.83			0.00			23.98			30.58		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	33.00											
Intersection LOS	C											
Intersection V/C	0.671											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.386	1.722	2.862	2.887
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	762	0	1073	407
d_b, Bicycle Delay [s]	23.00	60.00	12.88	38.08
I_b,int, Bicycle LOS Score for Intersection	3.017	4.132	2.588	2.190
Bicycle LOS	C	D	B	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 27: Encanto Dr at McCall Blvd**

Control Type:	Signalized	Delay (sec / veh):	25.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.541

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]	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	172	19	40	30	17	140	184	982	261	32	671	22
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	0	0	0	0	0	0	30	20	0	19	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	185	19	40	30	17	140	184	1012	281	32	690	22
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]	48	5	10	8	4	36	48	261	73	8	178	6
Total Analysis Volume [veh/h]	191	20	41	31	18	145	190	1045	290	33	713	23
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	Semi-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	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	10	0	0	10	0	7	10	0	7	10	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	3.0	0.0	3.0	3.0	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	32	0	0	32	0	68	77	0	11	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	21	0	0	17	0	0	14	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	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	4.20	4.20	4.20	4.00	4.00	4.00	4.00	4.00	4.00
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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	28	28	28	28	28	15	75	75	5	65	65
g / C, Green / Cycle	0.23	0.23	0.23	0.23	0.23	0.12	0.63	0.63	0.04	0.54	0.54
(v / s)_i Volume / Saturation Flow Rate	0.15	0.01	0.03	0.02	0.10	0.11	0.36	0.37	0.02	0.19	0.19
s, saturation flow rate [veh/h]	1242	1900	1615	1363	1642	1810	1900	1761	1810	1900	1879
c, Capacity [veh/h]	222	440	374	342	380	225	1192	1105	71	1031	1019
d1, Uniform Delay [s]	53.36	35.80	36.34	38.63	39.32	51.41	13.01	13.19	56.43	15.60	15.60
k, delay calibration	0.17	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]	13.57	0.04	0.13	0.11	0.76	8.40	2.02	2.30	4.72	0.97	0.99
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	0.86	0.05	0.11	0.09	0.43	0.84	0.57	0.59	0.47	0.36	0.36
d, Delay for Lane Group [s/veh]	66.93	35.84	36.47	38.74	40.09	59.81	15.03	15.49	61.16	16.58	16.59
Lane Group LOS	E	D	D	D	D	E	B	B	E	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.65	0.46	0.97	0.76	4.19	6.07	10.63	10.29	1.06	5.85	5.79
50th-Percentile Queue Length [ft/ln]	166.32	11.61	24.23	18.95	104.84	151.67	265.66	257.24	26.62	146.15	144.71
95th-Percentile Queue Length [veh/ln]	10.88	0.84	1.74	1.36	7.55	10.11	15.97	15.55	1.92	9.81	9.73
95th-Percentile Queue Length [ft/ln]	272.07	20.90	43.62	34.11	188.70	252.65	399.31	388.75	47.92	245.28	243.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	66.93	35.84	36.47	38.74	40.09	40.09	59.81	15.18	15.49	61.16	16.58	16.59
Movement LOS	E	D	D	D	D	D	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	59.51			39.87			20.80			18.50		
Approach LOS	E			D			C			B		
d_I, Intersection Delay [s/veh]	25.07											
Intersection LOS	C											
Intersection V/C	0.541											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.291	2.094	3.172	2.870
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	463	463	1217	267
d_b, Bicycle Delay [s]	35.42	35.42	9.20	45.07
I_b,int, Bicycle LOS Score for Intersection	1.975	1.880	2.818	2.194
Bicycle LOS	A	A	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 at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.313

Intersection Setup

Name	Sherman Rd			Sherman 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	26	1	8	32	3	18	12	907	23	14	622	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	3	5	25	0	0	16	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	1	8	32	3	21	17	932	23	14	638	13
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]	7	0	2	9	1	6	5	251	6	4	172	4
Total Analysis Volume [veh/h]	28	1	9	35	3	23	18	1005	25	15	688	14
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	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

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]	7	10	0	7	10	0	7	10	0	7	10	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	3.6	0.0	3.0	3.6	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	31	0	15	27	0	11	63	0	11	63	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	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	10	0	0	14	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	2.6	0.0	2.0	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.20	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]	2.00	2.20	2.00	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	4	5	5	6	6	3	90	90	3	90	90
g / C, Green / Cycle	0.04	0.04	0.04	0.05	0.05	0.03	0.75	0.75	0.02	0.75	0.75
(v / s)_i Volume / Saturation Flow Rate	0.02	0.01	0.02	0.00	0.01	0.01	0.27	0.27	0.01	0.19	0.19
s, saturation flow rate [veh/h]	1810	1640	1810	1900	1615	1810	1900	1884	1810	1900	1887
c, Capacity [veh/h]	65	73	73	93	79	48	1429	1417	42	1423	1413
d1, Uniform Delay [s]	56.66	55.15	56.34	54.37	55.06	57.44	5.06	5.06	57.74	4.64	4.64
k, delay calibration	0.11	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]	4.51	0.86	4.80	0.14	2.02	4.82	0.71	0.72	5.12	0.42	0.42
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	0.43	0.14	0.48	0.03	0.29	0.38	0.36	0.36	0.36	0.25	0.25
d, Delay for Lane Group [s/veh]	61.17	56.00	61.14	54.51	57.08	62.26	5.77	5.78	62.86	5.06	5.06
Lane Group LOS	E	E	E	D	E	E	A	A	E	A	A
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.91	0.31	1.14	0.09	0.72	0.60	3.93	3.90	0.50	2.43	2.42
50th-Percentile Queue Length [ft/ln]	22.83	7.72	28.41	2.26	17.92	14.94	98.18	97.41	12.62	60.74	60.38
95th-Percentile Queue Length [veh/ln]	1.64	0.56	2.05	0.16	1.29	1.08	7.07	7.01	0.91	4.37	4.35
95th-Percentile Queue Length [ft/ln]	41.10	13.90	51.13	4.06	32.26	26.89	176.72	175.33	22.72	109.33	108.68

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	61.17	56.00	56.00	61.14	54.51	57.08	62.26	5.77	5.78	62.86	5.06	5.06
Movement LOS	E	E	E	E	D	E	E	A	A	E	A	A
d_A, Approach Delay [s/veh]	59.81			59.28			6.74			6.27		
Approach LOS	E			E			A			A		
d_I, Intersection Delay [s/veh]	9.36											
Intersection LOS	A											
Intersection V/C	0.313											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	4.0
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	56.07
I_p,int, Pedestrian LOS Score for Intersection	1.982	2.169	2.722	2.806
Crosswalk LOS	A	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	447	380	973	973
d_b, Bicycle Delay [s]	36.19	39.37	15.81	15.81
I_b,int, Bicycle LOS Score for Intersection	1.622	1.660	2.424	2.151
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX C-3

**INTERSECTION ANALYSIS
WORKSHEETS -
OPENING YEAR 2024 CUMULATIVE**

CADO Warehouse Project

Vistro File: K:\...\Menifee CADO_AM.vistro

Scenario 3 OY CP AM

Report File: K:\...\3 OY CP AM.pdf

9/29/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Case Rd	Signalized	HCM 6th Edition	WB Left	0.430	37.3	D
2	Murrieta Rd at Case Rd	All-way stop	HCM 6th Edition	NB Left	0.308	10.0	B
3	Goetz Rd at Mapes Rd	Signalized	HCM 6th Edition	SB Left	0.473	33.7	C
4	I-215 SB Ramps/SR-74 at Bonnie Dr	Signalized	HCM 6th Edition	EB Left	0.507	14.0	B
5	I-215 NB Ramps at SR-74	Signalized	HCM 6th Edition	EB Left	0.420	13.6	B
6	Sherman Rd at SR-74	Signalized	HCM 6th Edition	EB Left	0.579	28.3	C
7	Goetz Rd at Fieldstone Dr	Signalized	HCM 6th Edition	WB Left	0.389	15.7	B
8	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.631	45.2	D
9	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.030	12.5	B
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.199	14.2	B
11	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	EB Right	0.884	103.3	F
12	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	9.359	5,259.6	F
13	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.708	39.1	D
14	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	SB Right	1.281	121.1	F
15	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	1.247	164.3	F
16	Trumble Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.838	48.3	D
17	Sherman Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	4.207	2,480.0	F
			HCM 6th				

18	Byers Rd at McLaughlin Rd	All-way stop	HCM 6th Edition	SB Left	0.028	7.0	A
19	Murrieta Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	WB Left	0.143	25.4	D
20	Murrieta Rd at Rouse Rd	Two-way stop	HCM 6th Edition	EB Left	1.072	118.6	F
21	Murrieta Rd at Chambers Ave	All-way stop	HCM 6th Edition	SB Thru	0.999	35.0	E
22	Murrieta Rd at McCall Blvd	Signalized	HCM 6th Edition	WB Right	0.562	37.1	D
23	Sun City Blvd at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.341	23.8	C
24	Bradley Rd at McCall Blvd	Signalized	HCM 6th Edition	SB Left	0.720	32.2	C
25	I-215 SB Ramps at McCall Blvd	Signalized	HCM 6th Edition	SB Right	0.897	52.8	D
26	I-215 NB Ramps at McCall Blvd	Signalized	HCM 6th Edition	EB Left	0.846	37.7	D
27	Encanto Dr at McCall Blvd	Signalized	HCM 6th Edition	NB Left	0.766	42.3	D
28	Sherman Rd at McCall Blvd	Signalized	HCM 6th Edition	NB Left	0.699	32.9	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: Goetz Rd at Case Rd

Control Type:	Signalized	Delay (sec / veh):	37.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.430

Intersection Setup

Name	Goetz Rd		Case Rd		Case 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	1	0	1	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]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Goetz Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	233	251	153	115	188	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	42	6	38	19	2	34
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]	289	272	200	141	201	178
Peak Hour Factor	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	81	76	56	39	56	50
Total Analysis Volume [veh/h]	323	304	223	158	225	199
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	10	0	7	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.7	0.0	5.0	0.0	3.0	5.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	66	0	25	0	29	54
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]	3.7	0.0	4.0	0.0	2.0	4.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.70	5.70	6.00	6.00	4.00	6.00
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]	3.70	3.70	4.00	4.00	2.00	4.00
g_i, Effective Green Time [s]	26	26	62	62	17	83
g / C, Green / Cycle	0.21	0.21	0.51	0.51	0.14	0.69
(v / s)_i Volume / Saturation Flow Rate	0.18	0.19	0.12	0.10	0.12	0.10
s, saturation flow rate [veh/h]	1810	1615	1900	1615	1810	1900
c, Capacity [veh/h]	386	345	977	830	256	1309
d1, Uniform Delay [s]	45.18	45.72	16.05	15.70	50.50	6.48
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]	4.82	7.38	0.54	0.51	9.37	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	0.84	0.88	0.23	0.19	0.88	0.15
d, Delay for Lane Group [s/veh]	49.99	53.10	16.59	16.21	59.87	6.73
Lane Group LOS	D	D	B	B	E	A
Critical Lane Group	No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	9.34	9.11	3.22	2.24	6.99	1.50
50th-Percentile Queue Length [ft/ln]	233.52	227.78	80.42	56.12	174.71	37.40
95th-Percentile Queue Length [veh/ln]	14.35	14.06	5.79	4.04	11.32	2.69
95th-Percentile Queue Length [ft/ln]	358.83	351.53	144.76	101.02	283.10	67.32

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	49.99	53.10	16.59	16.21	59.87	6.73
Movement LOS	D	D	B	B	E	A
d_A, Approach Delay [s/veh]	51.50		16.43		34.93	
Approach LOS	D		B		C	
d_I, Intersection Delay [s/veh]	37.26					
Intersection LOS	D					
Intersection V/C	0.430					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
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	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.503	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1005	317	800
d_b, Bicycle Delay [s]	14.85	42.50	21.60
I_b,int, Bicycle LOS Score for Intersection	1.560	2.188	2.259
Bicycle LOS	A	B	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Murrieta Rd at Case Rd**

Control Type:	All-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.308

Intersection Setup

Name	Murrieta Rd		Case Rd		Case 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	1	0	1	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]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Murrieta Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	123	18	177	35	13	140
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	16	0	14	14	0	29
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]	146	19	202	51	14	177
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]	38	5	53	13	4	46
Total Analysis Volume [veh/h]	152	20	211	53	15	185
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	589	732	686	792	620	679
Degree of Utilization, x	0.26	0.03	0.31	0.07	0.02	0.27

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.03	0.08	1.31	0.21	0.07	1.11
95th-Percentile Queue Length [ft]	25.63	2.10	32.63	5.37	1.86	27.63
Approach Delay [s/veh]	10.56		9.73		9.89	
Approach LOS	B		A		A	
Intersection Delay [s/veh]	10.00					
Intersection LOS	B					

**Intersection Level Of Service Report
Intersection 3: Goetz Rd at Mapes Rd**

Control Type:	Signalized	Delay (sec / veh):	33.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.473

Intersection Setup

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes 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	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes Rd		
Base Volume Input [veh/h]	268	278	14	3	141	165	146	0	187	0	0	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	1	48	0	0	21	0	0	0	4	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]	285	343	15	3	170	175	155	0	202	0	0	1
Peak Hour Factor	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270
Other Adjustment Factor	1.0000	1.0000	1.0000	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	104	5	1	51	53	47	0	61	0	0	0
Total Analysis Volume [veh/h]	345	415	18	4	206	212	187	0	244	0	0	1
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	0	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	0.0	3.2	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	52	62	0	11	21	0	20	47	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	0.0	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	17	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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	0.0	2.2	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	C	L	C	R	L	C	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.20	4.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.20	2.20
g_i, Effective Green Time [s]	25	85	85	1	61	61	14	20	2	2
g / C, Green / Cycle	0.21	0.71	0.71	0.01	0.50	0.50	0.12	0.17	0.02	0.02
(v / s)_i Volume / Saturation Flow Rate	0.19	0.11	0.11	0.00	0.11	0.13	0.10	0.15	0.00	0.00
s, saturation flow rate [veh/h]	1810	1900	1872	1810	1900	1615	1810	1615	202	1615
c, Capacity [veh/h]	379	1342	1323	14	959	815	215	275	34	29
d1, Uniform Delay [s]	46.32	5.84	5.84	59.21	16.52	16.96	51.98	48.68	0.00	57.89
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	8.54	0.26	0.26	10.94	0.51	0.78	10.36	9.48	0.00	0.47
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	0.91	0.16	0.16	0.29	0.21	0.26	0.87	0.89	0.00	0.03
d, Delay for Lane Group [s/veh]	54.85	6.10	6.11	70.15	17.03	17.73	62.33	58.16	0.00	58.36
Lane Group LOS	D	A	A	E	B	B	E	E	A	E
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.52	1.57	1.55	0.16	3.07	3.28	6.14	7.85	0.00	0.03
50th-Percentile Queue Length [ft/ln]	262.89	39.23	38.72	3.99	76.84	81.93	153.58	196.21	0.00	0.84
95th-Percentile Queue Length [veh/ln]	15.83	2.82	2.79	0.29	5.53	5.90	10.21	12.44	0.00	0.06
95th-Percentile Queue Length [ft/ln]	395.84	70.62	69.70	7.18	138.30	147.47	255.21	311.07	0.00	1.52

Movement, Approach, & Intersection Results

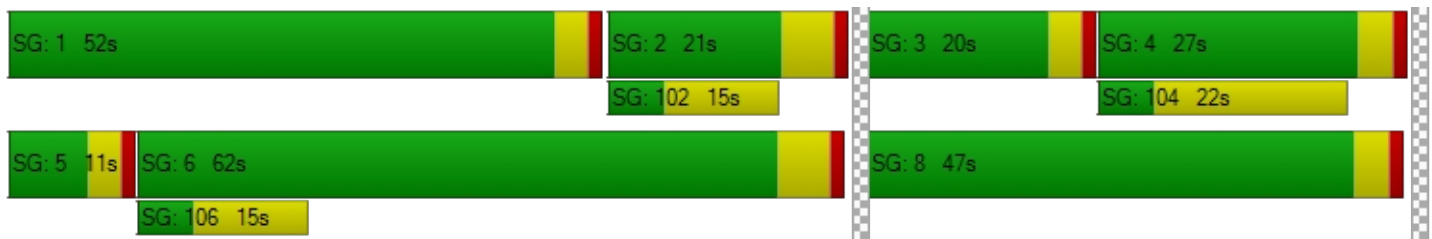
d_M, Delay for Movement [s/veh]	54.85	6.10	6.11	70.15	17.03	17.73	62.33	58.16	58.16	0.00	0.00	58.36
Movement LOS	D	A	A	E	B	B	E	E	E	A	A	E
d_A, Approach Delay [s/veh]	27.72			17.89			59.97			58.36		
Approach LOS	C			B			E			E		
d_I, Intersection Delay [s/veh]	33.71											
Intersection LOS	C											
Intersection V/C	0.473											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			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]	0.00			51.34			51.34			51.34		
I_p,int, Pedestrian LOS Score for Intersectio	0.000			2.648			2.277			1.963		
Crosswalk LOS	F			B			B			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	938			255			713			380		
d_b, Bicycle Delay [s]	16.91			45.68			24.83			39.37		
I_b,int, Bicycle LOS Score for Intersection	2.201			2.256			2.271			1.561		
Bicycle LOS	B			B			B			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: I-215 SB Ramps/SR-74 at Bonnie Dr

Control Type:	Signalized	Delay (sec / veh):	14.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.507

Intersection Setup

Name	SR-74		I-215 SB Ramps		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]	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]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	SR-74		I-215 SB Ramps		Bonnie Dr	
Base Volume Input [veh/h]	184	385	486	18	29	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	24	172	155	9	0	16
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]	219	580	670	28	31	160
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	57	150	173	7	8	41
Total Analysis Volume [veh/h]	226	599	692	29	32	165
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protected	Permissive	Overlap	Permissive	Permissive	Unsignalized
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups			2			
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	10	10	0	7	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	4.3	4.3	0.0	4.3	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	48	95	47	0	25	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	14	0
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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	0.0	3.3	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L
C, Cycle Length [s]	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	3.30	3.30
g_i, Effective Green Time [s]	17	105	84	84	5
g / C, Green / Cycle	0.14	0.87	0.70	0.70	0.04
(v / s)_i Volume / Saturation Flow Rate	0.12	0.32	0.36	0.02	0.02
s, saturation flow rate [veh/h]	1810	1900	1900	1615	1810
c, Capacity [veh/h]	260	1658	1321	1123	71
d1, Uniform Delay [s]	50.29	1.43	8.75	5.66	56.38
k, delay calibration	0.11	0.50	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.71	0.61	1.49	0.04	4.41
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	0.87	0.36	0.52	0.03	0.45
d, Delay for Lane Group [s/veh]	59.00	2.04	10.24	5.71	60.79
Lane Group LOS	E	A	B	A	E
Critical Lane Group	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	7.08	0.87	7.68	0.21	1.01
50th-Percentile Queue Length [ft/ln]	177.09	21.73	192.05	5.17	25.37
95th-Percentile Queue Length [veh/ln]	11.45	1.56	12.23	0.37	1.83
95th-Percentile Queue Length [ft/ln]	286.21	39.12	305.69	9.31	45.66

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	59.00	2.04	10.24	5.71	60.79	0.00
Movement LOS	E	A	B	A	E	
d_A, Approach Delay [s/veh]	17.64		10.05		10.13	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	14.02					
Intersection LOS	B					
Intersection V/C	0.507					

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 Intersectio	2.701	2.615	2.095
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1495	695	328
d_b, Bicycle Delay [s]	3.83	25.55	41.92
I_b,int, Bicycle LOS Score for Intersection	2.921	2.749	1.560
Bicycle LOS	C	B	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: I-215 NB Ramps at SR-74

Control Type:	Signalized	Delay (sec / veh):	13.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.420

Intersection Setup

Name	I-215 NB Ramps		SR-74		SR-74	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB Ramps		SR-74		SR-74	
Base Volume Input [veh/h]	131	11	8	629	531	676
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	138	0	0	171	196	172
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]	277	12	8	838	759	889
Peak Hour Factor	0.9330	0.9330	0.9330	0.9330	0.9330	0.9330
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	74	3	2	225	203	238
Total Analysis Volume [veh/h]	297	13	9	898	814	953
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protected	Permissive	Permissive	Unsignalized
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	4.3	0.0	3.0	5.0	5.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	53	0	11	67	56	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	21	0	0	10	7	0
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	0.0
I2, Clearance Lost Time [s]	3.3	0.0	2.0	4.0	4.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C
C, Cycle Length [s]	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	2.00	4.00	4.00
g_i, Effective Green Time [s]	23	2	86	80
g / C, Green / Cycle	0.19	0.02	0.71	0.67
(v / s)_i Volume / Saturation Flow Rate	0.17	0.00	0.25	0.23
s, saturation flow rate [veh/h]	1800	1810	3618	3618
c, Capacity [veh/h]	345	29	2584	2406
d1, Uniform Delay [s]	47.37	58.41	6.52	8.68
k, delay calibration	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.43	6.13	0.37	0.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.31	0.35	0.34
d, Delay for Lane Group [s/veh]	55.80	64.54	6.89	9.07
Lane Group LOS	E	E	A	A
Critical Lane Group	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	9.57	0.31	3.41	3.86
50th-Percentile Queue Length [ft/ln]	239.25	7.73	85.28	96.61
95th-Percentile Queue Length [veh/ln]	14.64	0.56	6.14	6.96
95th-Percentile Queue Length [ft/ln]	366.09	13.91	153.51	173.90

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.80	55.80	64.54	6.89	9.07	0.00
Movement LOS	E	E	E	A	A	
d_A, Approach Delay [s/veh]	55.80		7.46		4.33	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	13.59					
Intersection LOS	B					
Intersection V/C	0.420					

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 Intersectio	1.963	2.935	3.067
Crosswalk LOS	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	795	1017	833
d_b, Bicycle Delay [s]	21.78	14.50	20.42
I_b,int, Bicycle LOS Score for Intersection	2.071	2.308	2.231
Bicycle LOS	B	B	B

Sequence





Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Sherman Rd at SR-74**

Control Type:	Signalized	Delay (sec / veh):	28.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.579

Intersection Setup

Name	Sherman Rd			Sherman 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	1	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	40.00			40.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	46	1	250	0	4	1	5	623	15	239	860	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	9	0	4	0	0	0	0	138	33	12	285	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]	58	1	269	0	4	1	5	798	49	265	1197	1
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	72	0	1	0	1	214	13	71	320	0
Total Analysis Volume [veh/h]	62	1	288	0	4	1	5	854	52	284	1282	1
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	5.0	0.0	3.0	5.0	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	36	0	0	27	0	11	21	0	36	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	21	0	0	17	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			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	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	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	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	24	24	2	1	54	54	21	74	74
g / C, Green / Cycle	0.20	0.20	0.01	0.01	0.45	0.45	0.17	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.03	0.18	0.00	0.00	0.24	0.24	0.16	0.34	0.34
s, saturation flow rate [veh/h]	1811	1615	1835	1810	1900	1862	1810	1900	1899
c, Capacity [veh/h]	359	320	25	17	853	835	316	1167	1166
d1, Uniform Delay [s]	39.95	46.93	58.55	59.07	24.02	24.02	48.50	13.49	13.49
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.15	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]	0.23	9.03	3.95	9.86	2.42	2.47	12.08	1.87	1.87
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	0.18	0.90	0.20	0.30	0.54	0.54	0.90	0.55	0.55
d, Delay for Lane Group [s/veh]	40.18	55.96	62.51	68.93	26.44	26.49	60.57	15.36	15.36
Lane Group LOS	D	E	E	E	C	C	E	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.55	9.00	0.18	0.19	9.22	9.05	8.97	9.16	9.16
50th-Percentile Queue Length [ft/ln]	38.73	225.01	4.38	4.77	230.44	226.13	224.37	228.92	228.90
95th-Percentile Queue Length [veh/ln]	2.79	13.92	0.32	0.34	14.20	13.98	13.89	14.12	14.12
95th-Percentile Queue Length [ft/ln]	69.72	348.01	7.89	8.59	354.92	349.44	347.20	352.99	352.96

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	40.18	40.18	55.96	62.51	62.51	62.51	68.93	26.46	26.49	60.57	15.36	15.36
Movement LOS	D	D	E	E	E	E	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	53.13			62.51			26.70			23.56		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	28.30											
Intersection LOS	C											
Intersection V/C	0.579											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.255	1.738	3.122	3.275
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	518	368	250	667
d_b, Bicycle Delay [s]	32.93	39.94	45.94	26.67
I_b,int, Bicycle LOS Score for Intersection	2.139	1.568	2.311	2.852
Bicycle LOS	B	A	B	C

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Goetz Rd at Fieldstone Dr

Control Type:	Signalized	Delay (sec / veh):	15.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.389

Intersection Setup

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Base Volume Input [veh/h]	18	516	7	12	276	17	68	4	60	3	0	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	49	0	0	25	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]	19	596	7	13	318	18	72	4	64	3	0	16
Peak Hour Factor	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530
Other Adjustment Factor	1.0000	1.0000	1.0000	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	156	2	3	83	5	19	1	17	1	0	4
Total Analysis Volume [veh/h]	20	625	7	14	334	19	76	4	67	3	0	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 m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	3.0	3.2	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	39	0	11	39	0	39	50	0	20	31	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	24	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	2.0	2.2	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.00	4.20	4.20
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	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.00	2.20	2.20
g_i, Effective Green Time [s]	3	89	89	3	88	88	7	10	1	4	4
g / C, Green / Cycle	0.03	0.74	0.74	0.02	0.73	0.73	0.05	0.09	0.01	0.04	0.04
(v / s)_i Volume / Saturation Flow Rate	0.01	0.33	0.00	0.01	0.06	0.07	0.04	0.04	0.00	0.00	0.01
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1849	1810	1629	1810	1900	1615
c, Capacity [veh/h]	52	1400	1190	40	2642	1350	100	140	11	70	59
d1, Uniform Delay [s]	57.26	6.19	4.17	57.85	4.67	4.67	55.89	52.40	59.37	0.00	56.26
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
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]	4.70	1.03	0.01	5.27	0.07	0.13	11.12	2.81	12.90	0.00	2.60
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	0.39	0.45	0.01	0.35	0.09	0.09	0.76	0.51	0.27	0.00	0.29
d, Delay for Lane Group [s/veh]	61.96	7.22	4.18	63.12	4.73	4.80	67.01	55.22	72.27	0.00	58.86
Lane Group LOS	E	A	A	E	A	A	E	E	E	A	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.65	5.01	0.04	0.46	0.67	0.72	2.58	2.16	0.13	0.00	0.55
50th-Percentile Queue Length [ft/ln]	16.14	125.33	0.94	11.61	16.66	17.91	64.49	53.96	3.25	0.00	13.63
95th-Percentile Queue Length [veh/ln]	1.16	8.69	0.07	0.84	1.20	1.29	4.64	3.88	0.23	0.00	0.98
95th-Percentile Queue Length [ft/ln]	29.05	217.13	1.70	20.90	29.99	32.23	116.08	97.12	5.86	0.00	24.54

Movement, Approach, & Intersection Results

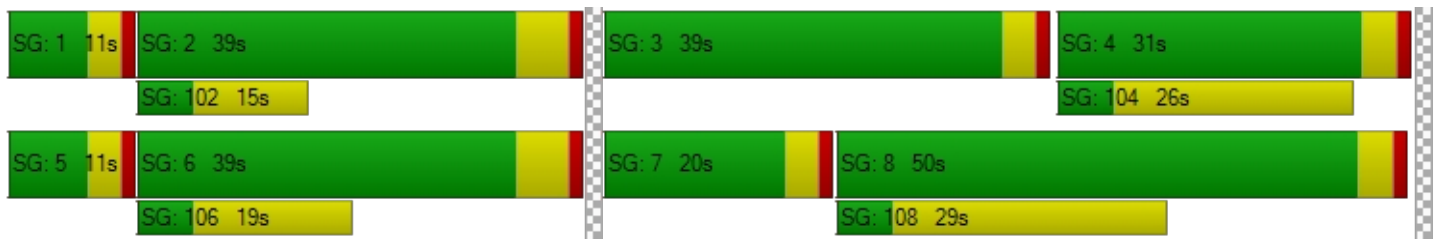
d_M, Delay for Movement [s/veh]	61.96	7.22	4.18	63.12	4.75	4.80	67.01	55.22	55.22	72.27	0.00	58.86
Movement LOS	E	A	A	E	A	A	E	E	E	E	A	E
d_A, Approach Delay [s/veh]	8.87			6.98			61.32			60.88		
Approach LOS	A			A			E			E		
d_I, Intersection Delay [s/veh]	15.66											
Intersection LOS	B											
Intersection V/C	0.389											

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]	51.34			51.34			51.34			51.34		
I_p,int, Pedestrian LOS Score for Intersectio	2.854			2.762			2.016			2.157		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	555			555			763			447		
d_b, Bicycle Delay [s]	31.32			31.32			22.94			36.19		
I_b,int, Bicycle LOS Score for Intersection	2.635			1.761			1.802			1.593		
Bicycle LOS	B			A			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Goetz Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	45.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.631

Intersection Setup

Name	Goetz Rd			Goetz 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	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	2	229	371	224	110	8	16	88	6	167	70	271
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	17	17	22	8	0	0	1	0	51	0	33
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]	2	260	410	259	125	8	17	94	6	228	74	320
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	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	68	107	68	33	2	4	25	2	59	19	84
Total Analysis Volume [veh/h]	2	271	428	270	130	8	18	98	6	238	77	334
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	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]	45	47	0	34	36	0	11	28	0	11	28	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	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	3.7	0.0	2.0	3.7	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	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	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	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	0	35	35	20	54	54	3	28	28	18	43	43
g / C, Green / Cycle	0.00	0.29	0.29	0.17	0.45	0.45	0.03	0.24	0.24	0.15	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.00	0.14	0.27	0.15	0.04	0.00	0.01	0.03	0.00	0.13	0.04	0.21
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	1900	1615
c, Capacity [veh/h]	7	547	465	301	1630	728	48	857	383	266	679	578
d1, Uniform Delay [s]	59.61	35.49	41.40	48.99	18.79	18.20	57.45	35.92	35.07	50.26	25.81	31.22
k, delay calibration	0.11	0.11	0.17	0.15	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	1.00
d2, Incremental Delay [s]	21.16	0.70	11.49	12.55	0.02	0.01	4.87	0.27	0.07	10.18	0.34	4.18
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	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	0.29	0.50	0.92	0.90	0.08	0.01	0.38	0.11	0.02	0.89	0.11	0.58
d, Delay for Lane Group [s/veh]	80.76	36.19	52.89	61.54	18.81	18.21	62.33	36.19	35.15	60.43	26.14	35.40
Lane Group LOS	F	D	D	E	B	B	E	D	D	E	C	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.10	6.41	13.10	8.66	0.98	0.12	0.59	1.12	0.14	7.50	1.48	8.09
50th-Percentile Queue Length [ft/ln]	2.49	160.25	327.47	216.60	24.59	2.95	14.64	28.08	3.46	187.49	36.95	202.27
95th-Percentile Queue Length [veh/ln]	0.18	10.56	19.03	13.49	1.77	0.21	1.05	2.02	0.25	11.99	2.66	12.76
95th-Percentile Queue Length [ft/ln]	4.49	264.05	475.86	337.28	44.27	5.31	26.35	50.55	6.23	299.77	66.51	318.89

Movement, Approach, & Intersection Results

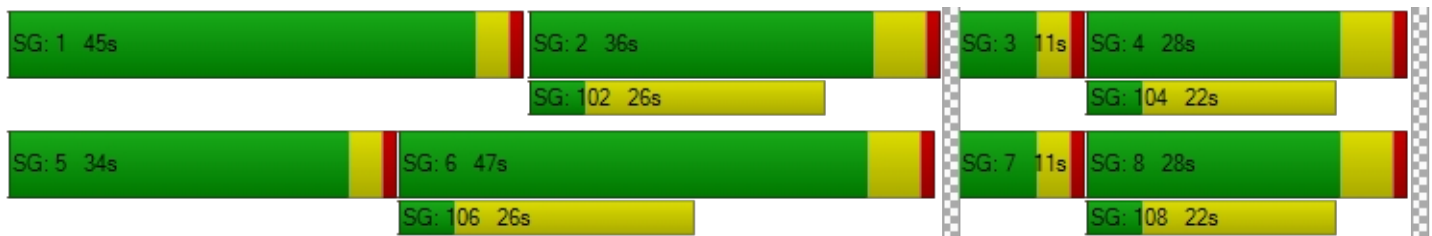
d_M, Delay for Movement [s/veh]	80.76	36.19	52.89	61.54	18.81	18.21	62.33	36.19	35.15	60.43	26.14	35.40
Movement LOS	F	D	D	E	B	B	E	D	D	E	C	D
d_A, Approach Delay [s/veh]	46.51			47.08			39.99			43.48		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	45.17											
Intersection LOS	D											
Intersection V/C	0.631											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.664	2.650	2.525	2.859
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	688	505	372	372
d_b, Bicycle Delay [s]	25.81	33.53	39.77	39.77
I_b,int, Bicycle LOS Score for Intersection	2.716	1.896	1.660	2.095
Bicycle LOS	B	A	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 9: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	12.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.030

Intersection Setup

Name	Wheat St		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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	0	689	0	0	510
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	15	316	1	0	179
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	15	1046	1	0	720
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	268	0	0	184
Total Analysis Volume [veh/h]	0	15	1072	1	0	738
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	0.03	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	33.89	12.52	0.00	0.00	10.48	0.00
Movement LOS	D	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.35	2.35	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.52		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.10					
Intersection LOS	B					

**Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	14.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.199

Intersection Setup

Name	Byers 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	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		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	6	692	2	6	512
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	89	331	0	69	179
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	95	1065	2	75	722
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	24	273	1	19	185
Total Analysis Volume [veh/h]	0	97	1091	2	77	740
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	0.20	0.01	0.00	0.12	0.01
d_M, Delay for Movement [s/veh]	49.24	14.23	0.00	0.00	11.32	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.74	0.74	0.00	0.00	0.40	0.00
95th-Percentile Queue Length [ft/ln]	18.40	18.40	0.00	0.00	10.09	0.00
d_A, Approach Delay [s/veh]	14.23		0.00		1.07	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.12					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 11: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	103.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.884

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	0	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	97	90	162	67	34	9	6	665	51	78	357	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	24	9	263	11	3	0	0	369	50	92	224	7
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]	127	104	435	82	39	10	6	1074	104	175	602	58
Peak Hour Factor	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	27	113	21	10	3	2	279	27	45	156	15
Total Analysis Volume [veh/h]	132	108	451	85	40	10	6	1114	108	182	624	60
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	4.7	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	35	0	0	28	0	11	45	0	12	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	21	0	0	17	0	0	7	0	0	14	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	3.7	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	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	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
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	42	10	10	10	1	33	33	14	46	46
g / C, Green / Cycle	0.35	0.08	0.08	0.08	0.01	0.28	0.28	0.12	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.41	0.05	0.02	0.01	0.00	0.33	0.33	0.10	0.18	0.18
s, saturation flow rate [veh/h]	1689	1810	1900	1615	1810	1900	1842	1810	1900	1842
c, Capacity [veh/h]	596	149	157	133	19	527	511	214	732	709
d1, Uniform Delay [s]	38.83	53.01	51.60	50.83	58.93	43.36	43.36	51.86	27.76	27.77
k, delay calibration	0.50	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]	89.43	3.39	0.85	0.24	9.00	97.86	99.32	9.08	2.20	2.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	1.16	0.57	0.26	0.08	0.31	1.18	1.18	0.85	0.47	0.47
d, Delay for Lane Group [s/veh]	128.26	56.40	52.45	51.07	67.93	141.22	142.68	60.94	29.97	30.04
Lane Group LOS	F	E	D	D	E	F	F	E	C	C
Critical Lane Group	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	31.36	2.55	1.14	0.28	0.22	29.14	28.45	5.72	7.56	7.34
50th-Percentile Queue Length [ft/ln]	784.06	63.77	28.53	7.02	5.59	728.50	711.33	142.99	188.89	183.55
95th-Percentile Queue Length [veh/ln]	44.65	4.59	2.05	0.51	0.40	41.82	40.98	9.64	12.06	11.79
95th-Percentile Queue Length [ft/ln]	1116.36	114.78	51.35	12.63	10.06	1045.56	1024.61	241.04	301.58	294.65

Movement, Approach, & Intersection Results

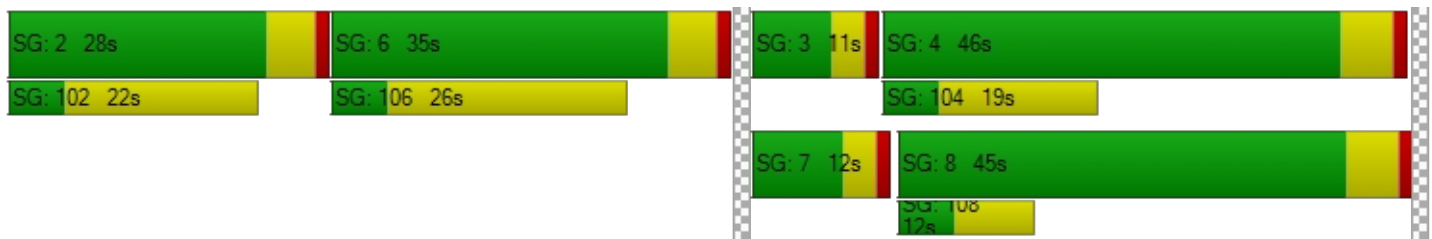
d_M, Delay for Movement [s/veh]	128.26	128.26	128.26	56.40	52.45	51.07	67.93	141.87	142.68	60.94	30.00	30.04
Movement LOS	F	F	F	E	D	D	E	F	F	E	C	C
d_A, Approach Delay [s/veh]	128.26			54.83			141.58			36.50		
Approach LOS	F			D			F			D		
d_I, Intersection Delay [s/veh]	103.25											
Intersection LOS	F											
Intersection V/C	0.884											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.477	2.259	2.963	3.150
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	495	378	655	672
d_b, Bicycle Delay [s]	33.98	39.45	27.14	26.47
I_b,int, Bicycle LOS Score for Intersection	2.700	1.782	2.573	2.274
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Evans Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	5,259.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	9.359

Intersection Setup

Name	Evans 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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	2	854	1	0	549
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	30	181	608	30	301	293
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]	30	183	1513	31	301	875
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	8	49	402	8	80	232
Total Analysis Volume [veh/h]	32	194	1606	33	320	929
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	9.36	0.60	0.02	0.00	0.80	0.01
d_M, Delay for Movement [s/veh]	5259.62	4217.85	0.00	0.00	41.38	0.00
Movement LOS	F	F	A	A	E	A
95th-Percentile Queue Length [veh/ln]	28.40	28.40	0.00	0.00	7.02	0.00
95th-Percentile Queue Length [ft/ln]	709.96	709.96	0.00	0.00	175.50	0.00
d_A, Approach Delay [s/veh]	4365.35		0.00		10.60	
Approach LOS	F		A		B	
d_I, Intersection Delay [s/veh]	321.07					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	39.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.708

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		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	29	6	85	324	0	60	151	608	24	70	475	350
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	68	0	0	9	0	721	0	43	543	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	6	158	343	0	73	160	1365	25	117	1047	371
Peak Hour Factor	0.9270	0.9270	0.9270	0.9270	1.0000	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]	8	2	43	93	0	20	43	368	7	32	282	100
Total Analysis Volume [veh/h]	33	6	170	370	0	79	173	1472	27	126	1129	400
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permiss	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	5	0	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	7	0	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	30	0	0	30	30	0	30	30	0
Amber [s]	0.0	5.0	0.0	5.0	0.0	0.0	3.0	4.7	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	32	0	32	0	0	11	45	0	11	45	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	14	0	14	0	0	0	7	0	0	17	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	4.0	0.0	4.0	0.0	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	L	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	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]	4.00	4.00	4.00	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	17	15	15	14	55	55	10	52	52
g / C, Green / Cycle	0.14	0.13	0.13	0.11	0.46	0.46	0.09	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.13	0.11	0.03	0.10	0.41	0.02	0.07	0.31	0.25
s, saturation flow rate [veh/h]	1650	3514	2859	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	239	449	366	202	1670	745	154	1573	702
d1, Uniform Delay [s]	50.26	51.00	46.93	52.34	29.33	17.69	53.99	27.86	25.48
k, delay calibration	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
d2, Incremental Delay [s]	9.76	3.84	0.29	9.85	7.08	0.09	10.18	2.85	3.34
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	0.88	0.82	0.22	0.86	0.88	0.04	0.82	0.72	0.57
d, Delay for Lane Group [s/veh]	60.02	54.85	47.22	62.19	36.41	17.78	64.17	30.71	28.81
Lane Group LOS	E	D	D	E	D	B	E	C	C
Critical Lane Group	Yes	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.51	5.42	1.03	5.49	19.21	0.41	4.05	12.98	8.66
50th-Percentile Queue Length [ft/ln]	162.72	135.51	25.82	137.16	480.16	10.19	101.27	324.60	216.51
95th-Percentile Queue Length [veh/ln]	10.69	9.24	1.86	9.33	26.39	0.73	7.29	18.89	13.49
95th-Percentile Queue Length [ft/ln]	267.32	230.97	46.47	233.20	659.84	18.33	182.28	472.34	337.17

Movement, Approach, & Intersection Results

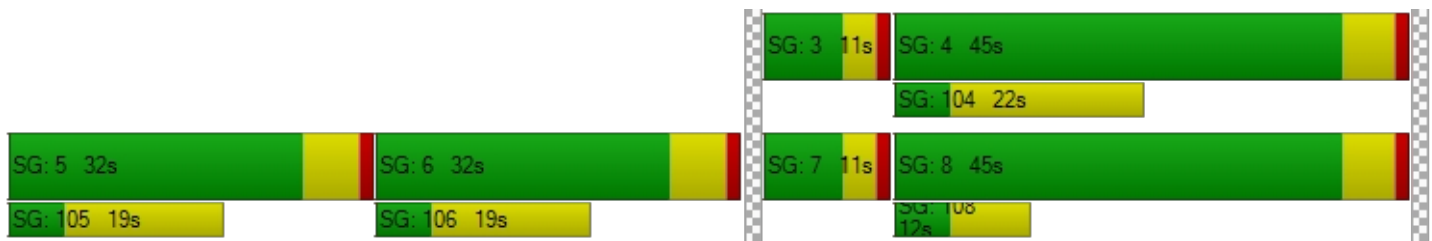
d_M, Delay for Movement [s/veh]	60.02	60.02	60.02	54.85	0.00	47.22	62.19	36.41	17.78	64.17	30.71	28.81
Movement LOS	E	E	E	D		D	E	D	B	E	C	C
d_A, Approach Delay [s/veh]	60.02			53.50			38.77			32.80		
Approach LOS	E			D			D			C		
d_I, Intersection Delay [s/veh]	39.07											
Intersection LOS	D											
Intersection V/C	0.708											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.054	2.683	3.257	3.461
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	433	655	655
d_b, Bicycle Delay [s]	36.82	36.82	27.14	27.14
I_b,int, Bicycle LOS Score for Intersection	1.904	1.560	2.939	2.925
Bicycle LOS	A	A	C	C

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 14: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	121.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.281

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			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 On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	124	0	245	0	722	499	105	703	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	282	0	310	0	427	375	94	279	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	413	0	570	0	1192	904	205	1024	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9850	0.9850	0.9850	1.0000	0.9850	0.9850	0.9850	0.9850	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	105	0	145	0	303	229	52	260	0
Total Analysis Volume [veh/h]	0	0	0	419	0	579	0	1210	918	208	1040	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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	10	0	0	10	0	7	10	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	38	0	0	67	0	15	82	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	14	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	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]		120	120	120	120	120	120
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]		33	33	56	56	16	76
g / C, Green / Cycle		0.27	0.27	0.47	0.47	0.13	0.64
(v / s)_i Volume / Saturation Flow Rate		0.23	0.36	0.64	0.57	0.11	0.29
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		493	440	894	760	239	2300
d1, Uniform Delay [s]		41.32	43.65	31.77	31.77	51.07	11.17
k, delay calibration		0.32	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]		11.35	157.42	166.50	105.85	9.43	0.64
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.85	1.32	1.35	1.21	0.87	0.45
d, Delay for Lane Group [s/veh]		52.68	201.07	198.27	137.63	60.50	11.81
Lane Group LOS		D	F	F	F	E	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		12.83	31.76	64.76	42.25	6.53	6.30
50th-Percentile Queue Length [ft/ln]		320.84	793.94	1619.11	1056.26	163.25	157.42
95th-Percentile Queue Length [veh/ln]		18.71	47.54	95.25	60.49	10.72	10.41
95th-Percentile Queue Length [ft/ln]		467.72	1188.48	2381.36	1512.20	268.02	260.30

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	52.68	52.68	201.07	0.00	198.27	137.63	60.50	11.81	0.00
Movement LOS				D	D	F		F	F	E	B	
d_A, Approach Delay [s/veh]	0.00			138.77			172.11			19.93		
Approach LOS	A			F			F			B		
d_I, Intersection Delay [s/veh]	121.08											
Intersection LOS	F											
Intersection V/C	1.281											

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	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.442	0.000	3.315
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	545	1022	1272
d_b, Bicycle Delay [s]	60.00	31.76	14.36	7.96
I_b,int, Bicycle LOS Score for Intersection	4.132	3.206	5.071	2.589
Bicycle LOS	D	C	F	B

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	164.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.247

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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]	45.00			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 Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	351	0	135	0	0	0	270	580	0	0	456	143
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
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]	254	0	275	0	0	0	397	312	0	0	119	94
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]	626	0	418	0	0	0	683	927	0	0	602	246
Peak Hour Factor	0.9650	0.9650	0.9650	1.0000	1.0000	1.0000	0.9650	0.9650	1.0000	1.0000	0.9650	0.9650
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	162	0	108	0	0	0	177	240	0	0	156	64
Total Analysis Volume [veh/h]	649	0	433	0	0	0	708	961	0	0	624	255
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

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	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	36	0	0	0	0	37	84	0	0	47	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	10	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	3.3	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]	5.30	5.30		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]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	31	31		33	78	41
g / C, Green / Cycle	0.26	0.26		0.28	0.65	0.34
(v / s)_i Volume / Saturation Flow Rate	0.36	0.27		0.39	0.51	0.49
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1807
c, Capacity [veh/h]	463	413		498	1240	622
d1, Uniform Delay [s]	44.65	44.65		43.50	14.66	39.35
k, delay calibration	0.50	0.46		0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	193.54	55.50		201.73	4.78	195.28
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	1.40	1.05		1.42	0.78	1.41
d, Delay for Lane Group [s/veh]	238.19	100.15		245.23	19.44	234.63
Lane Group LOS	F	F		F	B	F
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	38.10	18.16		41.87	16.79	50.88
50th-Percentile Queue Length [ft/ln]	952.53	454.06		1046.71	419.87	1272.06
95th-Percentile Queue Length [veh/ln]	57.29	25.87		63.02	23.52	76.17
95th-Percentile Queue Length [ft/ln]	1432.31	646.70		1575.59	587.90	1904.35

Movement, Approach, & Intersection Results

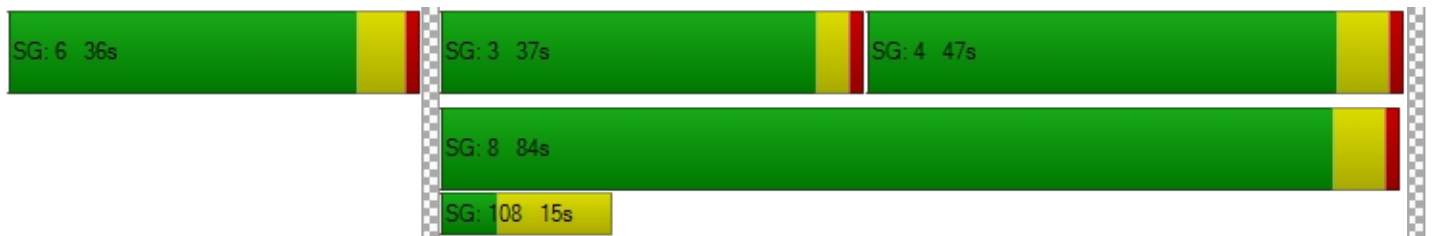
d_M, Delay for Movement [s/veh]	238.19	238.19	100.15	0.00	0.00	0.00	245.23	19.44	0.00	0.00	234.63	234.63
Movement LOS	F	F	F				F	B			F	F
d_A, Approach Delay [s/veh]	182.95			0.00			115.22			234.63		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	164.32											
Intersection LOS	F											
Intersection V/C	1.247											

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 Intersectio	2.483	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]	512	0	1305	688
d_b, Bicycle Delay [s]	33.23	60.00	7.25	25.81
I_b,int, Bicycle LOS Score for Intersection	3.345	4.132	4.313	3.010
Bicycle LOS	C	D	E	C

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 16: Trumble Rd at Ethanac Rd**

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):	0.838

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	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	99	9	34	8	9	109	87	558	34	61	341	11
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	21	0	0	0	0	21	60	467	60	0	165	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	126	10	36	8	10	137	152	1058	96	65	526	12
Peak Hour Factor	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	3	10	2	3	38	42	295	27	18	146	3
Total Analysis Volume [veh/h]	140	11	40	9	11	153	169	1178	107	72	586	13
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	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	19	0	17	23	0	63	73	0	11	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	14	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	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	4.00	4.00	4.00	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	2.00	2.00	2.00	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	9	21	2	14	13	73	73	6	66
g / C, Green / Cycle	0.08	0.18	0.02	0.12	0.11	0.61	0.61	0.05	0.55
(v / s)_i Volume / Saturation Flow Rate	0.08	0.03	0.00	0.10	0.09	0.62	0.07	0.04	0.32
s, saturation flow rate [veh/h]	1810	1669	1810	1631	1810	1900	1615	1810	1893
c, Capacity [veh/h]	136	294	28	190	202	1155	982	96	1040
d1, Uniform Delay [s]	55.50	42.03	58.45	52.08	52.24	23.52	9.87	56.03	17.81
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]	44.26	0.28	6.43	11.01	8.84	31.52	0.22	11.06	2.32
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	1.03	0.17	0.32	0.86	0.84	1.02	0.11	0.75	0.58
d, Delay for Lane Group [s/veh]	99.76	42.31	64.88	63.09	61.07	55.04	10.10	67.09	20.13
Lane Group LOS	F	D	E	E	E	F	B	E	C
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.77	1.32	0.32	5.43	5.31	37.44	1.12	2.38	10.49
50th-Percentile Queue Length [ft/ln]	144.23	32.90	8.02	135.63	132.78	936.05	28.09	59.43	262.35
95th-Percentile Queue Length [veh/ln]	9.81	2.37	0.58	9.24	9.09	48.30	2.02	4.28	15.81
95th-Percentile Queue Length [ft/ln]	245.25	59.21	14.44	231.12	227.27	1207.61	50.56	106.98	395.17

Movement, Approach, & Intersection Results

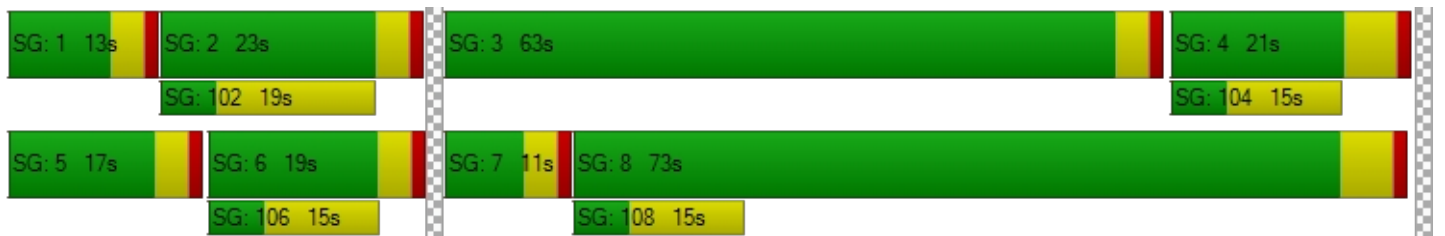
d_M, Delay for Movement [s/veh]	99.76	42.31	42.31	64.88	63.09	63.09	61.07	55.04	10.10	67.09	20.13	20.13
Movement LOS	F	D	D	E	E	E	E	F	B	E	C	C
d_A, Approach Delay [s/veh]	84.42			63.18			52.43			25.17		
Approach LOS	F			E			D			C		
d_I, Intersection Delay [s/veh]	48.29											
Intersection LOS	D											
Intersection V/C	0.838											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.079	2.074	3.094	2.984
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	250	317	1122	255
d_b, Bicycle Delay [s]	45.94	42.50	11.57	45.68
I_b,int, Bicycle LOS Score for Intersection	1.875	1.845	3.959	2.667
Bicycle LOS	A	A	D	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Sherman Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	2,480.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	4.207

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews 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	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews Rd		
Base Volume Input [veh/h]	4	3	2	5	7	196	229	222	14	0	246	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	22	0	0	30	0	3	1	526	60	0	182	8
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]	26	3	2	35	7	211	244	761	75	0	443	16
Peak Hour Factor	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540
Other Adjustment Factor	1.0000	1.0000	1.0000	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	1	10	2	62	71	223	22	0	130	5
Total Analysis Volume [veh/h]	30	4	2	41	8	247	286	891	88	0	519	19
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	4.21	0.18	0.01	2.18	0.39	0.45	0.27	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	2479.99	2140.10	1986.21	1155.22	1136.94	970.01	9.77	0.00	0.00	10.05	0.00	0.00
Movement LOS	F	F	F	F	F	F	A	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	5.80	5.80	5.80	28.61	28.61	28.61	1.12	1.12	1.12	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	145.07	145.07	145.07	715.17	715.17	715.17	28.10	28.10	28.10	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	2414.79			1000.17			2.21			0.00		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	180.69											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 18: Byers Rd at McLaughlin 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):	0.028

Intersection Setup

Name	Byers Rd			Byers 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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Byers Rd			Byers Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	26	0	13	9	0	0	0	0	0	0	6
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	26	0	13	9	0	0	0	0	0	0	6
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	7	0	3	2	0	0	0	0	0	0	2
Total Analysis Volume [veh/h]	0	26	0	13	9	0	0	0	0	0	0	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	916	889	899	1058
Degree of Utilization, x	0.03	0.02	0.00	0.01

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.09	0.08	0.00	0.02
95th-Percentile Queue Length [ft]	2.19	1.90	0.00	0.43
Approach Delay [s/veh]	7.05	7.16	0.00	6.42
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.02			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 19: Murrieta Rd at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	25.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.143

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	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]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	1	298	2	12	147	2	6	0	3	0	0	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	6	301	27	0	156	0	0	0	13	29	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]	7	617	29	13	312	2	6	0	16	29	0	33
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	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	158	7	3	80	1	2	0	4	7	0	8
Total Analysis Volume [veh/h]	7	632	30	13	320	2	6	0	16	30	0	34
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	0.01	0.00	0.01	0.00	0.00	0.03	0.00	0.02	0.14	0.00	0.07
d_M, Delay for Movement [s/veh]	7.90	0.00	0.00	8.90	0.00	0.00	23.77	20.93	10.45	25.38	23.42	15.84
Movement LOS	A	A	A	A	A	A	C	C	B	D	C	C
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.04	0.00	0.00	0.17	0.17	0.17	0.80	0.80	0.80
95th-Percentile Queue Length [ft/ln]	0.42	0.00	0.00	1.06	0.00	0.00	4.15	4.15	4.15	19.92	19.92	19.92
d_A, Approach Delay [s/veh]	0.08			0.35			14.08			20.31		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.63											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 20: Murrieta Rd at Rouse Rd

Control Type:	Two-way stop	Delay (sec / veh):	118.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.072

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	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	3	234	7	28	120	4	14	18	6	10	3	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	26	99	0	0	119	78	234	0	78	0	0	1
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	347	7	30	246	82	249	19	84	11	3	43
Peak Hour Factor	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950
Other Adjustment Factor	1.0000	1.0000	1.0000	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	97	2	8	69	23	70	5	23	3	1	12
Total Analysis Volume [veh/h]	32	388	8	34	275	92	278	21	94	12	3	48
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	0.03	0.00	0.00	0.03	0.00	0.00	1.07	0.07	0.12	0.06	0.01	0.07
d_M, Delay for Movement [s/veh]	8.08	0.00	0.00	8.16	0.00	0.00	118.62	17.82	10.34	23.29	18.50	10.84
Movement LOS	A	A	A	A	A	A	F	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.08	0.00	0.00	0.09	0.00	0.00	11.45	0.22	0.42	0.18	0.03	0.23
95th-Percentile Queue Length [ft/ln]	2.05	0.00	0.00	2.24	0.00	0.00	286.23	5.58	10.40	4.54	0.84	5.82
d_A, Approach Delay [s/veh]	0.60			0.69			87.33			13.57		
Approach LOS	A			A			F			B		
d_I, Intersection Delay [s/veh]	27.79											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 21: Murrieta Rd at Chambers Ave

Control Type:	All-way stop	Delay (sec / veh):	35.0
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.999

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	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	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Base Volume Input [veh/h]	36	211	2	36	188	8	28	44	51	7	10	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	26	149	0	0	275	0	1	0	78	0	0	1
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	64	373	2	38	474	8	31	47	132	7	11	17
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]	17	101	1	10	129	2	8	13	36	2	3	5
Total Analysis Volume [veh/h]	70	405	2	41	515	9	34	51	143	8	12	18
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	460	493	493	488	524	467	417	443	485
Degree of Utilization, x	0.15	0.41	0.41	0.08	1.00	0.49	0.02	0.03	0.04

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.53	2.00	2.00	0.27	13.98	2.63	0.06	0.08	0.12
95th-Percentile Queue Length [ft]	13.31	50.04	49.97	6.85	349.43	65.77	1.47	2.09	2.88
Approach Delay [s/veh]	14.59			60.89		17.84	10.84		
Approach LOS	B			F		C	B		
Intersection Delay [s/veh]	35.05								
Intersection LOS	E								

Intersection Level Of Service Report
Intersection 22: Murrieta Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	37.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.562

Intersection Setup

Name	Murrieta Rd			Murrieta 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	149	111	50	90	92	79	191	1	25	113	76
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	88	96	137	164	0	0	0	0	32	0	70
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	246	214	190	259	98	84	202	1	59	120	151
Peak Hour Factor	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160
Other Adjustment Factor	1.0000	1.0000	1.0000	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	67	58	52	71	27	23	55	0	16	33	41
Total Analysis Volume [veh/h]	0	269	234	207	283	107	92	221	1	64	131	165
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	11	27	0	43	59	0	0	24	0	0	26	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	14	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	0.0	2.0	3.3	0.0	0.0	2.6	0.0	0.0	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	L	C	R	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]	4.00	5.30	4.00	5.30	5.30	4.60	4.60	4.60	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	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	2.00	3.30	3.30	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	0	61	16	77	77	10	10	10	15	15	15
g / C, Green / Cycle	0.00	0.51	0.13	0.64	0.64	0.08	0.08	0.08	0.12	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.00	0.29	0.11	0.15	0.07	0.05	0.06	0.06	0.04	0.07	0.10
s, saturation flow rate [veh/h]	1810	1756	1810	1900	1615	1810	1900	1897	1810	1900	1615
c, Capacity [veh/h]	1	891	240	1216	1034	152	159	159	220	231	196
d1, Uniform Delay [s]	0.00	20.38	50.95	9.14	8.33	53.05	53.48	53.48	48.01	49.74	51.58
k, delay calibration	0.11	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	0.00	2.58	8.82	0.45	0.20	3.85	5.38	5.40	0.73	2.19	9.30
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	0.00	0.56	0.86	0.23	0.10	0.61	0.70	0.70	0.29	0.57	0.84
d, Delay for Lane Group [s/veh]	0.00	22.96	59.77	9.59	8.53	56.90	58.85	58.88	48.73	51.93	60.88
Lane Group LOS	A	C	E	A	A	E	E	E	D	D	E
Critical Lane Group	No	Yes	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	9.68	6.51	2.95	1.02	2.82	3.47	3.47	1.78	3.82	5.32
50th-Percentile Queue Length [ft/ln]	0.00	241.94	162.87	73.73	25.55	70.54	86.85	86.80	44.53	95.59	132.94
95th-Percentile Queue Length [veh/ln]	0.00	14.78	10.70	5.31	1.84	5.08	6.25	6.25	3.21	6.88	9.10
95th-Percentile Queue Length [ft/ln]	0.00	369.49	267.51	132.72	45.98	126.97	156.33	156.23	80.15	172.06	227.48

Movement, Approach, & Intersection Results

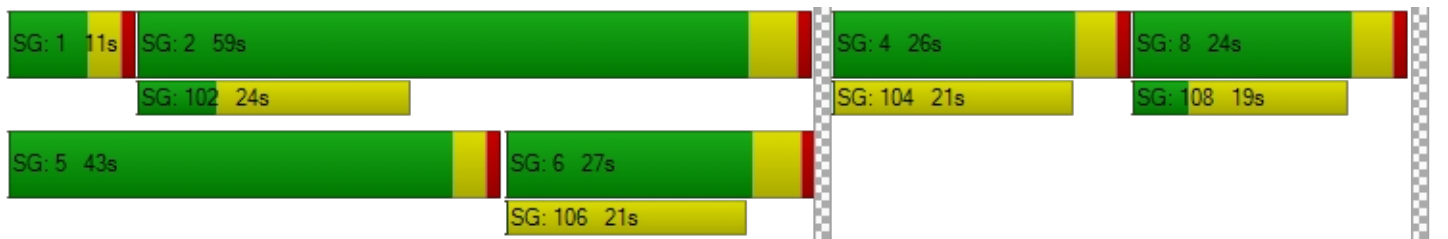
d_M, Delay for Movement [s/veh]	0.00	22.96	22.96	59.77	9.59	8.53	56.90	58.86	58.88	48.73	51.93	60.88
Movement LOS	A	C	C	E	A	A	E	E	E	D	D	E
d_A, Approach Delay [s/veh]	22.96			26.80			58.29			55.46		
Approach LOS	C			C			E			E		
d_I, Intersection Delay [s/veh]	37.10											
Intersection LOS	D											
Intersection V/C	0.562											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	4.0	11.0	4.0
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	56.07	49.50	56.07
I_p,int, Pedestrian LOS Score for Intersectio	2.370	2.745	2.439	2.665
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	362	895	323	357
d_b, Bicycle Delay [s]	40.26	18.32	42.17	40.51
I_b,int, Bicycle LOS Score for Intersection	2.390	2.545	1.819	1.857
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 23: Sun City Blvd at McCall Blvd

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):	0.341

Intersection Setup

Name	Sun City Blvd			Sun City Blvd			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	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sun City Blvd			Sun City Blvd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	31	53	58	54	45	8	25	371	32	136	306	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	233	0	0	102	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]	33	56	61	57	48	8	27	626	34	144	426	45
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	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	15	16	15	13	2	7	165	9	38	112	12
Total Analysis Volume [veh/h]	35	59	64	60	50	8	28	658	36	151	448	47
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	27	0	0	27	0	11	27	0	39	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	17	0	0	17	0	0	17	0	0	14	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	C	C	R	C	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	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	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	2.20	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	10	10	10	10	10	4	71	71	12	79	79
g / C, Green / Cycle	0.08	0.08	0.08	0.08	0.08	0.04	0.59	0.59	0.10	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.03	0.02	0.04	0.03	0.03	0.02	0.18	0.18	0.08	0.13	0.13
s, saturation flow rate [veh/h]	1831	1900	1615	1810	1855	1810	1900	1866	1810	1900	1837
c, Capacity [veh/h]	153	158	135	149	152	64	1125	1105	182	1249	1208
d1, Uniform Delay [s]	51.74	51.70	52.50	52.28	52.18	56.69	12.24	12.24	52.93	8.12	8.12
k, delay calibration	0.11	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]	1.12	1.04	2.59	1.76	1.56	4.60	0.72	0.74	9.19	0.36	0.38
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	0.31	0.30	0.48	0.40	0.38	0.44	0.31	0.31	0.83	0.20	0.20
d, Delay for Lane Group [s/veh]	52.86	52.75	55.09	54.04	53.74	61.30	12.96	12.97	62.12	8.48	8.50
Lane Group LOS	D	D	E	D	D	E	B	B	E	A	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.38	1.39	1.94	1.79	1.73	0.91	4.71	4.64	4.89	2.53	2.46
50th-Percentile Queue Length [ft/ln]	34.38	34.68	48.54	44.82	43.14	22.70	117.86	116.00	122.30	63.16	61.45
95th-Percentile Queue Length [veh/ln]	2.48	2.50	3.49	3.23	3.11	1.63	8.28	8.17	8.52	4.55	4.42
95th-Percentile Queue Length [ft/ln]	61.88	62.43	87.37	80.68	77.65	40.86	206.88	204.32	212.98	113.68	110.60

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.86	52.77	55.09	54.04	53.74	53.74	61.30	12.96	12.97	62.12	8.49	8.50
Movement LOS	D	D	E	D	D	D	E	B	B	E	A	A
d_A, Approach Delay [s/veh]	53.73			53.90			14.84			21.02		
Approach LOS	D			D			B			C		
d_I, Intersection Delay [s/veh]	23.81											
Intersection LOS	C											
Intersection V/C	0.341											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.392	2.208	2.591	2.640
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	380	380	373	840
d_b, Bicycle Delay [s]	39.37	39.37	39.69	20.18
I_b,int, Bicycle LOS Score for Intersection	1.690	1.657	2.155	2.093
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 24: Bradley Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	32.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.720

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	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	41	44	337	141	51	4	17	466	48	480	464	94
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	233	0	0	102	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]	43	47	357	149	54	4	18	727	51	509	594	100
Peak Hour Factor	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550
Other Adjustment Factor	1.0000	1.0000	1.0000	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	12	93	39	14	1	5	190	13	133	155	26
Total Analysis Volume [veh/h]	45	49	374	156	57	4	19	761	53	533	622	105
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
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	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	10	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [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
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	21	0	41	23	0	40	22	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	21	21	0	17	0	0	14	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	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	2.0	2.0	0.0	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	
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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	53	12	12	3	42	42	39	78	78
g / C, Green / Cycle	0.09	0.09	0.44	0.10	0.10	0.03	0.35	0.35	0.32	0.65	0.65
(v / s)_i Volume / Saturation Flow Rate	0.02	0.03	0.23	0.09	0.03	0.01	0.22	0.22	0.29	0.20	0.20
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1878	1810	1900	1857	1810	1900	1806
c, Capacity [veh/h]	161	169	717	187	194	51	670	654	582	1227	1166
d1, Uniform Delay [s]	51.08	51.13	24.13	52.81	49.88	57.28	32.13	32.14	39.14	9.36	9.37
k, delay calibration	0.11	0.11	0.28	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]	0.93	0.93	1.53	9.27	0.91	4.41	4.19	4.29	6.21	0.64	0.67
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.29	0.52	0.83	0.31	0.37	0.61	0.61	0.92	0.30	0.30
d, Delay for Lane Group [s/veh]	52.02	52.07	25.66	62.08	50.79	61.70	36.32	36.42	45.35	9.99	10.04
Lane Group LOS	D	D	C	E	D	E	D	D	D	A	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.31	1.43	7.92	5.09	1.75	0.63	10.48	10.27	15.74	4.23	4.05
50th-Percentile Queue Length [ft/ln]	32.76	35.66	198.07	127.36	43.82	15.64	262.04	256.69	393.56	105.70	101.27
95th-Percentile Queue Length [veh/ln]	2.36	2.57	12.54	8.80	3.15	1.13	15.79	15.52	22.25	7.60	7.29
95th-Percentile Queue Length [ft/ln]	58.96	64.19	313.48	219.89	78.87	28.14	394.78	388.06	556.24	190.00	182.29

Movement, Approach, & Intersection Results

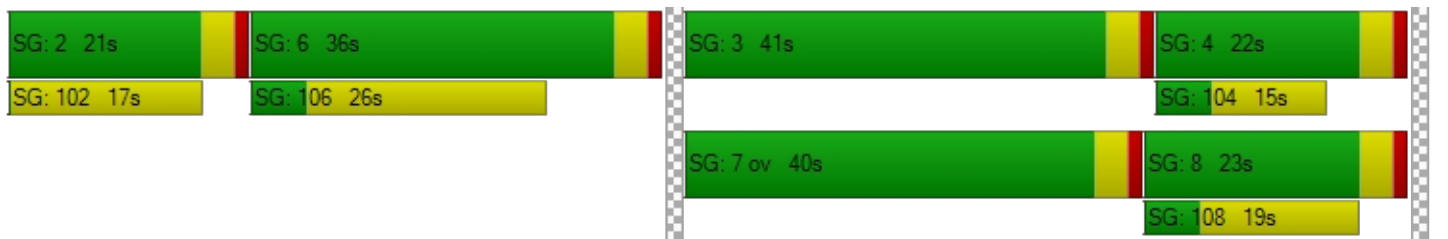
d_M, Delay for Movement [s/veh]	52.02	52.07	25.66	62.08	50.79	50.79	61.70	36.37	36.42	45.35	10.01	10.04
Movement LOS	D	D	C	E	D	D	E	D	D	D	B	B
d_A, Approach Delay [s/veh]	30.96			58.91			36.95			24.96		
Approach LOS	C			E			D			C		
d_I, Intersection Delay [s/veh]	32.22											
Intersection LOS	C											
Intersection V/C	0.720											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	4.0	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]	51.35	51.35	56.08	51.35
I_p,int, Pedestrian LOS Score for Intersectio	2.417	2.082	2.661	2.952
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	533	283	317	300
d_b, Bicycle Delay [s]	32.28	44.22	42.52	43.37
I_b,int, Bicycle LOS Score for Intersection	2.332	1.918	2.247	2.599
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: I-215 SB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	52.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.897

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	363	3	477	0	844	318	287	813	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	169	0	37	0	139	145	174	65	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	554	3	543	0	1034	482	478	927	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9880	0.9880	0.9880	1.0000	0.9880	0.9880	0.9880	0.9880	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	1	137	0	262	122	121	235	0
Total Analysis Volume [veh/h]	0	0	0	561	3	550	0	1047	488	484	938	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Unsigna	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	10	0	0	10	0	7	10	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	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	44	0	0	40	0	36	76	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	21	0	0	3	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	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	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	L	C
C, Cycle Length [s]		120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	2.60	2.00	2.60
g_i, Effective Green Time [s]		39	39	33	34	71
g / C, Green / Cycle		0.32	0.32	0.27	0.29	0.60
(v / s)_i Volume / Saturation Flow Rate		0.31	0.34	0.29	0.27	0.26
s, saturation flow rate [veh/h]		1810	1615	3618	1810	3618
c, Capacity [veh/h]		584	521	995	518	2152
d1, Uniform Delay [s]		40.01	40.65	43.49	41.70	13.29
k, delay calibration		0.41	0.48	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		26.57	54.21	43.13	8.27	0.64
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		0.97	1.06	1.05	0.93	0.44
d, Delay for Lane Group [s/veh]		66.58	94.86	86.62	49.96	13.93
Lane Group LOS		E	F	F	D	B
Critical Lane Group		No	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		19.89	22.46	20.43	14.84	6.77
50th-Percentile Queue Length [ft/ln]		497.26	561.59	510.74	370.97	169.27
95th-Percentile Queue Length [veh/ln]		27.20	31.34	28.73	21.16	11.04
95th-Percentile Queue Length [ft/ln]		680.12	783.58	718.21	528.90	275.96

Movement, Approach, & Intersection Results

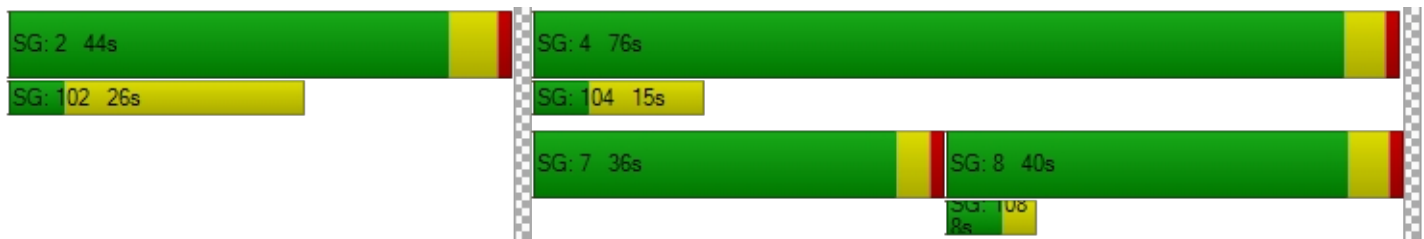
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	66.58	66.58	94.86	0.00	86.62	0.00	49.96	13.93	0.00
Movement LOS				E	E	F		F		D	B	
d_A, Approach Delay [s/veh]	0.00			80.54			59.31			26.20		
Approach LOS	A			F			E			C		
d_I, Intersection Delay [s/veh]	52.77											
Intersection LOS	D											
Intersection V/C	0.897											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	1.913	2.499	2.892	3.043
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	645	590	1190
d_b, Bicycle Delay [s]	60.00	27.54	29.82	9.84
I_b,int, Bicycle LOS Score for Intersection	4.132	3.398	2.423	2.733
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: I-215 NB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	37.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.846

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	201	0	256	0	0	0	234	603	0	0	957	495
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
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]	52	0	133	0	0	0	136	172	0	0	187	250
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]	265	0	404	0	0	0	384	811	0	0	1201	775
Peak Hour Factor	0.9390	0.9390	0.9390	1.0000	1.0000	1.0000	0.9390	0.9390	1.0000	1.0000	0.9390	0.9390
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	71	0	108	0	0	0	102	216	0	0	320	206
Total Analysis Volume [veh/h]	282	0	430	0	0	0	409	864	0	0	1279	825
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	39	0	0	0	0	32	81	0	0	49	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	21	0	0	0	0	0	10	0	0	3	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	3.3	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
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	2.60	2.60
g_i, Effective Green Time [s]	33	33		28	77	44
g / C, Green / Cycle	0.28	0.28		0.23	0.64	0.37
(v / s)_i Volume / Saturation Flow Rate	0.16	0.27		0.23	0.24	0.35
s, saturation flow rate [veh/h]	1810	1615		1810	3618	3618
c, Capacity [veh/h]	505	451		423	2309	1342
d1, Uniform Delay [s]	36.92	42.48		45.50	10.32	36.72
k, delay calibration	0.11	0.39		0.38	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	1.00	27.66		30.70	0.47	15.64
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	0.56	0.95		0.97	0.37	0.95
d, Delay for Lane Group [s/veh]	37.92	70.14		76.20	10.78	52.36
Lane Group LOS	D	E		E	B	D
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	6.98	15.46		15.45	5.23	20.59
50th-Percentile Queue Length [ft/ln]	174.43	386.46		386.28	130.63	514.75
95th-Percentile Queue Length [veh/ln]	11.31	21.91		21.90	8.97	28.03
95th-Percentile Queue Length [ft/ln]	282.73	547.66		547.44	224.35	700.79

Movement, Approach, & Intersection Results

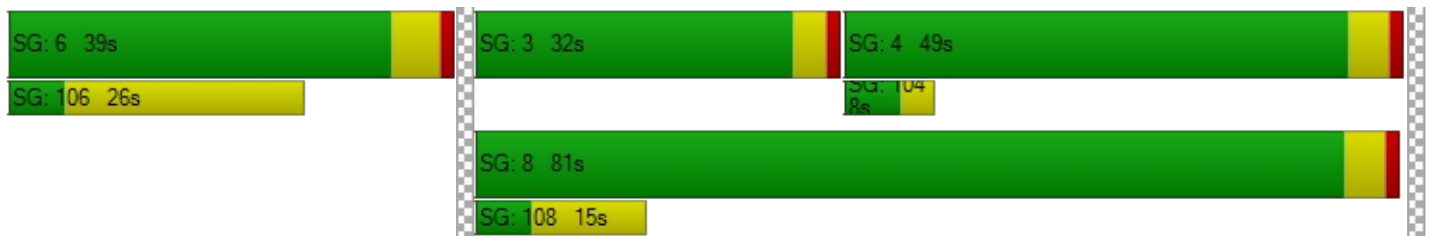
d_M, Delay for Movement [s/veh]	37.92	37.92	70.14	0.00	0.00	0.00	76.20	10.78	0.00	0.00	52.36	0.00
Movement LOS	D	D	E				E	B			D	
d_A, Approach Delay [s/veh]	57.38			0.00			31.80			32.60		
Approach LOS	E			A			C			C		
d_I, Intersection Delay [s/veh]	37.69											
Intersection LOS	D											
Intersection V/C	0.846											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.303	1.837	2.960	2.956
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	562	0	1273	740
d_b, Bicycle Delay [s]	31.03	60.00	7.92	23.81
I_b,int, Bicycle LOS Score for Intersection	2.734	4.132	2.610	2.615
Bicycle LOS	B	D	B	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: Encanto Dr at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	42.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.766

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]	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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]	196	28	80	30	18	121	113	653	76	72	1129	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	81	0	0	0	0	76	36	230	37	0	279	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]	289	30	85	32	19	204	156	922	118	76	1476	33
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	75	8	22	8	5	53	41	241	31	20	385	9
Total Analysis Volume [veh/h]	302	31	89	33	20	213	163	962	123	79	1541	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 m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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	10	0	0	10	0	7	10	0	7	10	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	3.0	0.0	3.0	3.0	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	46	0	0	46	0	16	63	0	11	58	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	21	0	0	17	0	0	14	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	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	4.20	4.20	4.20	4.00	4.00	4.00	4.00	4.00	4.00
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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	42	42	42	42	42	12	59	59	7	54	54
g / C, Green / Cycle	0.35	0.35	0.35	0.35	0.35	0.10	0.49	0.49	0.06	0.45	0.45
(v / s)_i Volume / Saturation Flow Rate	0.26	0.02	0.06	0.03	0.14	0.09	0.29	0.29	0.04	0.42	0.42
s, saturation flow rate [veh/h]	1166	1900	1615	1292	1636	1810	1900	1826	1810	1900	1886
c, Capacity [veh/h]	324	662	563	474	570	181	938	902	102	855	849
d1, Uniform Delay [s]	48.10	25.90	26.97	28.40	29.71	53.41	21.67	21.70	55.89	31.04	31.12
k, delay calibration	0.27	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]	23.24	0.03	0.13	0.06	0.47	14.68	2.71	2.84	11.96	16.93	17.46
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	0.93	0.05	0.16	0.07	0.41	0.90	0.59	0.59	0.78	0.92	0.93
d, Delay for Lane Group [s/veh]	71.34	25.93	27.10	28.46	30.18	68.10	24.38	24.54	67.85	47.97	48.59
Lane Group LOS	E	C	C	C	C	E	C	C	E	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	11.29	0.60	1.79	0.68	5.19	5.55	11.42	11.05	2.68	24.56	24.63
50th-Percentile Queue Length [ft/ln]	282.21	14.97	44.87	16.93	129.82	138.87	285.41	276.19	67.01	614.05	615.80
95th-Percentile Queue Length [veh/ln]	16.80	1.08	3.23	1.22	8.93	9.42	16.96	16.50	4.82	32.69	32.77
95th-Percentile Queue Length [ft/ln]	419.97	26.95	80.76	30.47	223.25	235.51	423.94	412.46	120.62	817.24	819.29

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	71.34	25.93	27.10	28.46	30.18	30.18	68.10	24.45	24.54	67.85	48.27	48.59
Movement LOS	E	C	C	C	C	C	E	C	C	E	D	D
d_A, Approach Delay [s/veh]	58.67			29.97			30.16			49.21		
Approach LOS	E			C			C			D		
d_I, Intersection Delay [s/veh]	42.27											
Intersection LOS	D											
Intersection V/C	0.766											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.303	2.116	0.000	3.034
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]	697	697	983	900
d_b, Bicycle Delay [s]	25.48	25.48	15.50	18.15
I_b,int, Bicycle LOS Score for Intersection	2.256	1.999	2.589	2.924
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 28: Sherman Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	32.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.699

Intersection Setup

Name	Sherman Rd			Sherman 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	26	6	26	53	10	81	112	563	19	22	1024	54
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	76	0	0	0	0	98	96	98	36	0	104	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	104	6	28	56	11	184	215	695	56	23	1189	57
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]	29	2	8	16	3	52	60	195	16	6	334	16
Total Analysis Volume [veh/h]	117	7	31	63	12	207	242	781	63	26	1336	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 m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	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	3.6	0.0	3.0	3.6	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	31	0	11	29	0	29	67	0	11	49	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	10	0	0	14	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	2.6	0.0	2.0	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.20	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]	2.00	2.20	2.00	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	9	20	6	17	17	18	73	73	4	59	59
g / C, Green / Cycle	0.08	0.17	0.05	0.15	0.15	0.15	0.61	0.61	0.03	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.06	0.02	0.03	0.01	0.13	0.13	0.22	0.23	0.01	0.37	0.37
s, saturation flow rate [veh/h]	1810	1661	1810	1900	1615	1810	1900	1851	1810	1900	1870
c, Capacity [veh/h]	136	281	93	276	235	275	1150	1120	62	927	912
d1, Uniform Delay [s]	54.89	42.39	55.95	44.10	50.26	49.84	12.06	12.06	56.78	25.01	25.07
k, delay calibration	0.11	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]	14.52	0.22	8.36	0.06	10.31	9.00	0.92	0.95	4.48	5.84	6.00
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
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	0.86	0.14	0.68	0.04	0.88	0.88	0.37	0.37	0.42	0.76	0.76
d, Delay for Lane Group [s/veh]	69.41	42.61	64.31	44.16	60.57	58.83	12.98	13.01	61.26	30.85	31.07
Lane Group LOS	E	D	E	D	E	E	B	B	E	C	C
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.04	0.98	2.09	0.31	6.75	7.72	5.83	5.69	0.84	17.12	16.97
50th-Percentile Queue Length [ft/ln]	101.09	24.55	52.29	7.85	168.82	192.94	145.68	142.15	21.11	427.95	424.31
95th-Percentile Queue Length [veh/ln]	7.28	1.77	3.76	0.57	11.01	12.27	9.79	9.60	1.52	23.90	23.73
95th-Percentile Queue Length [ft/ln]	181.95	44.19	94.12	14.14	275.37	306.84	244.65	239.91	37.99	597.58	593.22

Movement, Approach, & Intersection Results

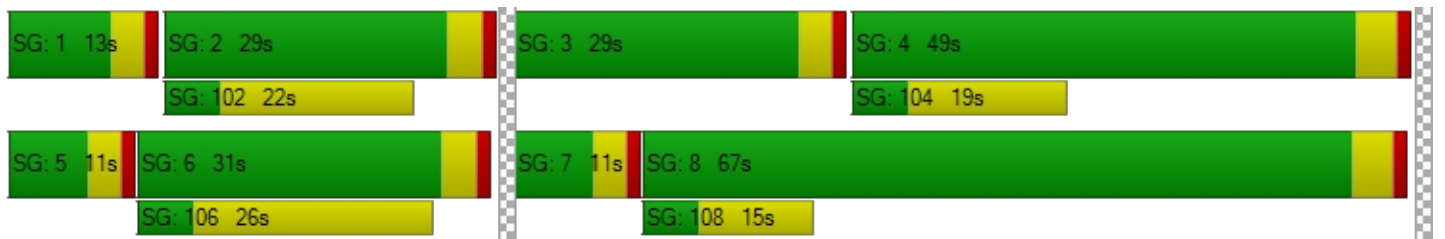
d_M, Delay for Movement [s/veh]	69.41	42.61	42.61	64.31	44.16	60.57	58.83	12.99	13.01	61.26	30.95	31.07
Movement LOS	E	D	D	E	D	E	E	B	B	E	C	C
d_A, Approach Delay [s/veh]	62.84			60.71			23.21			31.51		
Approach LOS	E			E			C			C		
d_I, Intersection Delay [s/veh]	32.89											
Intersection LOS	C											
Intersection V/C	0.699											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.039	2.291	2.940	2.904
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	447	413	1040	740
d_b, Bicycle Delay [s]	36.19	37.76	13.82	23.81
I_b,int, Bicycle LOS Score for Intersection	1.815	2.025	2.456	2.736
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



CADO Warehouse Project

Vistro File: K:\...\Menifee CADO_PM.vistro

Scenario 3 OY CP PM

Report File: K:\...\3 OY CP PM.pdf

9/29/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Case Rd	Signalized	HCM 6th Edition	NB Right	0.421	29.4	C
2	Murrieta Rd at Case Rd	All-way stop	HCM 6th Edition	EB Thru	0.524	12.3	B
3	Goetz Rd at Mapes Rd	Signalized	HCM 6th Edition	SB Left	0.595	37.7	D
4	I-215 SB Ramps/SR-74 at Bonnie Dr	Signalized	HCM 6th Edition	EB Left	0.678	17.4	B
5	I-215 NB Ramps at SR-74	Signalized	HCM 6th Edition	EB Left	0.641	19.5	B
6	Sherman Rd at SR-74	Signalized	HCM 6th Edition	WB Left	0.671	30.8	C
7	Goetz Rd at Fieldstone Dr	Signalized	HCM 6th Edition	SB Left	0.258	11.2	B
8	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.546	46.3	D
9	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.095	11.8	B
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.056	46.9	E
11	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	EB Right	0.980	277.8	F
12	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	3.586	1,787.7	F
13	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.708	38.8	D
14	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	SB Right	1.611	233.3	F
15	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	WB Thru	1.649	316.8	F
16	Trumble Rd at Ethanac Rd	Signalized	HCM 6th Edition	SB Right	0.818	55.6	E
17	Sherman Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	12.808	6,401.9	F
			HCM 6th				

18	Byers Rd at McLaughlin Rd	All-way stop	HCM 6th Edition	SB Thru	0.063	7.3	A
19	Murrieta Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	WB Left	0.746	122.2	F
20	Murrieta Rd at Rouse Rd	Two-way stop	HCM 6th Edition	EB Left	1.713	430.1	F
21	Murrieta Rd at Chambers Ave	All-way stop	HCM 6th Edition	SB Thru	1.053	38.5	E
22	Murrieta Rd at McCall Blvd	Signalized	HCM 6th Edition	NB Left	0.678	41.8	D
23	Sun City Blvd at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.422	25.4	C
24	Bradley Rd at McCall Blvd	Signalized	HCM 6th Edition	SB Left	0.791	33.8	C
25	I-215 SB Ramps at McCall Blvd	Signalized	HCM 6th Edition	EB Thru	0.939	70.7	E
26	I-215 NB Ramps at McCall Blvd	Signalized	HCM 6th Edition	EB Left	0.950	56.8	E
27	Encanto Dr at McCall Blvd	Signalized	HCM 6th Edition	NB Left	0.756	42.2	D
28	Sherman Rd at McCall Blvd	Signalized	HCM 6th Edition	NB Left	0.510	22.3	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: Goetz Rd at Case Rd

Control Type:	Signalized	Delay (sec / veh):	29.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.421

Intersection Setup

Name	Goetz Rd		Case Rd		Case 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	1	0	1	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]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Goetz Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	132	156	199	189	206	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	33	2	38	47	6	45
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]	173	167	249	247	224	321
Peak Hour Factor	0.9050	0.9050	0.9050	0.9050	0.9050	0.9050
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	48	46	69	68	62	89
Total Analysis Volume [veh/h]	191	185	275	273	248	355
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	10	0	7	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.7	0.0	5.0	0.0	3.0	5.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	34	0	48	0	38	86
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]	3.7	0.0	4.0	0.0	2.0	4.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.70	5.70	6.00	6.00	4.00	6.00
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]	3.70	3.70	4.00	4.00	2.00	4.00
g_i, Effective Green Time [s]	16	16	69	69	19	92
g / C, Green / Cycle	0.14	0.14	0.58	0.58	0.16	0.77
(v / s)_i Volume / Saturation Flow Rate	0.11	0.11	0.14	0.17	0.14	0.19
s, saturation flow rate [veh/h]	1810	1615	1900	1615	1810	1900
c, Capacity [veh/h]	245	219	1098	934	281	1457
d1, Uniform Delay [s]	50.12	50.63	12.49	12.86	49.59	4.01
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]	5.28	8.60	0.55	0.79	8.81	0.40
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	0.78	0.84	0.25	0.29	0.88	0.24
d, Delay for Lane Group [s/veh]	55.40	59.22	13.04	13.65	58.40	4.41
Lane Group LOS	E	E	B	B	E	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	5.71	5.75	3.39	3.50	7.63	1.79
50th-Percentile Queue Length [ft/ln]	142.64	143.83	84.70	87.43	190.67	44.81
95th-Percentile Queue Length [veh/ln]	9.62	9.69	6.10	6.30	12.16	3.23
95th-Percentile Queue Length [ft/ln]	240.58	242.17	152.45	157.38	303.90	80.65

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.40	59.22	13.04	13.65	58.40	4.41
Movement LOS	E	E	B	B	E	A
d_A, Approach Delay [s/veh]	57.28		13.34		26.61	
Approach LOS	E		B		C	
d_I, Intersection Delay [s/veh]	29.40					
Intersection LOS	C					
Intersection V/C	0.421					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
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	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.441	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	472	700	1333
d_b, Bicycle Delay [s]	35.04	25.35	6.67
I_b,int, Bicycle LOS Score for Intersection	1.560	2.464	2.555
Bicycle LOS	A	B	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Murrieta Rd at Case Rd**

Control Type:	All-way stop	Delay (sec / veh):	12.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.524

Intersection Setup

Name	Murrieta Rd		Case Rd		Case 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	1	0	1	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]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Murrieta Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	104	10	269	104	14	232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	15	0	31	16	0	20
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]	125	11	316	126	15	266
Peak Hour Factor	0.9020	0.9020	0.9020	0.9020	0.9020	0.9020
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	3	88	35	4	74
Total Analysis Volume [veh/h]	139	12	350	140	17	295
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	525	636	668	768	594	647
Degree of Utilization, x	0.27	0.02	0.52	0.18	0.03	0.46

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.06	0.06	3.07	0.66	0.09	2.38
95th-Percentile Queue Length [ft]	26.46	1.44	76.74	16.58	2.21	59.59
Approach Delay [s/veh]	11.74		12.32		12.62	
Approach LOS	B		B		B	
Intersection Delay [s/veh]	12.33					
Intersection LOS	B					

**Intersection Level Of Service Report
Intersection 3: Goetz Rd at Mapes Rd**

Control Type:	Signalized	Delay (sec / veh):	37.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.595

Intersection Setup

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes 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	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes Rd		
Base Volume Input [veh/h]	210	161	0	3	323	63	64	0	317	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	4	35	0	0	53	0	0	0	1	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]	227	206	0	3	395	67	68	0	337	0	0	0
Peak Hour Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Other Adjustment Factor	1.0000	1.0000	1.0000	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	56	0	1	108	18	19	0	92	0	0	0
Total Analysis Volume [veh/h]	249	226	0	3	433	73	75	0	370	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	0	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	0.0	3.2	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	47	57	0	13	23	0	23	50	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	0.0	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	17	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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	0.0	2.2	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	C	L	C	R	L	C	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.20	4.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.20	2.20
g_i, Effective Green Time [s]	19	76	76	1	58	58	7	30	19	19
g / C, Green / Cycle	0.16	0.63	0.63	0.01	0.48	0.48	0.05	0.25	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.14	0.06	0.06	0.00	0.23	0.05	0.04	0.23	0.00	0.00
s, saturation flow rate [veh/h]	1810	1900	1900	1810	1900	1615	1810	1615	1704	1615
c, Capacity [veh/h]	284	1195	1195	12	910	773	100	401	302	258
d1, Uniform Delay [s]	49.45	8.77	8.77	59.30	21.10	17.07	55.88	43.97	0.00	0.00
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.17	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
d2, Incremental Delay [s]	8.47	0.16	0.16	10.46	1.78	0.24	10.73	12.85	0.00	0.00
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
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	0.88	0.09	0.09	0.25	0.48	0.09	0.75	0.92	0.00	0.00
d, Delay for Lane Group [s/veh]	57.93	8.93	8.93	69.77	22.89	17.31	66.60	56.82	0.00	0.00
Lane Group LOS	E	A	A	E	C	B	E	E	A	A
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.69	1.08	1.08	0.12	8.05	1.09	2.54	12.08	0.00	0.00
50th-Percentile Queue Length [ft/ln]	192.34	26.97	26.97	3.08	201.25	27.20	63.45	301.88	0.00	0.00
95th-Percentile Queue Length [veh/ln]	12.24	1.94	1.94	0.22	12.70	1.96	4.57	17.77	0.00	0.00
95th-Percentile Queue Length [ft/ln]	306.07	48.55	48.55	5.54	317.58	48.97	114.22	444.35	0.00	0.00

Movement, Approach, & Intersection Results

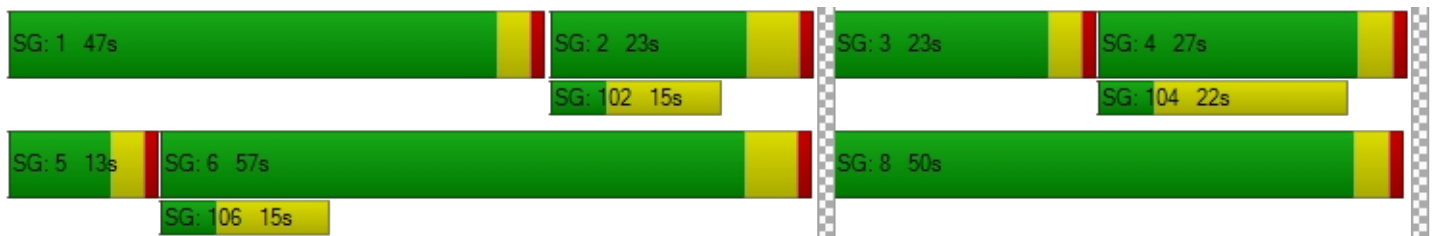
d_M, Delay for Movement [s/veh]	57.93	8.93	8.93	69.77	22.89	17.31	66.60	56.82	56.82	0.00	0.00	0.00
Movement LOS	E	A	A	E	C	B	E	E	E	A	A	A
d_A, Approach Delay [s/veh]	34.62			22.36			58.47			0.00		
Approach LOS	C			C			E			A		
d_I, Intersection Delay [s/veh]	37.68											
Intersection LOS	D											
Intersection V/C	0.595											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			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]	0.00			51.34			51.34			51.34		
I_p,int, Pedestrian LOS Score for Intersectio	0.000			2.578			2.205			1.956		
Crosswalk LOS	F			B			B			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	855			288			763			380		
d_b, Bicycle Delay [s]	19.67			43.95			22.94			39.37		
I_b,int, Bicycle LOS Score for Intersection	1.951			2.399			2.294			1.560		
Bicycle LOS	A			B			B			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: I-215 SB Ramps/SR-74 at Bonnie Dr

Control Type:	Signalized	Delay (sec / veh):	17.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.678

Intersection Setup

Name	SR-74		I-215 SB Ramps		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]	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]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	SR-74		I-215 SB Ramps		Bonnie Dr	
Base Volume Input [veh/h]	194	320	706	44	38	264
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	19	174	212	3	0	26
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]	225	513	960	50	40	306
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	58	133	249	13	10	80
Total Analysis Volume [veh/h]	234	533	998	52	42	318
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protected	Permissive	Overlap	Permissive	Permissive	Unsignalized
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups			2			
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	10	10	0	7	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	4.3	4.3	0.0	4.3	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	51	95	44	0	25	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	14	0
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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	0.0	3.3	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L
C, Cycle Length [s]	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	3.30	3.30
g_i, Effective Green Time [s]	18	104	82	82	5
g / C, Green / Cycle	0.15	0.87	0.69	0.69	0.04
(v / s)_i Volume / Saturation Flow Rate	0.13	0.28	0.53	0.03	0.02
s, saturation flow rate [veh/h]	1810	1900	1900	1615	1810
c, Capacity [veh/h]	268	1647	1302	1107	81
d1, Uniform Delay [s]	50.01	1.48	12.52	6.14	56.03
k, delay calibration	0.11	0.50	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.66	0.52	4.36	0.08	5.01
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	0.87	0.32	0.77	0.05	0.52
d, Delay for Lane Group [s/veh]	58.67	2.00	16.87	6.22	61.05
Lane Group LOS	E	A	B	A	E
Critical Lane Group	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	7.32	0.88	16.07	0.40	1.33
50th-Percentile Queue Length [ft/ln]	183.04	21.90	401.85	9.88	33.23
95th-Percentile Queue Length [veh/ln]	11.76	1.58	22.65	0.71	2.39
95th-Percentile Queue Length [ft/ln]	293.98	39.42	566.22	17.78	59.82

Movement, Approach, & Intersection Results

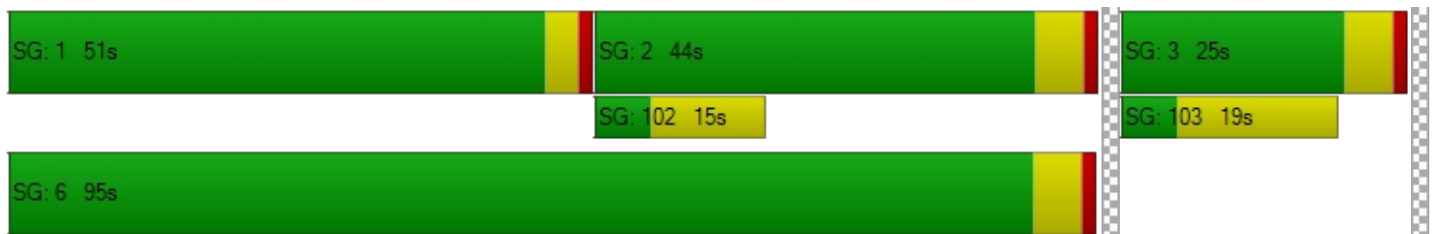
d_M, Delay for Movement [s/veh]	58.67	2.00	16.87	6.22	61.05	0.00
Movement LOS	E	A	B	A	E	
d_A, Approach Delay [s/veh]	19.29		16.34		7.37	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	17.36					
Intersection LOS	B					
Intersection V/C	0.678					

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 Intersectio	2.792	2.748	2.115
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]	1495	645	328
d_b, Bicycle Delay [s]	3.83	27.54	41.92
I_b,int, Bicycle LOS Score for Intersection	2.825	3.292	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 5: I-215 NB Ramps at SR-74**

Control Type:	Signalized	Delay (sec / veh):	19.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.641

Intersection Setup

Name	I-215 NB Ramps		SR-74		SR-74	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB Ramps		SR-74		SR-74	
Base Volume Input [veh/h]	207	21	14	955	503	602
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	207	0	0	239	193	188
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	426	22	15	1251	726	826
Peak Hour Factor	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	115	6	4	337	196	223
Total Analysis Volume [veh/h]	459	24	16	1348	782	890
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protected	Permissive	Permissive	Unsignalized
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	4.3	0.0	3.0	5.0	5.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	91	0	11	29	18	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	21	0	0	10	7	0
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	0.0
I2, Clearance Lost Time [s]	3.3	0.0	2.0	4.0	4.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C
C, Cycle Length [s]	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	2.00	4.00	4.00
g_i, Effective Green Time [s]	35	3	74	67
g / C, Green / Cycle	0.29	0.02	0.62	0.56
(v / s)_i Volume / Saturation Flow Rate	0.27	0.01	0.37	0.22
s, saturation flow rate [veh/h]	1799	1810	3618	3618
c, Capacity [veh/h]	519	45	2233	2023
d1, Uniform Delay [s]	41.52	57.59	14.01	14.87
k, delay calibration	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.00	4.80	1.22	0.56
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.93	0.36	0.60	0.39
d, Delay for Lane Group [s/veh]	49.52	62.39	15.23	15.42
Lane Group LOS	D	E	B	B
Critical Lane Group	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	14.47	0.52	9.75	5.47
50th-Percentile Queue Length [ft/ln]	361.63	12.99	243.82	136.74
95th-Percentile Queue Length [veh/ln]	20.70	0.94	14.87	9.31
95th-Percentile Queue Length [ft/ln]	517.57	23.38	371.86	232.63

Movement, Approach, & Intersection Results

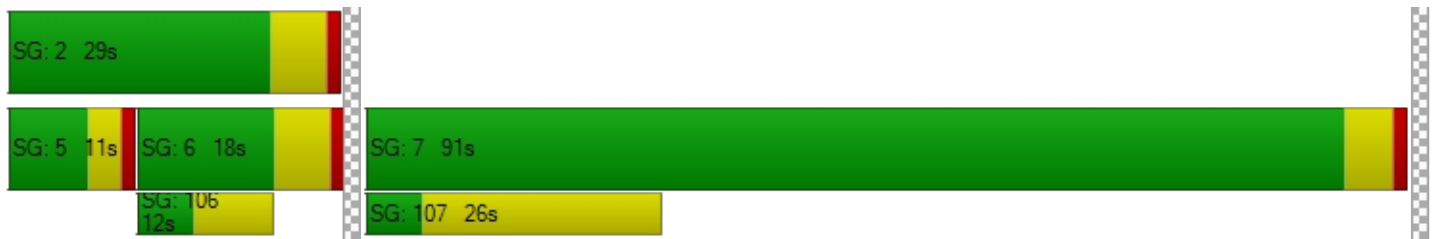
d_M, Delay for Movement [s/veh]	49.52	49.52	62.39	15.23	15.42	0.00
Movement LOS	D	D	E	B	B	
d_A, Approach Delay [s/veh]	49.52		15.78		7.50	
Approach LOS	D		B		A	
d_I, Intersection Delay [s/veh]	19.52					
Intersection LOS	B					
Intersection V/C	0.641					

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 Intersectio	2.095	3.091	3.239
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]	1428	383	200
d_b, Bicycle Delay [s]	4.90	39.20	48.60
I_b,int, Bicycle LOS Score for Intersection	2.357	2.685	2.205
Bicycle LOS	B	B	B

Sequence





Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Sherman Rd at SR-74**

Control Type:	Signalized	Delay (sec / veh):	30.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.671

Intersection Setup

Name	Sherman Rd			Sherman 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	1	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	40.00			40.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	76	0	243	2	2	2	19	936	36	183	688	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	28	0	12	0	0	0	0	303	16	8	210	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]	109	0	270	2	2	2	20	1295	54	202	939	2
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	0	71	1	1	1	5	339	14	53	246	1
Total Analysis Volume [veh/h]	114	0	283	2	2	2	21	1357	57	212	984	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	5.0	0.0	3.0	5.0	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	37	0	0	27	0	11	36	0	20	45	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	21	0	0	17	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			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	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	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	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	24	24	2	4	59	59	16	71	71
g / C, Green / Cycle	0.20	0.20	0.02	0.03	0.49	0.49	0.13	0.59	0.59
(v / s)_i Volume / Saturation Flow Rate	0.06	0.18	0.00	0.01	0.37	0.38	0.12	0.26	0.26
s, saturation flow rate [veh/h]	1810	1615	1767	1810	1900	1873	1810	1900	1899
c, Capacity [veh/h]	355	317	29	54	932	919	239	1126	1126
d1, Uniform Delay [s]	41.38	47.01	58.24	57.16	24.87	24.92	51.22	13.43	13.43
k, delay calibration	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
d2, Incremental Delay [s]	0.52	8.72	3.46	4.61	5.88	6.03	10.71	1.24	1.24
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	0.89	0.21	0.39	0.76	0.77	0.89	0.44	0.44
d, Delay for Lane Group [s/veh]	41.90	55.74	61.70	61.77	30.75	30.95	61.94	14.67	14.67
Lane Group LOS	D	E	E	E	C	C	E	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.91	8.82	0.21	0.67	16.21	16.10	6.69	6.73	6.73
50th-Percentile Queue Length [ft/ln]	72.64	220.44	5.13	16.76	405.36	402.47	167.34	168.24	168.14
95th-Percentile Queue Length [veh/ln]	5.23	13.69	0.37	1.21	22.82	22.68	10.94	10.98	10.98
95th-Percentile Queue Length [ft/ln]	130.74	342.18	9.24	30.17	570.45	566.98	273.42	274.60	274.46

Movement, Approach, & Intersection Results

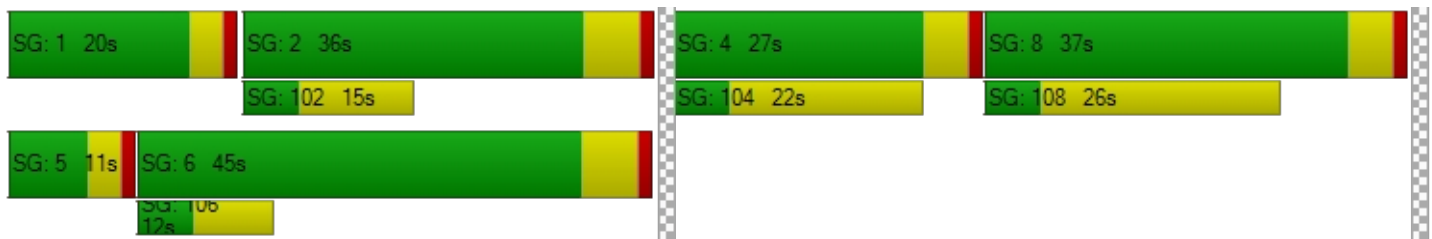
d_M, Delay for Movement [s/veh]	41.90	41.90	55.74	61.70	61.70	61.70	61.77	30.85	30.95	61.94	14.67	14.67
Movement LOS	D	D	E	E	E	E	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	51.76			61.70			31.31			23.03		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	30.78											
Intersection LOS	C											
Intersection V/C	0.671											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.245	1.749	3.221	3.314
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	535	368	500	650
d_b, Bicycle Delay [s]	32.19	39.94	33.75	27.34
I_b,int, Bicycle LOS Score for Intersection	2.215	1.570	2.743	2.548
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Goetz Rd at Fieldstone Dr

Control Type:	Signalized	Delay (sec / veh):	11.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.258

Intersection Setup

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Base Volume Input [veh/h]	31	319	2	16	552	64	35	1	25	0	3	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	39	0	0	54	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]	33	377	2	17	639	68	37	1	27	0	3	14
Peak Hour Factor	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170
Other Adjustment Factor	1.0000	1.0000	1.0000	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	103	1	5	174	19	10	0	7	0	1	4
Total Analysis Volume [veh/h]	36	411	2	19	697	74	40	1	29	0	3	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 m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	3.0	3.2	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	11	22	0	56	76	0	11	31	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	2	0	0	5	0	0	12	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	24	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	2.0	2.2	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.00	4.20	4.20
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	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.00	2.20	2.20
g_i, Effective Green Time [s]	5	89	89	3	87	87	5	10	0	5	5
g / C, Green / Cycle	0.04	0.74	0.74	0.03	0.73	0.73	0.04	0.08	0.00	0.04	0.04
(v / s)_i Volume / Saturation Flow Rate	0.02	0.22	0.00	0.01	0.14	0.14	0.02	0.02	0.00	0.00	0.01
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1809	1810	1623	1810	1900	1615
c, Capacity [veh/h]	74	1409	1198	50	2635	1317	79	132	0	72	61
d1, Uniform Delay [s]	56.32	5.11	4.01	57.36	5.16	5.17	56.11	51.56	0.00	55.62	56.05
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
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]	4.91	0.52	0.00	4.78	0.16	0.33	4.92	0.86	0.00	0.23	2.04
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	0.49	0.29	0.00	0.38	0.19	0.20	0.51	0.23	0.00	0.04	0.24
d, Delay for Lane Group [s/veh]	61.23	5.63	4.01	62.13	5.32	5.50	61.03	52.42	0.00	55.85	58.09
Lane Group LOS	E	A	A	E	A	A	E	D	A	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.14	2.72	0.01	0.62	1.62	1.71	1.29	0.88	0.00	0.09	0.48
50th-Percentile Queue Length [ft/ln]	28.39	68.03	0.26	15.39	40.62	42.63	32.36	21.99	0.00	2.31	11.92
95th-Percentile Queue Length [veh/ln]	2.04	4.90	0.02	1.11	2.92	3.07	2.33	1.58	0.00	0.17	0.86
95th-Percentile Queue Length [ft/ln]	51.11	122.45	0.47	27.70	73.11	76.73	58.25	39.58	0.00	4.16	21.45

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	61.23	5.63	4.01	62.13	5.37	5.50	61.03	52.42	52.42	0.00	55.85	58.09
Movement LOS	E	A	A	E	A	A	E	D	D	A	E	E
d_A, Approach Delay [s/veh]	10.08			6.75			57.34			57.72		
Approach LOS	B			A			E			E		
d_I, Intersection Delay [s/veh]	11.24											
Intersection LOS	B											
Intersection V/C	0.258											

Other Modes

g_Walk,mi, Effective Walk Time [s]	16.0			9.0			9.0			6.0		
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]	45.07			51.34			51.34			54.15		
I_p,int, Pedestrian LOS Score for Intersectio	2.877			2.808			2.015			2.158		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	272			272			1197			447		
d_b, Bicycle Delay [s]	44.81			44.81			9.68			36.19		
I_b,int, Bicycle LOS Score for Intersection	2.300			1.994			1.675			1.589		
Bicycle LOS	B			A			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 8: Goetz Rd at Ethanac Rd**

Control Type:	Signalized	Delay (sec / veh):	46.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.546

Intersection Setup

Name	Goetz Rd			Goetz 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	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	7	134	227	254	245	30	17	63	5	275	67	239
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	13	28	37	19	0	0	0	0	33	1	31
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]	7	155	269	306	279	32	18	67	5	325	72	284
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]	2	40	69	78	71	8	5	17	1	83	18	73
Total Analysis Volume [veh/h]	7	158	275	313	285	33	18	69	5	332	74	290
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	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	32	0	32	53	0	18	28	0	28	38	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	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	3.7	0.0	2.0	3.7	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	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	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	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	1	23	23	23	44	44	3	31	31	24	52	52
g / C, Green / Cycle	0.01	0.19	0.19	0.19	0.37	0.37	0.03	0.26	0.26	0.20	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.00	0.08	0.17	0.17	0.08	0.02	0.01	0.02	0.00	0.18	0.04	0.18
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	1900	1615
c, Capacity [veh/h]	23	360	306	343	1326	592	49	935	417	363	821	698
d1, Uniform Delay [s]	58.74	42.97	47.48	47.67	26.13	24.57	57.37	33.64	33.10	46.94	20.13	23.58
k, delay calibration	0.11	0.11	0.17	0.22	0.11	0.11	0.11	0.50	0.50	0.21	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	1.00
d2, Incremental Delay [s]	7.52	0.84	13.56	17.21	0.08	0.04	4.56	0.15	0.05	15.83	0.22	1.82
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	0.31	0.44	0.90	0.91	0.21	0.06	0.37	0.07	0.01	0.91	0.09	0.42
d, Delay for Lane Group [s/veh]	66.26	43.81	61.04	64.88	26.21	24.61	61.93	33.79	33.15	62.77	20.35	25.40
Lane Group LOS	E	D	E	E	C	C	E	C	C	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.25	4.09	8.85	10.43	2.69	0.59	0.58	0.76	0.11	10.89	1.21	5.70
50th-Percentile Queue Length [ft/ln]	6.30	102.13	221.24	260.74	67.33	14.74	14.57	18.90	2.78	272.19	30.34	142.44
95th-Percentile Queue Length [veh/ln]	0.45	7.35	13.73	15.73	4.85	1.06	1.05	1.36	0.20	16.30	2.18	9.61
95th-Percentile Queue Length [ft/ln]	11.34	183.83	343.21	393.15	121.20	26.54	26.23	34.01	5.00	407.47	54.62	240.31

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	66.26	43.81	61.04	64.88	26.21	24.61	61.93	33.79	33.15	62.77	20.35	25.40
Movement LOS	E	D	E	E	C	C	E	C	C	E	C	C
d_A, Approach Delay [s/veh]	54.94			45.31			39.26			42.69		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	46.31											
Intersection LOS	D											
Intersection V/C	0.546											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.660	2.672	2.524	2.835
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	438	788	372	538
d_b, Bicycle Delay [s]	36.58	22.02	39.77	32.05
I_b,int, Bicycle LOS Score for Intersection	2.286	2.080	1.636	2.134
Bicycle LOS	B	B	A	B

Sequence




Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 9: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	11.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.095

Intersection Setup

Name	Wheat St		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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	0	542	0	0	590
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	55	245	0	0	354
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	55	820	0	0	979
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	14	210	0	0	251
Total Analysis Volume [veh/h]	0	56	840	0	0	1003
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	0.10	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	30.29	11.77	0.00	0.00	9.48	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.31	0.31	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	7.86	7.86	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.77		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.35					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	46.9
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.056

Intersection Setup

Name	Byers 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	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		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	5	2	538	1	4	598
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	66	244	0	97	344
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	68	814	1	101	978
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]	1	18	212	0	26	255
Total Analysis Volume [veh/h]	5	71	849	1	105	1020
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	0.06	0.12	0.01	0.00	0.13	0.01
d_M, Delay for Movement [s/veh]	46.89	12.98	0.00	0.00	10.20	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.64	0.64	0.00	0.00	0.45	0.00
95th-Percentile Queue Length [ft/ln]	15.94	15.94	0.00	0.00	11.32	0.00
d_A, Approach Delay [s/veh]	15.21		0.00		0.95	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.09					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 11: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	277.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.980

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	0	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	106	76	143	45	75	13	6	402	108	212	484	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	55	3	174	7	9	0	0	326	40	281	407	12
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]	167	84	326	55	89	14	6	752	154	506	920	57
Peak Hour Factor	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	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]	45	23	88	15	24	4	2	202	41	136	248	15
Total Analysis Volume [veh/h]	180	90	351	59	96	15	6	809	166	545	990	61
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	4.7	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	32	0	0	28	0	11	36	0	24	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	21	0	0	17	0	0	7	0	0	14	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	3.7	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	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	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
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	39	10	10	10	1	12	12	38	49	49
g / C, Green / Cycle	0.33	0.08	0.08	0.08	0.01	0.10	0.10	0.32	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.36	0.03	0.05	0.01	0.00	0.26	0.26	0.30	0.28	0.28
s, saturation flow rate [veh/h]	1705	1810	1900	1615	1810	1900	1789	1810	1900	1862
c, Capacity [veh/h]	559	150	158	134	19	189	178	580	778	762
d1, Uniform Delay [s]	40.34	52.15	53.13	50.92	58.93	54.03	54.03	39.64	28.99	29.08
k, delay calibration	0.50	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]	72.34	1.66	3.75	0.36	9.01	760.21	761.12	8.04	4.75	4.97
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	1.11	0.39	0.61	0.11	0.31	2.66	2.66	0.94	0.68	0.69
d, Delay for Lane Group [s/veh]	112.68	53.81	56.88	51.28	67.94	814.24	815.15	47.68	33.74	34.05
Lane Group LOS	F	D	E	D	E	F	F	D	C	C
Critical Lane Group	Yes	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	26.88	1.72	2.89	0.42	0.22	45.43	42.83	16.00	12.68	12.60
50th-Percentile Queue Length [ft/ln]	672.03	42.90	72.36	10.56	5.59	1135.82	1070.68	399.88	316.93	314.98
95th-Percentile Queue Length [veh/ln]	37.89	3.09	5.21	0.76	0.40	70.27	66.55	22.55	18.52	18.42
95th-Percentile Queue Length [ft/ln]	947.32	77.22	130.24	19.01	10.06	1756.71	1663.78	563.85	462.91	460.52

Movement, Approach, & Intersection Results

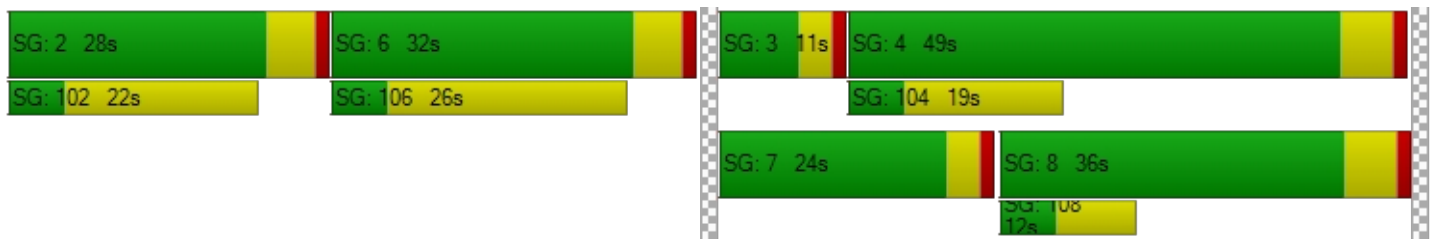
d_M, Delay for Movement [s/veh]	112.68	112.68	112.68	53.81	56.88	51.28	67.94	814.58	815.15	47.68	33.88	34.05
Movement LOS	F	F	F	D	E	D	E	F	F	D	C	C
d_A, Approach Delay [s/veh]	112.68			55.32			810.11			38.60		
Approach LOS	F			E			F			D		
d_I, Intersection Delay [s/veh]	277.82											
Intersection LOS	F											
Intersection V/C	0.980											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.774	2.266	3.019	3.231
Crosswalk LOS	C	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	445	378	505	722
d_b, Bicycle Delay [s]	36.27	39.45	33.53	24.51
I_b,int, Bicycle LOS Score for Intersection	2.584	1.840	2.369	2.876
Bicycle LOS	B	A	B	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Evans Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	1,787.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.586

Intersection Setup

Name	Evans 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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	2	602	3	4	754
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	48	282	537	31	239	652
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]	48	284	1175	34	243	1451
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]	12	73	303	9	63	374
Total Analysis Volume [veh/h]	50	293	1213	35	251	1497
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	3.59	0.68	0.01	0.00	0.44	0.01
d_M, Delay for Movement [s/veh]	1787.72	1537.81	0.00	0.00	16.38	0.00
Movement LOS	F	F	A	A	C	A
95th-Percentile Queue Length [veh/ln]	36.35	36.35	0.00	0.00	2.27	0.00
95th-Percentile Queue Length [ft/ln]	908.87	908.87	0.00	0.00	56.74	0.00
d_A, Approach Delay [s/veh]	1574.24		0.00		2.35	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	162.95					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: Barnett Rd/Case Rd at Ethanac Rd

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):	0.708

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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	26	9	48	425	0	141	169	442	18	51	493	394
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	61	0	0	3	0	758	0	79	810	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	10	112	451	0	152	179	1227	19	133	1333	418
Peak Hour Factor	0.9690	0.9690	0.9690	0.9690	1.0000	0.9690	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	3	29	116	0	39	46	317	5	34	344	108
Total Analysis Volume [veh/h]	29	10	116	465	0	157	185	1266	20	137	1376	431
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permiss	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	5	0	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	7	0	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	30	0	0	30	30	0	30	30	0
Amber [s]	0.0	5.0	0.0	5.0	0.0	0.0	3.0	4.7	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	25	0	25	0	0	11	59	0	11	59	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	14	0	14	0	0	0	7	0	0	17	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	4.0	0.0	4.0	0.0	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	L	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	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]	4.00	4.00	4.00	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	13	18	18	14	56	56	11	53	53
g / C, Green / Cycle	0.11	0.15	0.15	0.12	0.47	0.47	0.09	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.09	0.13	0.05	0.10	0.35	0.01	0.08	0.38	0.27
s, saturation flow rate [veh/h]	1665	3514	2859	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	182	524	427	215	1702	760	164	1598	714
d1, Uniform Delay [s]	52.51	50.05	45.95	51.88	25.89	17.04	53.71	30.16	25.49
k, delay calibration	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
d2, Incremental Delay [s]	10.71	5.26	0.53	9.60	3.00	0.06	10.69	6.33	3.77
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	0.89	0.37	0.86	0.74	0.03	0.84	0.86	0.60
d, Delay for Lane Group [s/veh]	63.22	55.32	46.48	61.48	28.88	17.10	64.40	36.49	29.26
Lane Group LOS	E	E	D	E	C	B	E	D	C
Critical Lane Group	Yes	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.93	6.91	2.05	5.84	14.21	0.29	4.42	17.87	9.46
50th-Percentile Queue Length [ft/ln]	123.23	172.63	51.33	146.00	355.24	7.36	110.41	446.75	236.62
95th-Percentile Queue Length [veh/ln]	8.57	11.21	3.70	9.80	20.39	0.53	7.86	24.80	14.51
95th-Percentile Queue Length [ft/ln]	214.25	280.36	92.39	245.08	509.79	13.24	196.58	620.06	362.76

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	63.22	63.22	63.22	55.32	0.00	46.48	61.48	28.88	17.10	64.40	36.49	29.26
Movement LOS	E	E	E	E		D	E	C	B	E	D	C
d_A, Approach Delay [s/veh]	63.22			53.09			32.82			36.85		
Approach LOS	E			D			C			D		
d_I, Intersection Delay [s/veh]	38.82											
Intersection LOS	D											
Intersection V/C	0.708											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.009	2.761	3.290	3.495
Crosswalk LOS	B	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	317	317	888	888
d_b, Bicycle Delay [s]	42.50	42.50	18.54	18.54
I_b,int, Bicycle LOS Score for Intersection	1.815	1.560	2.773	3.163
Bicycle LOS	A	A	C	C

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 14: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	233.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.611

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			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 On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	193	0	361	0	602	384	125	716	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	188	0	446	0	464	363	279	454	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	393	0	829	0	1102	770	412	1213	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9460	0.9460	0.9460	1.0000	0.9460	0.9460	0.9460	0.9460	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	104	0	219	0	291	203	109	321	0
Total Analysis Volume [veh/h]	0	0	0	415	0	876	0	1165	814	436	1282	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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	10	0	0	10	0	7	10	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	55	0	28	83	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	14	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	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]		120	120	120	120	120	120
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	42	42	31	77
g / C, Green / Cycle		0.26	0.26	0.35	0.35	0.26	0.64
(v / s)_i Volume / Saturation Flow Rate		0.23	0.54	0.61	0.50	0.24	0.35
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		478	427	668	568	469	2330
d1, Uniform Delay [s]		42.15	44.15	38.90	38.90	43.39	11.77
k, delay calibration		0.33	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]		13.44	482.07	340.64	204.79	8.65	0.94
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		0.87	2.05	1.74	1.43	0.93	0.55
d, Delay for Lane Group [s/veh]		55.60	526.22	379.53	243.69	52.04	12.71
Lane Group LOS		E	F	F	F	D	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		13.07	69.28	81.63	47.95	13.12	8.31
50th-Percentile Queue Length [ft/ln]		326.84	1732.09	2040.72	1198.72	327.99	207.87
95th-Percentile Queue Length [veh/ln]		19.00	109.43	126.66	72.59	19.06	13.04
95th-Percentile Queue Length [ft/ln]		475.08	2735.84	3166.40	1814.75	476.49	326.10

Movement, Approach, & Intersection Results

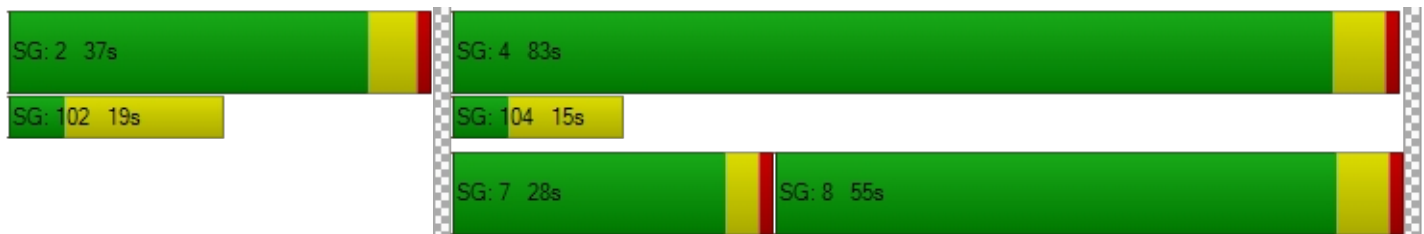
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	55.60	55.60	526.22	0.00	379.53	243.69	52.04	12.71	0.00
Movement LOS				E	E	F		F	F	D	B	
d_A, Approach Delay [s/veh]	0.00			374.94			323.66			22.69		
Approach LOS	A			F			F			C		
d_I, Intersection Delay [s/veh]	233.27											
Intersection LOS	F											
Intersection V/C	1.611											

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	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.585	0.000	3.486
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	822	1288
d_b, Bicycle Delay [s]	60.00	32.49	20.83	7.60
I_b,int, Bicycle LOS Score for Intersection	4.132	3.690	4.825	2.977
Bicycle LOS	D	D	E	C

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	316.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.649

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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]	45.00			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 Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	426	2	198	0	0	0	246	570	0	0	413	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
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]	425	0	185	0	0	0	431	221	0	0	308	284
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]	877	2	395	0	0	0	692	825	0	0	746	491
Peak Hour Factor	0.9570	0.9570	0.9570	1.0000	1.0000	1.0000	0.9570	0.9570	1.0000	1.0000	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]	229	1	103	0	0	0	181	216	0	0	195	128
Total Analysis Volume [veh/h]	916	2	413	0	0	0	723	862	0	0	780	513
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

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	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	38	0	0	0	0	30	82	0	0	52	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	10	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	3.3	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]	5.30	5.30		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]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	33	33		26	76	46
g / C, Green / Cycle	0.27	0.27		0.22	0.64	0.39
(v / s)_i Volume / Saturation Flow Rate	0.51	0.26		0.40	0.45	0.73
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1776
c, Capacity [veh/h]	493	440		392	1208	685
d1, Uniform Delay [s]	43.65	42.67		47.00	14.56	36.85
k, delay calibration	0.50	0.38		0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	395.41	25.13		389.62	3.61	404.79
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	1.86	0.94		1.84	0.71	1.89
d, Delay for Lane Group [s/veh]	439.06	67.80		436.62	18.17	441.64
Lane Group LOS	F	E		F	B	F
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	68.19	14.55		53.60	14.38	95.64
50th-Percentile Queue Length [ft/ln]	1704.69	363.76		1340.06	359.51	2391.02
95th-Percentile Queue Length [veh/ln]	106.37	20.81		83.43	20.60	150.87
95th-Percentile Queue Length [ft/ln]	2659.31	520.15		2085.78	514.98	3771.74

Movement, Approach, & Intersection Results

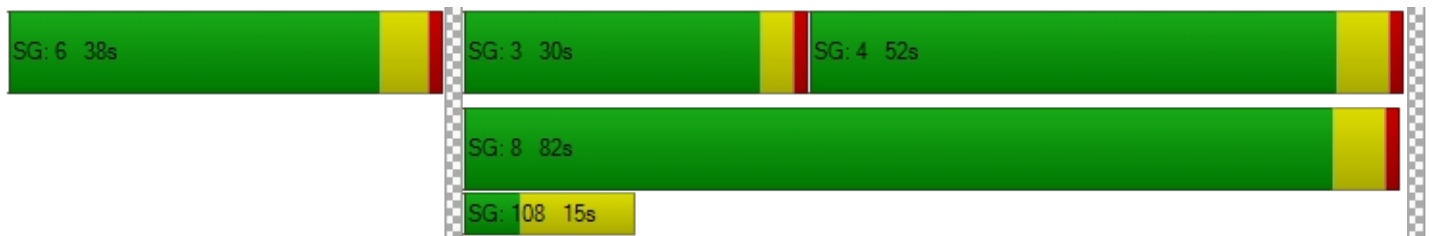
d_M, Delay for Movement [s/veh]	439.06	439.06	67.80	0.00	0.00	0.00	436.62	18.17	0.00	0.00	441.64	441.64
Movement LOS	F	F	E				F	B			F	F
d_A, Approach Delay [s/veh]	323.86			0.00			209.05			441.64		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	316.81											
Intersection LOS	F											
Intersection V/C	1.649											

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 Intersectio	2.604	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]	545	0	1272	772
d_b, Bicycle Delay [s]	31.76	60.00	7.96	22.63
I_b,int, Bicycle LOS Score for Intersection	3.756	4.132	4.175	3.693
Bicycle LOS	D	D	D	D

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Trumble Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	55.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.818

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	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	84	5	37	30	15	141	73	588	33	44	361	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	62	0	0	0	0	62	42	319	42	0	466	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]	151	5	39	32	16	211	119	942	77	47	849	4
Peak Hour Factor	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	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]	41	1	11	9	4	58	33	259	21	13	233	1
Total Analysis Volume [veh/h]	166	5	43	35	18	232	131	1035	85	52	933	4
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	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]	16	19	0	20	23	0	15	70	0	11	66	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	14	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	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	4.00	4.00	4.00	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	2.00	2.00	2.00	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	12	26	5	19	10	66	66	6	61
g / C, Green / Cycle	0.10	0.22	0.04	0.16	0.09	0.55	0.55	0.05	0.51
(v / s)_i Volume / Saturation Flow Rate	0.09	0.03	0.02	0.15	0.07	0.54	0.05	0.03	0.49
s, saturation flow rate [veh/h]	1810	1641	1810	1633	1810	1900	1615	1810	1899
c, Capacity [veh/h]	181	356	75	259	157	1037	882	87	963
d1, Uniform Delay [s]	53.51	37.92	56.20	50.19	53.92	27.17	13.06	55.97	28.77
k, delay calibration	0.11	0.11	0.11	0.17	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]	16.52	0.17	4.40	25.19	10.76	27.40	0.22	6.37	23.17
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	0.92	0.14	0.46	0.97	0.83	1.00	0.10	0.60	0.97
d, Delay for Lane Group [s/veh]	70.03	38.09	60.60	75.38	64.68	54.57	13.27	62.33	51.94
Lane Group LOS	E	D	E	E	E	D	B	E	D
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.79	1.16	1.13	9.24	4.23	33.67	1.07	1.65	29.57
50th-Percentile Queue Length [ft/ln]	144.66	29.10	28.25	230.99	105.82	841.85	26.77	41.25	739.23
95th-Percentile Queue Length [veh/ln]	9.73	2.10	2.03	14.22	7.61	43.19	1.93	2.97	38.49
95th-Percentile Queue Length [ft/ln]	243.28	52.38	50.86	355.62	190.18	1079.76	48.18	74.25	962.18

Movement, Approach, & Intersection Results

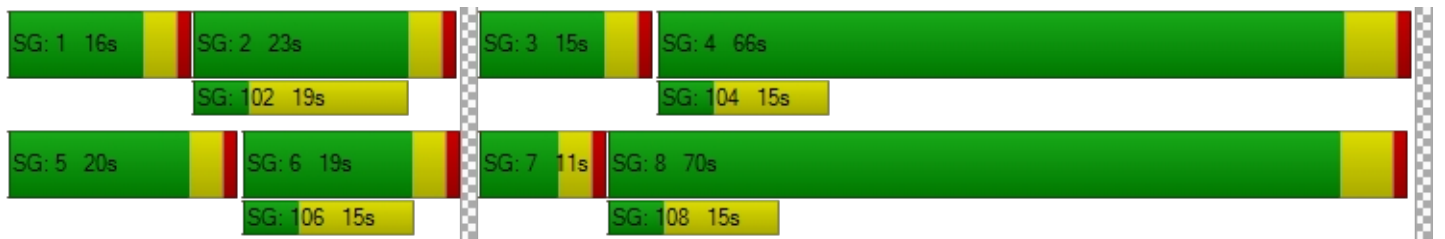
d_M, Delay for Movement [s/veh]	70.03	38.09	38.09	60.60	75.38	75.38	64.68	54.57	13.27	62.33	51.94	51.94
Movement LOS	E	D	D	E	E	E	E	D	B	E	D	D
d_A, Approach Delay [s/veh]	62.87			73.57			52.82			52.49		
Approach LOS	E			E			D			D		
d_I, Intersection Delay [s/veh]	55.65											
Intersection LOS	E											
Intersection V/C	0.818											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.075	2.094	3.195	3.094
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	250	317	1072	1005
d_b, Bicycle Delay [s]	45.94	42.50	12.93	14.85
I_b,int, Bicycle LOS Score for Intersection	1.913	2.030	3.624	3.191
Bicycle LOS	A	B	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 17: Sherman Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	6,401.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	12.808

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews 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	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews Rd		
Base Volume Input [veh/h]	19	5	2	4	2	191	271	173	15	2	95	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	62	0	0	15	0	1	3	356	43	0	527	25
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]	82	5	2	19	2	203	290	539	59	2	628	28
Peak Hour Factor	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760
Other Adjustment Factor	1.0000	1.0000	1.0000	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	1	1	5	1	58	83	154	17	1	179	8
Total Analysis Volume [veh/h]	94	6	2	22	2	232	331	615	67	2	717	32
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	12.81	0.29	0.00	1.32	0.10	0.55	0.38	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	6401.87	6083.59	5918.94	703.45	664.76	496.58	11.67	0.00	0.00	8.92	0.00	0.00
Movement LOS	F	F	F	F	F	F	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	14.43	14.43	14.43	20.39	20.39	20.39	1.80	1.80	1.80	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	360.70	360.70	360.70	509.84	509.84	509.84	44.94	44.94	44.94	0.16	0.16	0.16
d_A, Approach Delay [s/veh]	6373.68			515.67			3.81			0.02		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	370.41											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 18: Byers Rd at McLaughlin Rd

Control Type:	All-way stop	Delay (sec / veh):	7.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.063

Intersection Setup

Name	Byers Rd			Byers 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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Byers Rd			Byers Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	17	0	10	29	0	0	56	0	11	10	14
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	17	0	10	29	0	0	56	0	11	10	14
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	0	3	7	0	0	14	0	3	3	4
Total Analysis Volume [veh/h]	0	17	0	10	29	0	0	56	0	11	10	14
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	871	865	887	923
Degree of Utilization, x	0.02	0.05	0.06	0.04

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.06	0.14	0.20	0.12
95th-Percentile Queue Length [ft]	1.49	3.54	5.04	2.95
Approach Delay [s/veh]	7.21	7.36	7.33	7.05
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.26			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 19: Murrieta Rd at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	122.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.746

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	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]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	2	297	3	25	368	7	6	0	3	7	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	14	244	30	0	337	0	0	0	10	47	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]	16	559	33	27	727	7	6	0	13	54	0	24
Peak Hour Factor	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	158	9	8	206	2	2	0	4	15	0	7
Total Analysis Volume [veh/h]	18	632	37	31	822	8	7	0	15	61	0	27
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	0.02	0.01	0.00	0.03	0.01	0.00	0.09	0.00	0.04	0.75	0.00	0.06
d_M, Delay for Movement [s/veh]	9.54	0.00	0.00	9.00	0.00	0.00	53.28	43.26	17.65	122.21	112.71	85.83
Movement LOS	A	A	A	A	A	A	F	E	C	F	F	F
95th-Percentile Queue Length [veh/ln]	0.07	0.00	0.00	0.10	0.00	0.00	0.43	0.43	0.43	4.55	4.55	4.55
95th-Percentile Queue Length [ft/ln]	1.70	0.00	0.00	2.58	0.00	0.00	10.76	10.76	10.76	113.74	113.74	113.74
d_A, Approach Delay [s/veh]	0.25			0.32			28.99			111.05		
Approach LOS	A			A			D			F		
d_I, Intersection Delay [s/veh]	6.55											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 20: Murrieta Rd at Rouse Rd

Control Type:	Two-way stop	Delay (sec / veh):	430.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.713

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	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	4	227	12	65	297	26	9	8	2	4	10	61
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	87	133	0	1	132	262	154	0	51	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	91	374	13	70	447	290	164	8	53	4	11	65
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	100	3	19	120	78	44	2	14	1	3	17
Total Analysis Volume [veh/h]	97	400	14	75	479	310	176	9	57	4	12	70
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	0.12	0.00	0.00	0.06	0.00	0.00	1.71	0.06	0.10	0.05	0.12	0.11
d_M, Delay for Movement [s/veh]	9.85	0.00	0.00	8.33	0.00	0.00	430.05	31.13	11.74	48.12	47.12	11.16
Movement LOS	A	A	A	A	A	A	F	D	B	E	E	B
95th-Percentile Queue Length [veh/ln]	0.39	0.00	0.00	0.21	0.00	0.00	13.90	0.19	0.32	0.14	0.41	0.36
95th-Percentile Queue Length [ft/ln]	9.75	0.00	0.00	5.20	0.00	0.00	347.58	4.85	7.97	3.55	10.16	8.94
d_A, Approach Delay [s/veh]	1.87			0.72			316.69			17.90		
Approach LOS	A			A			F			C		
d_I, Intersection Delay [s/veh]	46.83											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 21: Murrieta Rd at Chambers Ave

Control Type:	All-way stop	Delay (sec / veh):	38.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.053

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	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	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Base Volume Input [veh/h]	50	256	9	44	222	38	11	24	24	6	31	57
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	87	308	0	1	233	1	0	0	51	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]	140	579	10	48	468	41	12	25	76	6	33	60
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]	37	152	3	13	123	11	3	7	20	2	9	16
Total Analysis Volume [veh/h]	147	609	11	51	493	43	13	26	80	6	35	63
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	483	517	519	472	536	455	427	453	495
Degree of Utilization, x	0.30	0.60	0.60	0.11	1.05	0.26	0.01	0.08	0.13

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.28	3.91	3.88	0.36	15.95	1.04	0.04	0.25	0.43
95th-Percentile Queue Length [ft]	31.92	97.78	97.12	9.02	398.72	25.92	1.07	6.25	10.85
Approach Delay [s/veh]	18.35			74.63		13.69	11.14		
Approach LOS	C			F		B	B		
Intersection Delay [s/veh]	38.47								
Intersection LOS	E								

Intersection Level Of Service Report
Intersection 22: Murrieta Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	41.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.678

Intersection Setup

Name	Murrieta Rd			Murrieta 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	3	184	130	80	115	48	38	121	1	77	153	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	182	63	113	137	0	0	0	0	108	0	155
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]	3	377	201	198	259	51	40	128	1	190	162	288
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	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	99	53	52	68	13	11	34	0	50	43	76
Total Analysis Volume [veh/h]	3	396	211	208	272	54	42	135	1	200	170	303
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	11	27	0	21	37	0	0	24	0	0	48	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	14	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	0.0	2.0	3.3	0.0	0.0	2.6	0.0	0.0	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	L	C	R	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]	4.00	5.30	4.00	5.30	5.30	4.60	4.60	4.60	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	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	2.00	3.30	3.30	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	1	50	16	65	65	10	10	10	25	25	25
g / C, Green / Cycle	0.01	0.42	0.13	0.54	0.54	0.08	0.08	0.08	0.21	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.00	0.34	0.11	0.14	0.03	0.02	0.04	0.04	0.11	0.09	0.19
s, saturation flow rate [veh/h]	1810	1790	1810	1900	1615	1810	1900	1895	1810	1900	1615
c, Capacity [veh/h]	11	751	235	1033	878	152	159	159	384	404	343
d1, Uniform Delay [s]	59.38	30.58	51.30	14.58	12.92	51.57	52.24	52.25	41.85	40.88	45.82
k, delay calibration	0.11	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	13.33	9.12	10.43	0.62	0.13	0.98	1.81	1.82	1.09	0.70	7.51
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.81	0.88	0.26	0.06	0.28	0.43	0.43	0.52	0.42	0.88
d, Delay for Lane Group [s/veh]	72.72	39.71	61.73	15.20	13.06	52.55	54.06	54.07	42.94	41.58	53.33
Lane Group LOS	E	D	E	B	B	D	D	D	D	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.13	16.38	6.66	3.87	0.68	1.22	2.02	2.02	5.32	4.40	9.35
50th-Percentile Queue Length [ft/ln]	3.22	409.60	166.48	96.69	17.05	30.53	50.41	50.38	133.03	110.00	233.73
95th-Percentile Queue Length [veh/ln]	0.23	23.02	10.89	6.96	1.23	2.20	3.63	3.63	9.10	7.84	14.36
95th-Percentile Queue Length [ft/ln]	5.80	575.56	272.28	174.04	30.69	54.96	90.74	90.68	227.61	196.01	359.10

Movement, Approach, & Intersection Results

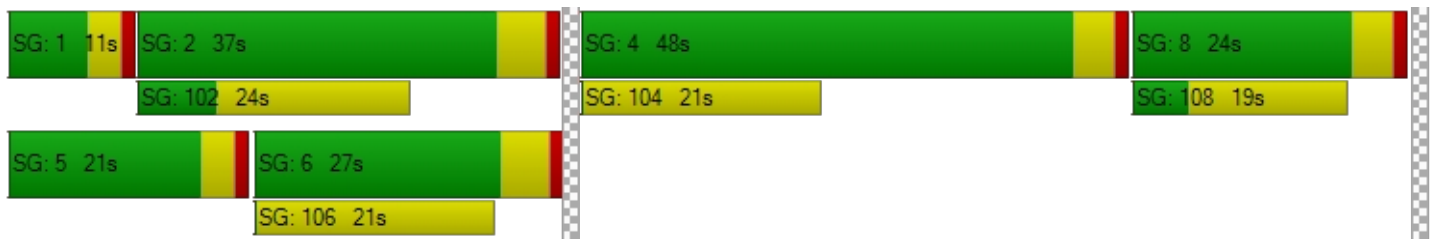
d_M, Delay for Movement [s/veh]	72.72	39.71	39.71	61.73	15.20	13.06	52.55	54.06	54.07	42.94	41.58	53.33
Movement LOS	E	D	D	E	B	B	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	39.87			33.11			53.71			47.27		
Approach LOS	D			C			D			D		
d_I, Intersection Delay [s/veh]	41.79											
Intersection LOS	D											
Intersection V/C	0.678											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	4.0	11.0	4.0
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	56.07	49.50	56.07
l_p,int, Pedestrian LOS Score for Intersectio	2.483	2.782	2.406	2.704
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	362	528	323	723
d_b, Bicycle Delay [s]	40.26	32.49	42.17	24.45
l_b,int, Bicycle LOS Score for Intersection	2.566	2.441	1.706	2.115
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 23: Sun City Blvd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	25.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.422

Intersection Setup

Name	Sun City Blvd			Sun City Blvd			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	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sun City Blvd			Sun City Blvd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	80	121	148	65	77	10	25	324	59	67	416	228
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	176	0	0	263	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	128	157	69	82	11	27	519	63	71	704	242
Peak Hour Factor	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860
Other Adjustment Factor	1.0000	1.0000	1.0000	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	32	40	17	21	3	7	132	16	18	178	61
Total Analysis Volume [veh/h]	86	130	159	70	83	11	27	526	64	72	714	245
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	48	0	0	22	0	11	37	0	13	39	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	9	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	14	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	C	C	R	C	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	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	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	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	10	10	4	72	72	6	74	74
g / C, Green / Cycle	0.12	0.12	0.12	0.08	0.08	0.03	0.60	0.60	0.05	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.10	0.04	0.04	0.01	0.16	0.16	0.04	0.26	0.26
s, saturation flow rate [veh/h]	1826	1900	1615	1822	1856	1810	1900	1829	1810	1900	1736
c, Capacity [veh/h]	221	230	196	152	155	63	1141	1098	96	1176	1075
d1, Uniform Delay [s]	49.22	49.18	51.41	52.77	52.74	56.74	11.37	11.38	56.01	11.83	11.83
k, delay calibration	0.11	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]	1.63	1.52	7.90	2.93	2.80	4.55	0.56	0.59	10.92	1.13	1.24
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	0.48	0.48	0.81	0.54	0.53	0.43	0.26	0.26	0.75	0.43	0.43
d, Delay for Lane Group [s/veh]	50.85	50.70	59.31	55.70	55.54	61.30	11.93	11.97	66.93	12.96	13.07
Lane Group LOS	D	D	E	E	E	E	B	B	E	B	B
Critical Lane Group	No	No	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.09	3.16	5.09	2.49	2.50	0.88	3.80	3.69	2.43	6.88	6.32
50th-Percentile Queue Length [ft/ln]	77.34	79.08	127.26	62.32	62.55	21.91	95.06	92.21	60.64	171.94	157.97
95th-Percentile Queue Length [veh/ln]	5.57	5.69	8.79	4.49	4.50	1.58	6.84	6.64	4.37	11.18	10.44
95th-Percentile Queue Length [ft/ln]	139.21	142.35	219.76	112.17	112.59	39.43	171.10	165.99	109.15	279.47	261.03

Movement, Approach, & Intersection Results

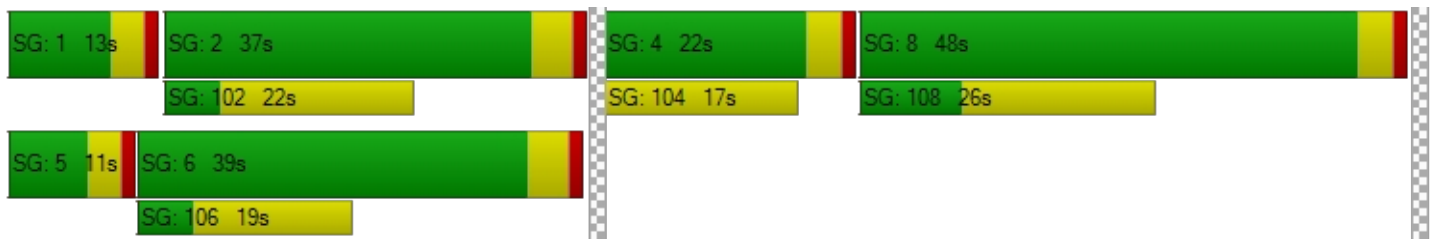
d_M, Delay for Movement [s/veh]	50.85	50.72	59.31	55.70	55.56	55.54	61.30	11.95	11.97	66.93	13.00	13.07
Movement LOS	D	D	E	E	E	E	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	54.39			55.62			14.11			16.78		
Approach LOS	D			E			B			B		
d_I, Intersection Delay [s/veh]	25.39											
Intersection LOS	C											
Intersection V/C	0.422											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	4.0	13.0
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	56.07	47.70
I_p,int, Pedestrian LOS Score for Intersectio	2.431	2.284	2.643	2.718
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	730	297	540	573
d_b, Bicycle Delay [s]	24.19	43.52	31.97	30.53
I_b,int, Bicycle LOS Score for Intersection	1.869	1.695	2.069	2.410
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 24: Bradley Rd at McCall Blvd**

Control Type:	Signalized	Delay (sec / veh):	33.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.791

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	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	57	84	516	115	89	3	26	509	67	568	667	120
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	176	0	0	263	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]	60	89	547	122	94	3	28	716	71	602	970	127
Peak Hour Factor	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	23	140	31	24	1	7	184	18	154	249	33
Total Analysis Volume [veh/h]	62	91	561	125	96	3	29	734	73	617	995	130
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
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	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	10	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [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
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	30	30	0	21	0	38	23	0	46	31	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	21	21	0	17	0	0	14	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	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	2.0	2.0	0.0	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	
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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	16	64	10	10	4	33	33	45	73	73
g / C, Green / Cycle	0.13	0.13	0.54	0.09	0.09	0.04	0.28	0.28	0.37	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.03	0.05	0.35	0.07	0.05	0.02	0.22	0.22	0.34	0.30	0.31
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1890	1810	1900	1840	1810	1900	1825
c, Capacity [veh/h]	238	250	868	158	165	67	523	507	674	1161	1115
d1, Uniform Delay [s]	46.89	47.56	19.68	53.73	52.79	56.57	40.18	40.19	35.85	12.94	13.08
k, delay calibration	0.11	0.11	0.50	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]	0.58	0.89	3.70	8.62	3.49	4.35	11.14	11.50	5.44	1.47	1.61
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	0.36	0.65	0.79	0.60	0.43	0.78	0.78	0.92	0.49	0.50
d, Delay for Lane Group [s/veh]	47.46	48.45	23.38	62.35	56.27	60.92	51.33	51.69	41.29	14.41	14.69
Lane Group LOS	D	D	C	E	E	E	D	D	D	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.71	2.55	11.67	4.08	3.04	0.94	12.61	12.27	17.69	8.42	8.41
50th-Percentile Queue Length [ft/ln]	42.80	63.84	291.85	101.96	75.97	23.40	315.29	306.84	442.36	210.49	210.19
95th-Percentile Queue Length [veh/ln]	3.08	4.60	17.28	7.34	5.47	1.68	18.44	18.02	24.59	13.18	13.16
95th-Percentile Queue Length [ft/ln]	77.03	114.92	431.94	183.52	136.75	42.12	460.89	450.48	614.82	329.46	329.07

Movement, Approach, & Intersection Results

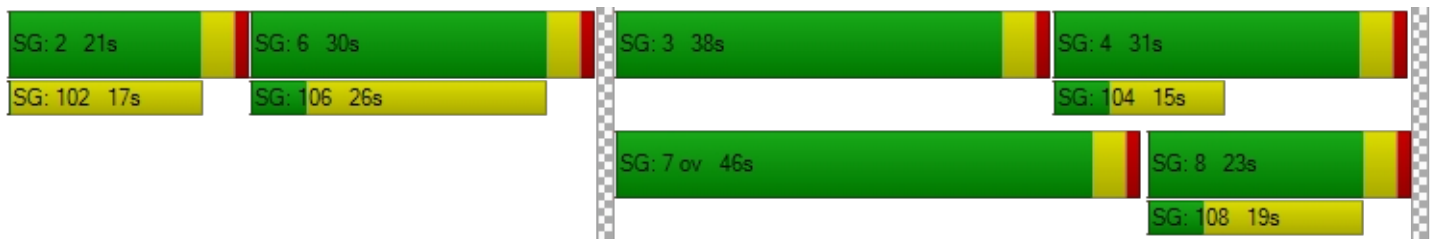
d_M, Delay for Movement [s/veh]	47.46	48.45	23.38	62.35	56.27	56.27	60.92	51.49	51.69	41.29	14.53	14.69
Movement LOS	D	D	C	E	E	E	E	D	D	D	B	B
d_A, Approach Delay [s/veh]	28.67			59.67			51.83			24.02		
Approach LOS	C			E			D			C		
d_I, Intersection Delay [s/veh]	33.85											
Intersection LOS	C											
Intersection V/C	0.791											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	4.0	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]	51.35	51.35	56.08	51.35
I_p,int, Pedestrian LOS Score for Intersectio	2.512	2.110	2.750	3.068
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	283	317	450
d_b, Bicycle Delay [s]	36.83	44.22	42.52	36.05
I_b,int, Bicycle LOS Score for Intersection	2.738	1.929	2.249	2.997
Bicycle LOS	B	A	B	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: I-215 SB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	70.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.939

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	358	3	462	0	845	315	285	794	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	312	0	124	0	103	108	185	139	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	691	3	614	0	999	442	487	981	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9890	0.9890	0.9890	1.0000	0.9890	0.9890	0.9890	0.9890	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	175	1	155	0	253	112	123	248	0
Total Analysis Volume [veh/h]	0	0	0	699	3	621	0	1010	447	492	992	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Unsigna	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	10	0	0	10	0	7	10	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	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	48	0	0	36	0	36	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	21	0	0	3	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	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	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	L	C
C, Cycle Length [s]		120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	2.60	2.00	2.60
g_i, Effective Green Time [s]		43	43	28	35	67
g / C, Green / Cycle		0.36	0.36	0.24	0.29	0.56
(v / s)_i Volume / Saturation Flow Rate		0.39	0.38	0.28	0.27	0.27
s, saturation flow rate [veh/h]		1810	1615	3618	1810	3618
c, Capacity [veh/h]		644	575	860	526	2032
d1, Uniform Delay [s]		38.65	38.65	45.73	41.48	15.88
k, delay calibration		0.50	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		62.46	61.18	90.55	8.36	0.84
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		1.09	1.08	1.17	0.94	0.49
d, Delay for Lane Group [s/veh]		101.11	99.83	136.28	49.84	16.73
Lane Group LOS		F	F	F	D	B
Critical Lane Group		Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		29.08	25.74	23.41	15.08	8.10
50th-Percentile Queue Length [ft/ln]		726.93	643.52	585.37	377.06	202.42
95th-Percentile Queue Length [veh/ln]		40.22	35.90	34.24	21.45	12.76
95th-Percentile Queue Length [ft/ln]		1005.56	897.57	856.08	536.28	319.09

Movement, Approach, & Intersection Results

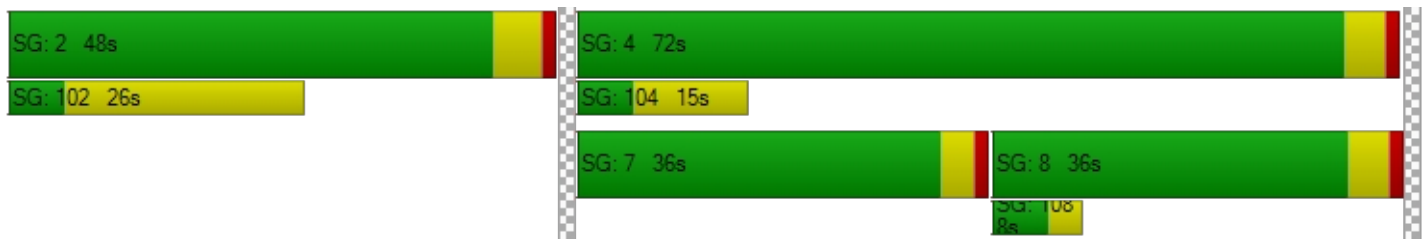
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	101.11	101.11	99.83	0.00	136.28	0.00	49.84	16.73	0.00
Movement LOS				F	F	F		F		D	B	
d_A, Approach Delay [s/veh]	0.00			100.51			94.80			27.71		
Approach LOS	A			F			F			C		
d_I, Intersection Delay [s/veh]	70.69											
Intersection LOS	E											
Intersection V/C	0.939											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	1.921	2.600	2.912	3.073
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	712	523	1123
d_b, Bicycle Delay [s]	60.00	24.90	32.71	11.53
I_b,int, Bicycle LOS Score for Intersection	4.132	3.743	2.393	2.784
Bicycle LOS	D	D	B	C

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 26: I-215 NB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	56.8
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.950

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	383	4	480	0	0	0	283	897	0	0	740	244
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
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]	135	0	222	0	0	0	90	325	0	0	189	247
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]	541	4	731	0	0	0	390	1276	0	0	973	506
Peak Hour Factor	0.9860	0.9860	0.9860	1.0000	1.0000	1.0000	0.9860	0.9860	1.0000	1.0000	0.9860	0.9860
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	137	1	185	0	0	0	99	324	0	0	247	128
Total Analysis Volume [veh/h]	549	4	741	0	0	0	396	1294	0	0	987	513
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	56	0	0	0	0	29	64	0	0	35	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	21	0	0	0	0	0	10	0	0	3	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	3.3	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
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	2.60	2.60
g_i, Effective Green Time [s]	51	51		25	59	30
g / C, Green / Cycle	0.42	0.42		0.21	0.50	0.25
(v / s)_i Volume / Saturation Flow Rate	0.31	0.46		0.22	0.36	0.27
s, saturation flow rate [veh/h]	1810	1615		1810	3618	3618
c, Capacity [veh/h]	765	682		377	1791	916
d1, Uniform Delay [s]	28.81	34.65		47.50	23.82	44.80
k, delay calibration	0.25	0.50		0.36	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	2.98	60.13		53.20	2.57	52.70
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	0.72	1.09		1.05	0.72	1.08
d, Delay for Lane Group [s/veh]	31.79	94.78		100.70	26.39	97.50
Lane Group LOS	C	F		F	C	F
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	13.12	29.93		16.66	14.46	20.07
50th-Percentile Queue Length [ft/ln]	328.06	748.22		416.39	361.53	501.83
95th-Percentile Queue Length [veh/ln]	19.06	41.30		23.99	20.70	28.65
95th-Percentile Queue Length [ft/ln]	476.58	1032.62		599.80	517.44	716.27

Movement, Approach, & Intersection Results

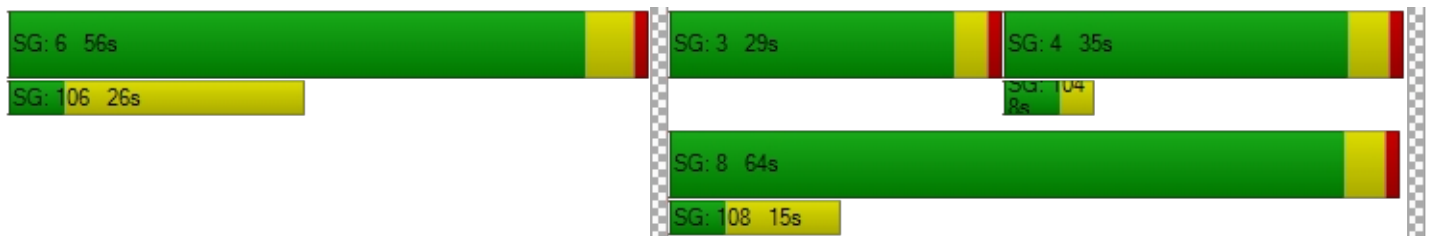
d_M, Delay for Movement [s/veh]	31.79	31.79	94.78	0.00	0.00	0.00	100.70	26.39	0.00	0.00	97.50	0.00
Movement LOS	C	C	F				F	C			F	
d_A, Approach Delay [s/veh]	67.86			0.00			43.80			64.46		
Approach LOS	E			A			D			E		
d_I, Intersection Delay [s/veh]	56.77											
Intersection LOS	E											
Intersection V/C	0.950											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.586	1.829	3.049	3.041
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	845	0	990	507
d_b, Bicycle Delay [s]	20.01	60.00	15.30	33.45
I_b,int, Bicycle LOS Score for Intersection	3.695	4.132	2.954	2.374
Bicycle LOS	D	D	C	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: Encanto Dr at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	42.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.756

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]	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	172	19	40	30	17	140	184	982	261	32	671	22
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	64	0	0	0	0	62	90	361	95	0	312	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]	246	20	42	32	18	210	285	1402	372	34	1023	23
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]	64	5	11	8	5	54	74	362	96	9	264	6
Total Analysis Volume [veh/h]	254	21	43	33	19	217	294	1448	384	35	1057	24
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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	10	0	0	10	0	7	10	0	7	10	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	3.0	0.0	3.0	3.0	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	42	0	0	42	0	42	67	0	11	36	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	21	0	0	17	0	0	14	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	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	4.20	4.20	4.20	4.00	4.00	4.00	4.00	4.00	4.00
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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	38	38	38	38	38	22	65	65	5	48	48
g / C, Green / Cycle	0.32	0.32	0.32	0.32	0.32	0.18	0.54	0.54	0.04	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.22	0.01	0.03	0.02	0.14	0.16	0.48	0.52	0.02	0.29	0.29
s, saturation flow rate [veh/h]	1162	1900	1615	1359	1635	1810	1900	1769	1810	1900	1885
c, Capacity [veh/h]	273	599	509	455	515	328	1031	960	73	764	758
d1, Uniform Delay [s]	50.81	28.47	28.92	30.94	32.90	48.02	24.21	26.00	56.33	30.03	30.03
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]	23.45	0.02	0.07	0.07	0.64	8.63	11.31	19.80	4.77	5.54	5.59
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	0.93	0.04	0.08	0.07	0.46	0.90	0.89	0.95	0.48	0.71	0.71
d, Delay for Lane Group [s/veh]	74.26	28.49	28.99	31.01	33.54	56.65	35.51	45.80	61.10	35.57	35.62
Lane Group LOS	E	C	C	C	C	E	D	D	E	D	D
Critical Lane Group	Yes	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	9.51	0.43	0.89	0.71	5.59	9.28	24.68	28.31	1.13	13.94	13.85
50th-Percentile Queue Length [ft/ln]	237.75	10.69	22.28	17.76	139.84	231.97	616.98	707.72	28.19	348.55	346.14
95th-Percentile Queue Length [veh/ln]	14.57	0.77	1.60	1.28	9.47	14.27	32.83	37.03	2.03	20.07	19.95
95th-Percentile Queue Length [ft/ln]	364.19	19.24	40.11	31.98	236.81	356.85	820.66	925.86	50.75	501.64	498.70

Movement, Approach, & Intersection Results

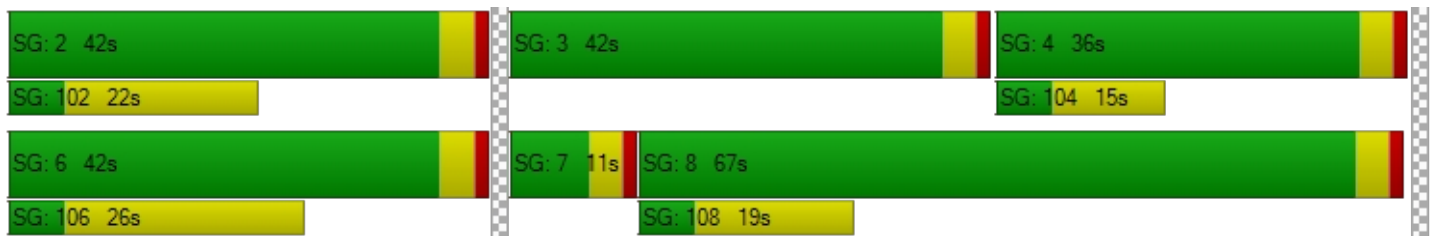
d_M, Delay for Movement [s/veh]	74.26	28.49	28.99	31.01	33.54	33.54	56.65	39.29	45.80	61.10	35.59	35.62
Movement LOS	E	C	C	C	C	C	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	65.11			33.23			42.87			36.40		
Approach LOS	E			C			D			D		
d_I, Intersection Delay [s/veh]	42.15											
Intersection LOS	D											
Intersection V/C	0.756											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.331	2.153	3.508	3.016
Crosswalk LOS	B	B	D	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	630	630	1050	533
d_b, Bicycle Delay [s]	28.15	28.15	13.54	32.27
I_b,int, Bicycle LOS Score for Intersection	2.084	2.003	3.314	2.480
Bicycle LOS	B	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 at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	22.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.510

Intersection Setup

Name	Sherman Rd			Sherman 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	26	1	8	32	3	18	12	907	23	14	622	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	62	0	0	0	0	124	133	139	90	0	126	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	1	8	34	3	143	146	1100	114	15	785	14
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]	24	0	2	9	1	39	39	297	31	4	212	4
Total Analysis Volume [veh/h]	97	1	9	37	3	154	157	1187	123	16	847	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 m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	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	3.6	0.0	3.0	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	12	31	0	26	45	0	38	52	0	11	25	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	10	0	0	14	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	2.6	0.0	2.0	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.20	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]	2.00	2.20	2.00	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	8	17	5	14	14	13	79	79	3	69	69
g / C, Green / Cycle	0.07	0.14	0.04	0.11	0.11	0.10	0.66	0.66	0.02	0.58	0.58
(v / s)_i Volume / Saturation Flow Rate	0.05	0.01	0.02	0.00	0.10	0.09	0.35	0.35	0.01	0.23	0.23
s, saturation flow rate [veh/h]	1810	1640	1810	1900	1615	1810	1900	1838	1810	1900	1888
c, Capacity [veh/h]	121	226	77	216	184	190	1245	1205	44	1092	1086
d1, Uniform Delay [s]	55.23	44.87	56.16	47.21	52.11	52.65	10.95	11.00	57.62	14.04	14.04
k, delay calibration	0.11	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]	11.68	0.08	4.61	0.03	9.74	8.83	1.63	1.72	4.93	1.08	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
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	0.80	0.04	0.48	0.01	0.84	0.83	0.53	0.54	0.36	0.40	0.40
d, Delay for Lane Group [s/veh]	66.91	44.95	60.78	47.24	61.85	61.47	12.58	12.72	62.55	15.12	15.12
Lane Group LOS	E	D	E	D	E	E	B	B	E	B	B
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.28	0.27	1.20	0.08	5.04	5.06	9.08	8.92	0.54	6.50	6.46
50th-Percentile Queue Length [ft/ln]	82.11	6.63	29.90	2.04	125.94	126.56	226.97	223.00	13.38	162.53	161.59
95th-Percentile Queue Length [veh/ln]	5.91	0.48	2.15	0.15	8.72	8.75	14.02	13.82	0.96	10.68	10.63
95th-Percentile Queue Length [ft/ln]	147.81	11.93	53.81	3.68	217.97	218.81	350.51	345.45	24.09	267.07	265.83

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	66.91	44.95	44.95	60.78	47.24	61.85	61.47	12.64	12.72	62.55	15.12	15.12
Movement LOS	E	D	D	E	D	E	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	64.86			61.42			17.88			15.98		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	22.34											
Intersection LOS	C											
Intersection V/C	0.510											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.036	2.236	2.899	2.868
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	447	680	790	340
d_b, Bicycle Delay [s]	36.19	26.14	21.96	41.33
I_b,int, Bicycle LOS Score for Intersection	1.736	1.880	2.770	2.284
Bicycle LOS	A	A	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX C-4

**INTERSECTION ANALYSIS
WORKSHEETS -
OPENING YEAR 2024 CUMULATIVE
PLUS PROJECT**

CADO Warehouse Project

Vistro File: K:\...\Menifee CADO_AM.vistro

Scenario 4 OY CP WP AM

Report File: K:\...4 OY CP WP AM.pdf

9/29/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Case Rd	Signalized	HCM 6th Edition	WB Left	0.430	37.1	D
2	Murrieta Rd at Case Rd	All-way stop	HCM 6th Edition	NB Left	0.309	10.0	B
3	Goetz Rd at Mapes Rd	Signalized	HCM 6th Edition	SB Left	0.485	33.9	C
4	I-215 SB Ramps/SR-74 at Bonnie Dr	Signalized	HCM 6th Edition	EB Left	0.507	13.8	B
5	I-215 NB Ramps at SR-74	Signalized	HCM 6th Edition	EB Left	0.422	13.6	B
6	Sherman Rd at SR-74	Signalized	HCM 6th Edition	EB Left	0.583	28.4	C
7	Goetz Rd at Fieldstone Dr	Signalized	HCM 6th Edition	WB Left	0.394	15.3	B
8	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.670	47.5	D
9	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.257	120.4	F
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.194	190.6	F
11	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	EB Right	0.929	119.3	F
12	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	24.596	10,000.0	F
13	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.755	48.0	D
14	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	SB Right	1.462	165.2	F
15	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	1.383	215.2	F
16	Trumble Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.842	49.8	D
17	Sherman Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	6.042	3,492.9	F
			HCM 6th				

18	Byers Rd at McLaughlin Rd	All-way stop	HCM 6th Edition	SB Left	0.032	6.9	A
19	Murrieta Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	WB Left	0.170	29.8	D
20	Murrieta Rd at Rouse Rd	Two-way stop	HCM 6th Edition	EB Left	1.222	176.7	F
21	Murrieta Rd at Chambers Ave	All-way stop	HCM 6th Edition	SB Thru	1.037	38.8	E
22	Murrieta Rd at McCall Blvd	Signalized	HCM 6th Edition	WB Right	0.591	38.0	D
23	Sun City Blvd at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.343	23.6	C
24	Bradley Rd at McCall Blvd	Signalized	HCM 6th Edition	SB Left	0.722	32.1	C
25	I-215 SB Ramps at McCall Blvd	Signalized	HCM 6th Edition	SB Right	0.899	53.3	D
26	I-215 NB Ramps at McCall Blvd	Signalized	HCM 6th Edition	EB Left	0.851	38.2	D
27	Encanto Dr at McCall Blvd	Signalized	HCM 6th Edition	NB Left	0.791	45.1	D
28	Sherman Rd at McCall Blvd	Signalized	HCM 6th Edition	NB Left	0.709	33.6	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: Goetz Rd at Case Rd

Control Type:	Signalized	Delay (sec / veh):	37.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.430

Intersection Setup

Name	Goetz Rd		Case Rd		Case 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	1	0	1	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]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Goetz Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	233	251	153	115	188	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	42	6	38	19	2	34
Site-Generated Trips [veh/h]	6	0	0	28	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]	295	272	200	169	201	178
Peak Hour Factor	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	82	76	56	47	56	50
Total Analysis Volume [veh/h]	330	304	223	189	225	199
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	10	0	7	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.7	0.0	5.0	0.0	3.0	5.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	66	0	25	0	29	54
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]	3.7	0.0	4.0	0.0	2.0	4.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.70	5.70	6.00	6.00	4.00	6.00
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]	3.70	3.70	4.00	4.00	2.00	4.00
g_i, Effective Green Time [s]	26	26	62	62	17	83
g / C, Green / Cycle	0.21	0.21	0.51	0.51	0.14	0.69
(v / s)_i Volume / Saturation Flow Rate	0.18	0.19	0.12	0.12	0.12	0.10
s, saturation flow rate [veh/h]	1810	1615	1900	1615	1810	1900
c, Capacity [veh/h]	387	345	977	830	256	1309
d1, Uniform Delay [s]	45.38	45.70	16.06	16.05	50.50	6.49
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]	5.42	7.34	0.54	0.64	9.37	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	0.85	0.88	0.23	0.23	0.88	0.15
d, Delay for Lane Group [s/veh]	50.80	53.05	16.60	16.69	59.87	6.73
Lane Group LOS	D	D	B	B	E	A
Critical Lane Group	No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	9.64	9.11	3.22	2.75	6.99	1.50
50th-Percentile Queue Length [ft/ln]	240.95	227.67	80.45	68.71	174.71	37.42
95th-Percentile Queue Length [veh/ln]	14.73	14.06	5.79	4.95	11.32	2.69
95th-Percentile Queue Length [ft/ln]	368.24	351.39	144.81	123.68	283.10	67.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	50.80	53.05	16.60	16.69	59.87	6.73
Movement LOS	D	D	B	B	E	A
d_A, Approach Delay [s/veh]	51.88		16.64		34.93	
Approach LOS	D		B		C	
d_I, Intersection Delay [s/veh]	37.11					
Intersection LOS	D					
Intersection V/C	0.430					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
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	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.523	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1005	317	800
d_b, Bicycle Delay [s]	14.85	42.50	21.60
I_b,int, Bicycle LOS Score for Intersection	1.560	2.239	2.259
Bicycle LOS	A	B	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Murrieta Rd at Case Rd**

Control Type:	All-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.309

Intersection Setup

Name	Murrieta Rd		Case Rd		Case 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	1	0	1	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]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Murrieta Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	123	18	177	35	13	140
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	16	0	14	14	0	29
Site-Generated Trips [veh/h]	0	0	0	0	17	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]	146	19	202	51	31	177
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]	38	5	53	13	8	46
Total Analysis Volume [veh/h]	152	20	211	53	32	185
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	585	726	683	788	619	678
Degree of Utilization, x	0.26	0.03	0.31	0.07	0.05	0.27

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.03	0.08	1.31	0.22	0.16	1.11
95th-Percentile Queue Length [ft]	25.84	2.12	32.83	5.40	4.08	27.67
Approach Delay [s/veh]	10.63		9.77		9.82	
Approach LOS	B		A		A	
Intersection Delay [s/veh]	10.02					
Intersection LOS	B					

**Intersection Level Of Service Report
Intersection 3: Goetz Rd at Mapes Rd**

Control Type:	Signalized	Delay (sec / veh):	33.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.485

Intersection Setup

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes 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	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes Rd		
Base Volume Input [veh/h]	268	278	14	3	141	165	146	0	187	0	0	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	1	48	0	0	21	0	0	0	4	0	0	0
Site-Generated Trips [veh/h]	3	6	0	0	28	0	0	0	14	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	288	349	15	3	198	175	155	0	216	0	0	1
Peak Hour Factor	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270	0.8270
Other Adjustment Factor	1.0000	1.0000	1.0000	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	106	5	1	60	53	47	0	65	0	0	0
Total Analysis Volume [veh/h]	348	422	18	4	239	212	187	0	261	0	0	1
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	0	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	0.0	3.2	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	52	62	0	11	21	0	20	47	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	0.0	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	17	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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	0.0	2.2	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	C	L	C	R	L	C	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.20	4.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.20	2.20
g_i, Effective Green Time [s]	25	84	84	1	59	59	14	22	3	3
g / C, Green / Cycle	0.21	0.70	0.70	0.01	0.49	0.49	0.12	0.18	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.19	0.12	0.12	0.00	0.13	0.13	0.10	0.16	0.00	0.00
s, saturation flow rate [veh/h]	1810	1900	1873	1810	1900	1615	1810	1615	823	1615
c, Capacity [veh/h]	382	1322	1303	14	935	795	215	292	54	46
d1, Uniform Delay [s]	46.22	6.28	6.28	59.21	17.69	17.80	51.98	48.05	0.00	56.65
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	8.53	0.27	0.28	10.94	0.66	0.82	10.36	9.46	0.00	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
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	0.91	0.17	0.17	0.29	0.26	0.27	0.87	0.89	0.00	0.02
d, Delay for Lane Group [s/veh]	54.75	6.56	6.56	70.15	18.35	18.62	62.33	57.51	0.00	56.84
Lane Group LOS	D	A	A	E	B	B	E	E	A	E
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.60	1.69	1.67	0.16	3.76	3.38	6.14	8.37	0.00	0.03
50th-Percentile Queue Length [ft/ln]	265.04	42.20	41.66	3.99	93.94	84.57	153.58	209.34	0.00	0.80
95th-Percentile Queue Length [veh/ln]	15.94	3.04	3.00	0.29	6.76	6.09	10.21	13.12	0.00	0.06
95th-Percentile Queue Length [ft/ln]	398.54	75.97	74.99	7.18	169.10	152.22	255.21	327.98	0.00	1.44

Movement, Approach, & Intersection Results

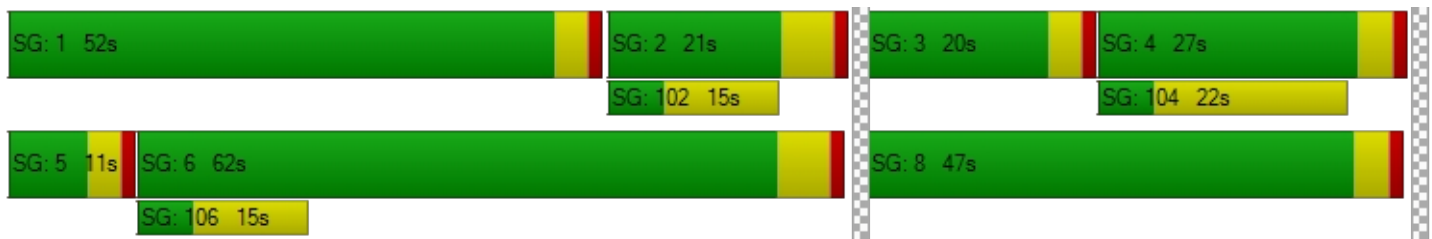
d_M, Delay for Movement [s/veh]	54.75	6.56	6.56	70.15	18.35	18.62	62.33	57.51	57.51	0.00	0.00	56.84
Movement LOS	D	A	A	E	B	B	E	E	E	A	A	E
d_A, Approach Delay [s/veh]	27.84			18.93			59.52			56.84		
Approach LOS	C			B			E			E		
d_I, Intersection Delay [s/veh]	33.85											
Intersection LOS	C											
Intersection V/C	0.485											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			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]	0.00			51.34			51.34			51.34		
I_p,int, Pedestrian LOS Score for Intersectio	0.000			2.661			2.283			1.963		
Crosswalk LOS	F			B			B			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	938			255			713			380		
d_b, Bicycle Delay [s]	16.91			45.68			24.83			39.37		
I_b,int, Bicycle LOS Score for Intersection	2.210			2.310			2.299			1.561		
Bicycle LOS	B			B			B			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: I-215 SB Ramps/SR-74 at Bonnie Dr

Control Type:	Signalized	Delay (sec / veh):	13.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.507

Intersection Setup

Name	SR-74		I-215 SB Ramps		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]	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]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	SR-74		I-215 SB Ramps		Bonnie Dr	
Base Volume Input [veh/h]	184	385	486	18	29	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	24	172	155	9	0	16
Site-Generated Trips [veh/h]	0	24	0	17	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]	219	604	670	45	31	160
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	57	156	173	12	8	41
Total Analysis Volume [veh/h]	226	624	692	46	32	165
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protected	Permissive	Overlap	Permissive	Permissive	Unsignalized
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups			2			
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	10	10	0	7	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	4.3	4.3	0.0	4.3	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	48	95	47	0	25	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	14	0
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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	0.0	3.3	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L
C, Cycle Length [s]	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	3.30	3.30
g_i, Effective Green Time [s]	17	105	84	84	5
g / C, Green / Cycle	0.14	0.87	0.70	0.70	0.04
(v / s)_i Volume / Saturation Flow Rate	0.12	0.33	0.36	0.03	0.02
s, saturation flow rate [veh/h]	1810	1900	1900	1615	1810
c, Capacity [veh/h]	260	1658	1321	1123	71
d1, Uniform Delay [s]	50.29	1.45	8.75	5.73	56.38
k, delay calibration	0.11	0.50	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.71	0.65	1.49	0.07	4.41
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	0.87	0.38	0.52	0.04	0.45
d, Delay for Lane Group [s/veh]	59.00	2.11	10.24	5.79	60.79
Lane Group LOS	E	A	B	A	E
Critical Lane Group	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	7.08	0.92	7.68	0.33	1.01
50th-Percentile Queue Length [ft/ln]	177.09	23.12	192.05	8.29	25.37
95th-Percentile Queue Length [veh/ln]	11.45	1.66	12.23	0.60	1.83
95th-Percentile Queue Length [ft/ln]	286.21	41.61	305.69	14.93	45.66

Movement, Approach, & Intersection Results

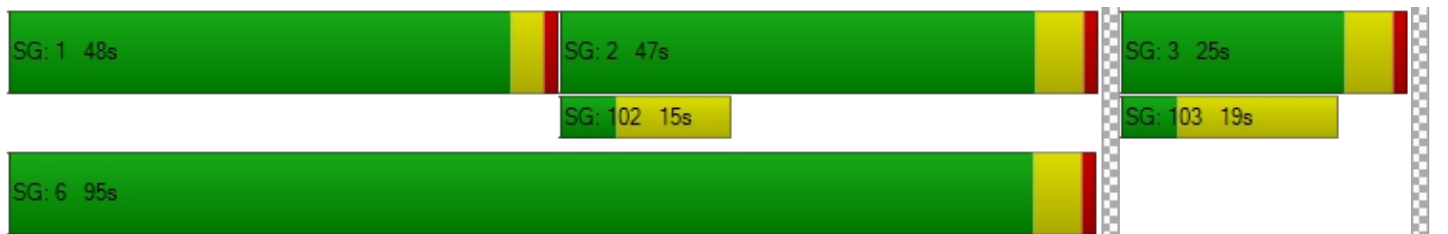
d_M, Delay for Movement [s/veh]	59.00	2.11	10.24	5.79	60.79	0.00
Movement LOS	E	A	B	A	E	
d_A, Approach Delay [s/veh]	17.24		9.96		10.13	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	13.78					
Intersection LOS	B					
Intersection V/C	0.507					

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 Intersectio	2.710	2.635	2.104
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1495	695	328
d_b, Bicycle Delay [s]	3.83	25.55	41.92
I_b,int, Bicycle LOS Score for Intersection	2.962	2.777	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 5: I-215 NB Ramps at SR-74**

Control Type:	Signalized	Delay (sec / veh):	13.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.422

Intersection Setup

Name	I-215 NB Ramps		SR-74		SR-74	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB Ramps		SR-74		SR-74	
Base Volume Input [veh/h]	131	11	8	629	531	676
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	138	0	0	171	196	172
Site-Generated Trips [veh/h]	3	0	0	0	24	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]	280	12	8	838	783	889
Peak Hour Factor	0.9330	0.9330	0.9330	0.9330	0.9330	0.9330
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	75	3	2	225	210	238
Total Analysis Volume [veh/h]	300	13	9	898	839	953
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protected	Permissive	Permissive	Unsignalized
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	4.3	0.0	3.0	5.0	5.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	53	0	11	67	56	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	17	0	0	10	7	0
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	0.0
I2, Clearance Lost Time [s]	3.3	0.0	2.0	4.0	4.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C
C, Cycle Length [s]	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	2.00	4.00	4.00
g_i, Effective Green Time [s]	23	2	86	80
g / C, Green / Cycle	0.19	0.02	0.71	0.66
(v / s)_i Volume / Saturation Flow Rate	0.17	0.00	0.25	0.23
s, saturation flow rate [veh/h]	1801	1810	3618	3618
c, Capacity [veh/h]	348	29	2578	2400
d1, Uniform Delay [s]	47.27	58.41	6.59	8.85
k, delay calibration	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.43	6.13	0.37	0.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.31	0.35	0.35
d, Delay for Lane Group [s/veh]	55.70	64.54	6.97	9.25
Lane Group LOS	E	E	A	A
Critical Lane Group	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	9.66	0.31	3.44	4.05
50th-Percentile Queue Length [ft/ln]	241.46	7.73	86.12	101.26
95th-Percentile Queue Length [veh/ln]	14.76	0.56	6.20	7.29
95th-Percentile Queue Length [ft/ln]	368.88	13.91	155.02	182.27

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.70	55.70	64.54	6.97	9.25	0.00
Movement LOS	E	E	E	A	A	
d_A, Approach Delay [s/veh]	55.70		7.54		4.49	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	13.62					
Intersection LOS	B					
Intersection V/C	0.422					

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 Intersectio	1.966	2.944	3.075
Crosswalk LOS	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	795	1017	833
d_b, Bicycle Delay [s]	21.78	14.50	20.42
I_b,int, Bicycle LOS Score for Intersection	2.076	2.308	2.252
Bicycle LOS	B	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Sherman Rd at SR-74**

Control Type:	Signalized	Delay (sec / veh):	28.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.583

Intersection Setup

Name	Sherman Rd			Sherman 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	1	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	40.00			40.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	46	1	250	0	4	1	5	623	15	239	860	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	9	0	4	0	0	0	0	138	33	12	285	0
Site-Generated Trips [veh/h]	2	0	0	0	0	0	0	3	10	0	24	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	60	1	269	0	4	1	5	801	59	265	1221	1
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	72	0	1	0	1	214	16	71	327	0
Total Analysis Volume [veh/h]	64	1	288	0	4	1	5	858	63	284	1307	1
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	5.0	0.0	3.0	5.0	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	36	0	0	27	0	11	21	0	36	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	21	0	0	17	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			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	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	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	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	24	24	2	1	54	54	21	74	74
g / C, Green / Cycle	0.20	0.20	0.01	0.01	0.45	0.45	0.17	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.04	0.18	0.00	0.00	0.25	0.25	0.16	0.34	0.34
s, saturation flow rate [veh/h]	1811	1615	1835	1810	1900	1855	1810	1900	1899
c, Capacity [veh/h]	359	320	25	17	852	832	316	1167	1166
d1, Uniform Delay [s]	39.99	46.93	58.55	59.07	24.17	24.17	48.50	13.63	13.63
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.15	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]	0.24	9.02	3.95	9.86	2.52	2.58	12.08	1.95	1.95
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	0.18	0.90	0.20	0.30	0.55	0.55	0.90	0.56	0.56
d, Delay for Lane Group [s/veh]	40.23	55.95	62.51	68.93	26.68	26.74	60.57	15.58	15.58
Lane Group LOS	D	E	E	E	C	C	E	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.60	9.00	0.18	0.19	9.45	9.24	8.97	9.44	9.44
50th-Percentile Queue Length [ft/ln]	40.01	224.97	4.38	4.77	236.34	231.07	224.37	235.96	235.94
95th-Percentile Queue Length [veh/ln]	2.88	13.92	0.32	0.34	14.50	14.23	13.89	14.48	14.48
95th-Percentile Queue Length [ft/ln]	72.02	347.97	7.89	8.59	362.40	355.72	347.20	361.92	361.90

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	40.23	40.23	55.95	62.51	62.51	62.51	68.93	26.71	26.74	60.57	15.58	15.58
Movement LOS	D	D	E	E	E	E	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	53.05			62.51			26.94			23.61		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	28.36											
Intersection LOS	C											
Intersection V/C	0.583											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.261	1.738	3.137	3.284
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	518	368	250	667
d_b, Bicycle Delay [s]	32.93	39.94	45.94	26.67
I_b,int, Bicycle LOS Score for Intersection	2.142	1.568	2.324	2.873
Bicycle LOS	B	A	B	C

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Goetz Rd at Fieldstone Dr

Control Type:	Signalized	Delay (sec / veh):	15.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.394

Intersection Setup

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Base Volume Input [veh/h]	18	516	7	12	276	17	68	4	60	3	0	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	49	0	0	25	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	0	0	42	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]	19	605	7	13	360	18	72	4	64	3	0	16
Peak Hour Factor	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530	0.9530
Other Adjustment Factor	1.0000	1.0000	1.0000	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	159	2	3	94	5	19	1	17	1	0	4
Total Analysis Volume [veh/h]	20	635	7	14	378	19	76	4	67	3	0	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 m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	3.0	3.2	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	39	0	11	39	0	39	50	0	20	31	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	0	0	0	0	0	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	24	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	2.0	2.2	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.00	4.20	4.20
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	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.00	2.20	2.20
g_i, Effective Green Time [s]	3	89	89	3	88	88	7	10	1	4	4
g / C, Green / Cycle	0.03	0.74	0.74	0.02	0.73	0.73	0.05	0.09	0.01	0.04	0.04
(v / s)_i Volume / Saturation Flow Rate	0.01	0.33	0.00	0.01	0.07	0.07	0.04	0.04	0.00	0.00	0.01
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1854	1810	1629	1810	1900	1615
c, Capacity [veh/h]	52	1400	1190	40	2642	1354	100	140	11	70	59
d1, Uniform Delay [s]	57.26	6.24	4.17	57.85	4.71	4.71	55.89	52.40	59.37	0.00	56.26
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
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]	4.70	1.06	0.01	5.27	0.07	0.15	11.12	2.81	12.90	0.00	2.60
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	0.39	0.45	0.01	0.35	0.10	0.10	0.76	0.51	0.27	0.00	0.29
d, Delay for Lane Group [s/veh]	61.96	7.30	4.18	63.12	4.78	4.86	67.01	55.22	72.27	0.00	58.86
Lane Group LOS	E	A	A	E	A	A	E	E	E	A	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.65	5.14	0.04	0.46	0.76	0.81	2.58	2.16	0.13	0.00	0.55
50th-Percentile Queue Length [ft/ln]	16.14	128.40	0.94	11.61	18.90	20.31	64.49	53.96	3.25	0.00	13.63
95th-Percentile Queue Length [veh/ln]	1.16	8.85	0.07	0.84	1.36	1.46	4.64	3.88	0.23	0.00	0.98
95th-Percentile Queue Length [ft/ln]	29.05	221.31	1.70	20.90	34.02	36.57	116.08	97.12	5.86	0.00	24.54

Movement, Approach, & Intersection Results

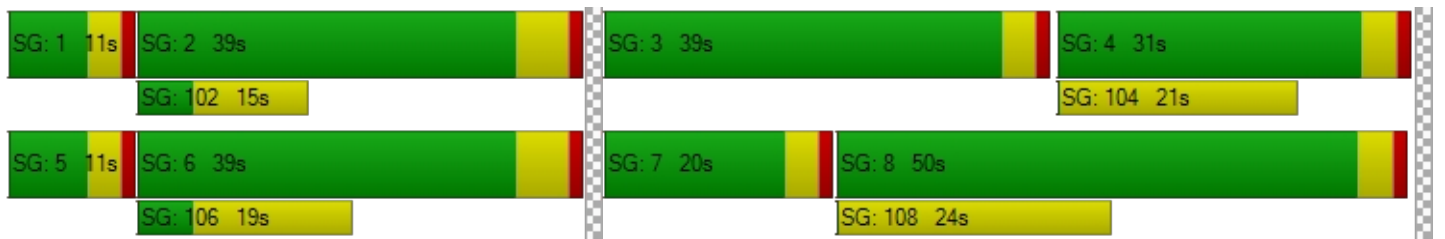
d_M, Delay for Movement [s/veh]	61.96	7.30	4.18	63.12	4.80	4.86	67.01	55.22	55.22	72.27	0.00	58.86
Movement LOS	E	A	A	E	A	A	E	E	E	E	A	E
d_A, Approach Delay [s/veh]	8.92			6.79			61.32			60.88		
Approach LOS	A			A			E			E		
d_I, Intersection Delay [s/veh]	15.27											
Intersection LOS	B											
Intersection V/C	0.394											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0			4.0			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]	56.07			56.07			51.34			51.34		
I_p,int, Pedestrian LOS Score for Intersectio	2.870			2.780			2.016			2.157		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	555			555			763			447		
d_b, Bicycle Delay [s]	31.32			31.32			22.94			36.19		
I_b,int, Bicycle LOS Score for Intersection	2.652			1.786			1.802			1.593		
Bicycle LOS	B			A			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 8: Goetz Rd at Ethanac Rd**

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):	0.670

Intersection Setup

Name	Goetz Rd			Goetz 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	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	2	229	371	224	110	8	16	88	6	167	70	271
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	17	17	22	8	0	0	1	0	51	0	33
Site-Generated Trips [veh/h]	0	0	14	42	0	0	0	5	0	3	1	9
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	2	260	424	301	125	8	17	99	6	231	75	329
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	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	68	111	79	33	2	4	26	2	60	20	86
Total Analysis Volume [veh/h]	2	271	443	314	130	8	18	103	6	241	78	343
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	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]	45	47	0	34	36	0	11	28	0	11	28	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	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	3.7	0.0	2.0	3.7	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	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	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	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	0	36	36	23	58	58	3	24	24	18	39	39
g / C, Green / Cycle	0.00	0.30	0.30	0.19	0.48	0.48	0.03	0.20	0.20	0.15	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.00	0.14	0.27	0.17	0.04	0.00	0.01	0.03	0.00	0.13	0.04	0.21
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	1900	1615
c, Capacity [veh/h]	7	564	479	345	1748	780	48	738	329	267	617	525
d1, Uniform Delay [s]	59.61	34.62	40.90	47.58	16.62	16.10	57.45	39.14	38.17	50.33	28.51	34.72
k, delay calibration	0.11	0.11	0.21	0.23	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	1.00
d2, Incremental Delay [s]	21.16	0.64	13.82	17.00	0.02	0.01	4.87	0.40	0.10	10.96	0.42	6.23
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	0.29	0.48	0.92	0.91	0.07	0.01	0.38	0.14	0.02	0.90	0.13	0.65
d, Delay for Lane Group [s/veh]	80.76	35.26	54.73	64.58	16.64	16.11	62.33	39.53	38.27	61.29	28.94	40.94
Lane Group LOS	F	D	D	E	B	B	E	D	D	E	C	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.10	6.31	13.84	10.44	0.91	0.11	0.59	1.25	0.15	7.65	1.59	9.06
50th-Percentile Queue Length [ft/ln]	2.49	157.79	345.91	260.97	22.75	2.73	14.64	31.18	3.66	191.34	39.85	226.38
95th-Percentile Queue Length [veh/ln]	0.18	10.43	19.94	15.74	1.64	0.20	1.05	2.25	0.26	12.19	2.87	13.99
95th-Percentile Queue Length [ft/ln]	4.49	260.79	498.42	393.44	40.95	4.91	26.35	56.13	6.59	304.77	71.73	349.76

Movement, Approach, & Intersection Results

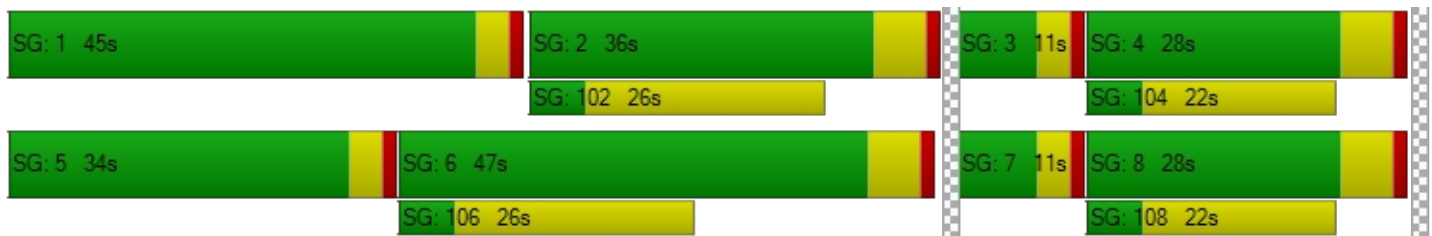
d_M, Delay for Movement [s/veh]	80.76	35.26	54.73	64.58	16.64	16.11	62.33	39.53	38.27	61.29	28.94	40.94
Movement LOS	F	D	D	E	B	B	E	D	D	E	C	D
d_A, Approach Delay [s/veh]	47.43			49.93			42.70			46.94		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	47.53											
Intersection LOS	D											
Intersection V/C	0.670											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.670	2.667	2.526	2.880
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	688	505	372	372
d_b, Bicycle Delay [s]	25.81	33.53	39.77	39.77
I_b,int, Bicycle LOS Score for Intersection	2.741	1.933	1.664	2.106
Bicycle LOS	B	A	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 9: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	120.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.257

Intersection Setup

Name	Wheat St		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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	0	689	0	0	510
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	15	316	1	0	179
Site-Generated Trips [veh/h]	9	76	6	55	234	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	91	1052	56	234	724
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	23	269	14	60	185
Total Analysis Volume [veh/h]	9	93	1078	57	240	742
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	0.26	0.20	0.01	0.00	0.39	0.01
d_M, Delay for Movement [s/veh]	120.38	25.31	0.00	0.00	14.35	0.00
Movement LOS	F	D	A	A	B	A
95th-Percentile Queue Length [veh/ln]	2.18	2.18	0.00	0.00	1.81	0.00
95th-Percentile Queue Length [ft/ln]	54.59	54.59	0.00	0.00	45.29	0.00
d_A, Approach Delay [s/veh]	33.70		0.00		3.51	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	3.10					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	190.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.194

Intersection Setup

Name	Byers 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	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		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	6	692	2	6	512
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	89	331	0	69	179
Site-Generated Trips [veh/h]	4	31	76	6	194	234
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]	4	126	1141	8	269	956
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	32	292	2	69	245
Total Analysis Volume [veh/h]	4	129	1169	8	276	980
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	0.19	0.28	0.01	0.00	0.46	0.01
d_M, Delay for Movement [s/veh]	190.63	24.06	0.00	0.00	15.99	0.00
Movement LOS	F	C	A	A	C	A
95th-Percentile Queue Length [veh/ln]	2.41	2.41	0.00	0.00	2.41	0.00
95th-Percentile Queue Length [ft/ln]	60.24	60.24	0.00	0.00	60.20	0.00
d_A, Approach Delay [s/veh]	29.07		0.00		3.51	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	3.23					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 11: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	119.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.929

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	0	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	97	90	162	67	34	9	6	665	51	78	357	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	24	9	263	11	3	0	0	369	50	92	224	7
Site-Generated Trips [veh/h]	27	0	0	0	0	17	0	96	11	0	385	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	154	104	435	82	39	27	6	1170	115	175	987	58
Peak Hour Factor	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640	0.9640
Other Adjustment Factor	1.0000	1.0000	1.0000	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	27	113	21	10	7	2	303	30	45	256	15
Total Analysis Volume [veh/h]	160	108	451	85	40	28	6	1214	119	182	1024	60
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	4.7	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	35	0	0	28	0	11	45	0	12	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	3	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	7	0	0	14	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	3.7	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	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	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
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	42	10	10	10	1	33	33	14	46	46
g / C, Green / Cycle	0.35	0.08	0.08	0.08	0.01	0.28	0.28	0.12	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.42	0.05	0.02	0.02	0.00	0.36	0.36	0.10	0.29	0.29
s, saturation flow rate [veh/h]	1694	1810	1900	1615	1810	1900	1841	1810	1900	1863
c, Capacity [veh/h]	597	150	157	134	19	527	510	214	731	717
d1, Uniform Delay [s]	38.85	52.96	51.56	51.36	58.93	43.37	43.37	51.86	31.87	31.89
k, delay calibration	0.50	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]	107.22	3.34	0.84	0.77	9.00	141.15	143.92	9.08	6.88	7.05
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	1.20	0.57	0.25	0.21	0.31	1.28	1.29	0.85	0.75	0.75
d, Delay for Lane Group [s/veh]	146.07	56.30	52.39	52.13	67.93	184.52	187.29	60.94	38.75	38.94
Lane Group LOS	F	E	D	D	E	F	F	E	D	D
Critical Lane Group	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	34.37	2.55	1.14	0.80	0.22	35.46	34.75	5.72	14.24	14.03
50th-Percentile Queue Length [ft/ln]	859.30	63.69	28.51	19.95	5.59	886.46	868.84	142.99	356.08	350.83
95th-Percentile Queue Length [veh/ln]	49.51	4.59	2.05	1.44	0.40	51.99	51.15	9.64	20.43	20.18
95th-Percentile Queue Length [ft/ln]	1237.85	114.65	51.31	35.91	10.06	1299.80	1278.83	241.04	510.81	504.42

Movement, Approach, & Intersection Results

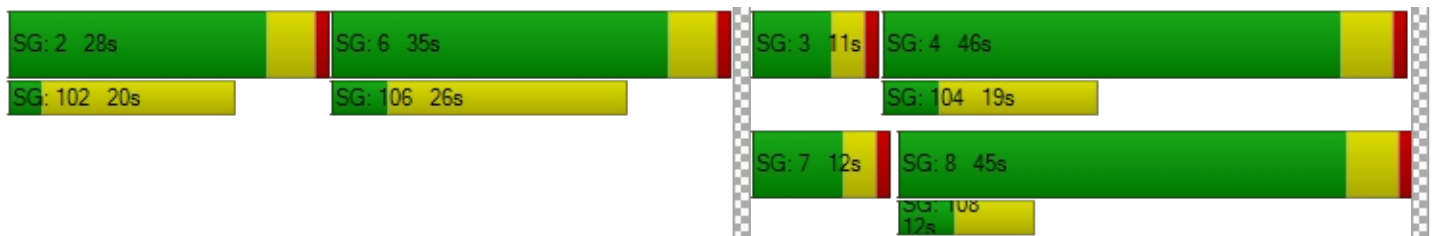
d_M, Delay for Movement [s/veh]	146.07	146.07	146.07	56.30	52.39	52.13	67.93	185.75	187.29	60.94	38.84	38.94
Movement LOS	F	F	F	E	D	D	E	F	F	E	D	D
d_A, Approach Delay [s/veh]	146.07			54.51			185.36			42.02		
Approach LOS	F			D			F			D		
d_I, Intersection Delay [s/veh]	119.29											
Intersection LOS	F											
Intersection V/C	0.929											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	7.0	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	53.20	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.505	2.266	3.146	3.285
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	495	378	655	672
d_b, Bicycle Delay [s]	33.98	39.45	27.14	26.47
I_b,int, Bicycle LOS Score for Intersection	2.746	1.812	2.664	2.604
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Evans Rd at Ethanac 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):	24.596

Intersection Setup

Name	Evans 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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	2	854	1	0	549
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	30	181	608	30	301	293
Site-Generated Trips [veh/h]	0	0	96	0	0	385
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]	30	183	1609	31	301	1260
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	8	49	427	8	80	334
Total Analysis Volume [veh/h]	32	194	1708	33	320	1338
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	24.60	0.65	0.02	0.00	0.87	0.01
d_M, Delay for Movement [s/veh]	10000.00	10000.00	0.00	0.00	54.89	0.00
Movement LOS	F	F	A	A	F	A
95th-Percentile Queue Length [veh/ln]	29.96	29.96	0.00	0.00	8.45	0.00
95th-Percentile Queue Length [ft/ln]	748.99	748.99	0.00	0.00	211.25	0.00
d_A, Approach Delay [s/veh]	10000.00		0.00		10.59	
Approach LOS	F		A		B	
d_I, Intersection Delay [s/veh]	628.29					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	48.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
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		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	29	6	85	324	0	60	151	608	24	70	475	350
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	68	0	0	9	0	721	0	43	543	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	96	0	0	385	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	6	158	343	0	73	160	1461	25	117	1432	371
Peak Hour Factor	0.9270	0.9270	0.9270	0.9270	1.0000	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]	8	2	43	93	0	20	43	394	7	32	386	100
Total Analysis Volume [veh/h]	33	6	170	370	0	79	173	1576	27	126	1545	400
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permiss	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	5	0	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	7	0	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	30	0	0	30	30	0	30	30	0
Amber [s]	0.0	5.0	0.0	5.0	0.0	0.0	3.0	4.7	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	32	0	32	0	0	11	45	0	11	45	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	14	0	14	0	0	0	7	0	0	17	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	4.0	0.0	4.0	0.0	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	L	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	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]	4.00	4.00	4.00	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	17	15	15	14	55	55	10	52	52
g / C, Green / Cycle	0.14	0.13	0.13	0.11	0.46	0.46	0.09	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.13	0.11	0.03	0.10	0.44	0.02	0.07	0.43	0.25
s, saturation flow rate [veh/h]	1650	3514	2859	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	239	449	366	202	1670	745	154	1573	702
d1, Uniform Delay [s]	50.26	51.00	46.93	52.34	30.82	17.69	53.99	33.46	25.48
k, delay calibration	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
d2, Incremental Delay [s]	9.76	3.84	0.29	9.85	12.21	0.09	10.18	18.85	3.34
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	0.88	0.82	0.22	0.86	0.94	0.04	0.82	0.98	0.57
d, Delay for Lane Group [s/veh]	60.02	54.85	47.22	62.19	43.03	17.78	64.17	52.31	28.81
Lane Group LOS	E	D	D	E	D	B	E	D	C
Critical Lane Group	Yes	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	6.51	5.42	1.03	5.49	22.59	0.41	4.05	24.43	8.66
50th-Percentile Queue Length [ft/ln]	162.72	135.51	25.82	137.16	564.87	10.19	101.27	610.79	216.51
95th-Percentile Queue Length [veh/ln]	10.69	9.24	1.86	9.33	30.39	0.73	7.29	32.54	13.49
95th-Percentile Queue Length [ft/ln]	267.32	230.97	46.47	233.20	759.76	18.33	182.28	813.45	337.17

Movement, Approach, & Intersection Results

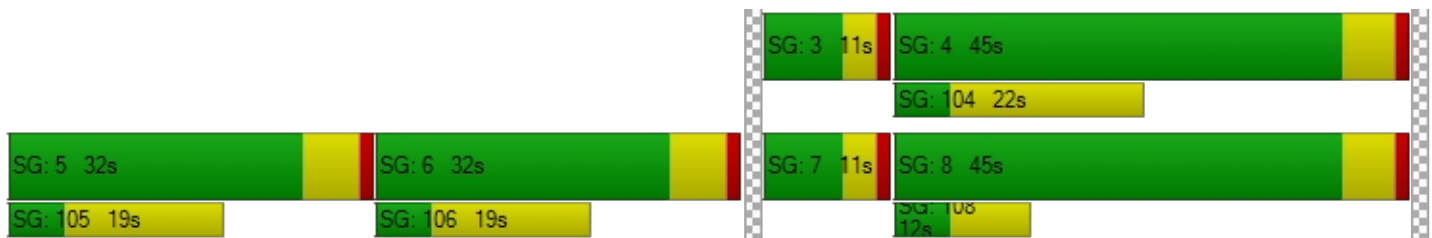
d_M, Delay for Movement [s/veh]	60.02	60.02	60.02	54.85	0.00	47.22	62.19	43.03	17.78	64.17	52.31	28.81
Movement LOS	E	E	E	D		D	E	D	B	E	D	C
d_A, Approach Delay [s/veh]	60.02			53.50			44.51			48.49		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	47.96											
Intersection LOS	D											
Intersection V/C	0.755											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.054	2.683	3.398	3.602
Crosswalk LOS	B	B	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	433	655	655
d_b, Bicycle Delay [s]	36.82	36.82	27.14	27.14
I_b,int, Bicycle LOS Score for Intersection	1.904	1.560	3.025	3.268
Bicycle LOS	A	A	C	C

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 14: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	165.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.462

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			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 On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	124	0	245	0	722	499	105	703	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	282	0	310	0	427	375	94	279	0
Site-Generated Trips [veh/h]	0	0	0	0	0	198	0	60	36	0	187	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	413	0	768	0	1252	940	205	1211	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9850	0.9850	0.9850	1.0000	0.9850	0.9850	0.9850	0.9850	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	105	0	195	0	318	239	52	307	0
Total Analysis Volume [veh/h]	0	0	0	419	0	780	0	1271	954	208	1229	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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	10	0	0	10	0	7	10	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	38	0	0	67	0	15	82	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	14	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	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]		120	120	120	120	120	120
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]		33	33	56	56	16	76
g / C, Green / Cycle		0.27	0.27	0.47	0.47	0.13	0.64
(v / s)_i Volume / Saturation Flow Rate		0.23	0.48	0.67	0.59	0.11	0.34
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		493	440	894	760	239	2300
d1, Uniform Delay [s]		41.32	43.65	31.77	31.77	51.07	12.05
k, delay calibration		0.32	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]		11.35	356.71	196.40	125.66	9.43	0.89
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	1.77	1.42	1.26	0.87	0.53
d, Delay for Lane Group [s/veh]		52.68	400.36	228.17	157.43	60.50	12.95
Lane Group LOS		D	F	F	F	E	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		12.83	56.12	72.19	46.43	6.53	8.05
50th-Percentile Queue Length [ft/ln]		320.84	1403.00	1804.72	1160.76	163.25	201.33
95th-Percentile Queue Length [veh/ln]		18.71	87.83	107.79	67.39	10.72	12.71
95th-Percentile Queue Length [ft/ln]		467.72	2195.67	2694.71	1684.76	268.02	317.68

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	52.68	52.68	400.36	0.00	228.17	157.43	60.50	12.95	0.00
Movement LOS				D	D	F		F	F	E	B	
d_A, Approach Delay [s/veh]	0.00			278.86			197.84			19.83		
Approach LOS	A			F			F			B		
d_I, Intersection Delay [s/veh]	165.20											
Intersection LOS	F											
Intersection V/C	1.462											

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	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.540	0.000	3.417
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	545	1022	1272
d_b, Bicycle Delay [s]	60.00	31.76	14.36	7.96
I_b,int, Bicycle LOS Score for Intersection	4.132	3.538	5.231	2.745
Bicycle LOS	D	D	F	B

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	215.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.383

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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]	45.00			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 Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	351	0	135	0	0	0	270	580	0	0	456	143
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
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]	254	0	275	0	0	0	397	312	0	0	119	94
Site-Generated Trips [veh/h]	158	0	0	0	0	0	52	8	0	0	29	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	784	0	418	0	0	0	735	935	0	0	631	246
Peak Hour Factor	0.9650	0.9650	0.9650	1.0000	1.0000	1.0000	0.9650	0.9650	1.0000	1.0000	0.9650	0.9650
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	203	0	108	0	0	0	190	242	0	0	163	64
Total Analysis Volume [veh/h]	812	0	433	0	0	0	762	969	0	0	654	255
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

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	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	36	0	0	0	0	37	84	0	0	47	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	10	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	3.3	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]	5.30	5.30		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]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	31	31		33	78	41
g / C, Green / Cycle	0.26	0.26		0.28	0.65	0.34
(v / s)_i Volume / Saturation Flow Rate	0.45	0.27		0.42	0.51	0.50
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1810
c, Capacity [veh/h]	463	413		498	1240	623
d1, Uniform Delay [s]	44.65	44.65		43.50	14.79	39.35
k, delay calibration	0.50	0.46		0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	348.12	55.50		249.09	4.95	215.31
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	1.75	1.05		1.53	0.78	1.46
d, Delay for Lane Group [s/veh]	392.77	100.15		292.59	19.73	254.66
Lane Group LOS	F	F		F	B	F
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	57.98	18.16		48.41	17.11	54.43
50th-Percentile Queue Length [ft/ln]	1449.50	454.06		1210.37	427.75	1360.78
95th-Percentile Queue Length [veh/ln]	89.92	25.87		73.81	23.89	82.06
95th-Percentile Queue Length [ft/ln]	2247.99	646.70		1845.18	597.34	2051.62

Movement, Approach, & Intersection Results

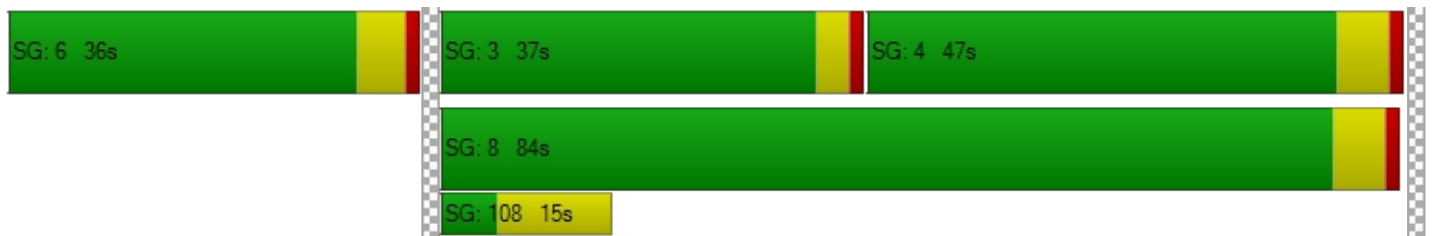
d_M, Delay for Movement [s/veh]	392.77	392.77	100.15	0.00	0.00	0.00	292.59	19.73	0.00	0.00	254.66	254.66
Movement LOS	F	F	F				F	B			F	F
d_A, Approach Delay [s/veh]	291.00			0.00			139.85			254.66		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	215.15											
Intersection LOS	F											
Intersection V/C	1.383											

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 Intersectio	2.562	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]	512	0	1305	688
d_b, Bicycle Delay [s]	33.23	60.00	7.25	25.81
I_b,int, Bicycle LOS Score for Intersection	3.614	4.132	4.416	3.059
Bicycle LOS	D	D	E	C

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Trumble Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	49.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.842

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	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	99	9	34	8	9	109	87	558	34	61	341	11
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	21	0	0	0	0	21	60	467	60	0	165	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	8	0	0	29	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	126	10	36	8	10	137	152	1066	96	65	555	12
Peak Hour Factor	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980	0.8980
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	3	10	2	3	38	42	297	27	18	155	3
Total Analysis Volume [veh/h]	140	11	40	9	11	153	169	1187	107	72	618	13
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	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	26	0	17	42	0	35	52	0	11	28	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	14	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	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	4.00	4.00	4.00	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	2.00	2.00	2.00	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	9	21	2	14	13	73	73	6	66
g / C, Green / Cycle	0.08	0.18	0.02	0.12	0.11	0.61	0.61	0.05	0.55
(v / s)_i Volume / Saturation Flow Rate	0.08	0.03	0.00	0.10	0.09	0.62	0.07	0.04	0.33
s, saturation flow rate [veh/h]	1810	1669	1810	1631	1810	1900	1615	1810	1893
c, Capacity [veh/h]	136	297	29	194	202	1151	978	96	1036
d1, Uniform Delay [s]	55.50	41.83	58.40	51.81	52.25	23.66	10.00	56.03	18.45
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]	44.26	0.27	6.08	9.74	8.89	34.98	0.23	11.04	2.67
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	1.03	0.17	0.31	0.85	0.84	1.03	0.11	0.75	0.61
d, Delay for Lane Group [s/veh]	99.76	42.11	64.49	61.55	61.14	58.65	10.22	67.07	21.12
Lane Group LOS	F	D	E	E	E	F	B	E	C
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.77	1.31	0.32	5.36	5.31	38.43	1.13	2.38	11.44
50th-Percentile Queue Length [ft/ln]	144.23	32.81	7.98	133.91	132.85	960.64	28.29	59.42	285.97
95th-Percentile Queue Length [veh/ln]	9.81	2.36	0.57	9.15	9.09	49.94	2.04	4.28	16.99
95th-Percentile Queue Length [ft/ln]	245.25	59.06	14.36	228.80	227.37	1248.51	50.92	106.96	424.64

Movement, Approach, & Intersection Results

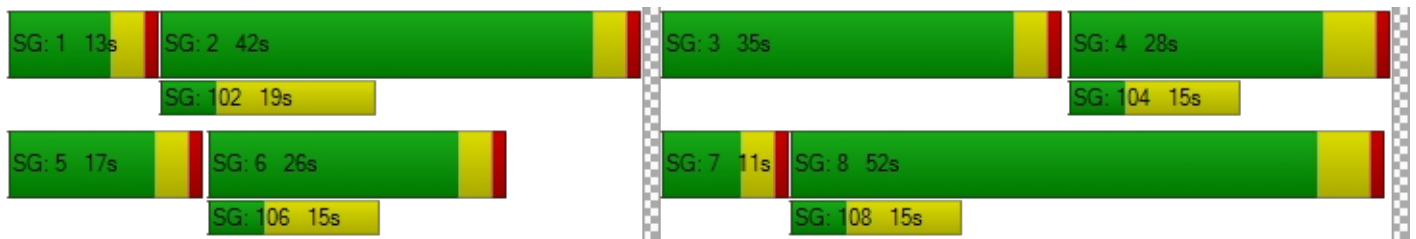
d_M, Delay for Movement [s/veh]	99.76	42.11	42.11	64.49	61.55	61.55	61.14	58.65	10.22	67.07	21.12	21.12
Movement LOS	F	D	D	E	E	E	E	F	B	E	C	C
d_A, Approach Delay [s/veh]	84.37			61.70			55.40			25.82		
Approach LOS	F			E			E			C		
d_I, Intersection Delay [s/veh]	49.80											
Intersection LOS	D											
Intersection V/C	0.842											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.079	2.074	3.111	3.006
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	367	633	772	372
d_b, Bicycle Delay [s]	40.02	28.02	22.63	39.77
I_b,int, Bicycle LOS Score for Intersection	1.875	1.845	3.974	2.720
Bicycle LOS	A	A	D	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Sherman Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	3,492.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	6.042

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews 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	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews Rd		
Base Volume Input [veh/h]	4	3	2	5	7	196	229	222	14	0	246	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	22	0	0	30	0	3	1	526	60	0	182	8
Site-Generated Trips [veh/h]	5	0	0	0	0	10	2	5	1	0	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
Total Hourly Volume [veh/h]	31	3	2	35	7	221	246	766	76	0	457	16
Peak Hour Factor	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540	0.8540
Other Adjustment Factor	1.0000	1.0000	1.0000	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	1	10	2	65	72	224	22	0	134	5
Total Analysis Volume [veh/h]	36	4	2	41	8	259	288	897	89	0	535	19
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	6.04	0.20	0.01	2.39	0.42	0.48	0.28	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	3492.87	3068.81	2899.90	1294.48	1274.52	1091.69	9.87	0.00	0.00	10.08	0.00	0.00
Movement LOS	F	F	F	F	F	F	A	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	6.74	6.74	6.74	30.55	30.55	30.55	1.16	1.16	1.16	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	168.62	168.62	168.62	763.87	763.87	763.87	28.89	28.89	28.89	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	3424.25			1123.44			2.23			0.00		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	226.21											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 18: Byers Rd at McLaughlin Rd

Control Type:	All-way stop	Delay (sec / veh):	6.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.032

Intersection Setup

Name	Byers Rd			Byers 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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Byers Rd			Byers Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	26	0	13	9	0	0	0	0	0	0	6
Site-Generated Trips [veh/h]	0	0	0	2	0	0	0	0	0	0	0	28
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	26	0	15	9	0	0	0	0	0	0	34
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	7	0	4	2	0	0	0	0	0	0	9
Total Analysis Volume [veh/h]	0	26	0	15	9	0	0	0	0	0	0	34
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	903	876	893	1057
Degree of Utilization, x	0.03	0.03	0.00	0.03

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.09	0.08	0.00	0.10
95th-Percentile Queue Length [ft]	2.22	2.11	0.00	2.49
Approach Delay [s/veh]	7.10	7.23	0.00	6.52
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	6.90			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 19: Murrieta Rd at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	29.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.170

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	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]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	1	298	2	12	147	2	6	0	3	0	0	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	6	301	27	0	156	0	0	0	13	29	0	0
Site-Generated Trips [veh/h]	28	27	0	0	11	0	0	0	2	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	644	29	13	323	2	6	0	18	29	0	33
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	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	165	7	3	83	1	2	0	5	7	0	8
Total Analysis Volume [veh/h]	36	660	30	13	331	2	6	0	18	30	0	34
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	0.03	0.01	0.00	0.01	0.00	0.00	0.04	0.00	0.03	0.17	0.00	0.07
d_M, Delay for Movement [s/veh]	8.00	0.00	0.00	9.00	0.00	0.00	27.36	23.67	10.64	29.79	27.11	17.26
Movement LOS	A	A	A	A	A	A	D	C	B	D	D	C
95th-Percentile Queue Length [veh/ln]	0.09	0.00	0.00	0.04	0.00	0.00	0.20	0.20	0.20	0.93	0.93	0.93
95th-Percentile Queue Length [ft/ln]	2.25	0.00	0.00	1.08	0.00	0.00	4.89	4.89	4.89	23.37	23.37	23.37
d_A, Approach Delay [s/veh]	0.40			0.34			14.82			23.13		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.93											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 20: Murrieta Rd at Rouse Rd

Control Type:	Two-way stop	Delay (sec / veh):	176.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.222

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	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	3	234	7	28	120	4	14	18	6	10	3	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	26	99	0	0	119	78	234	0	78	0	0	1
Site-Generated Trips [veh/h]	0	49	0	1	12	0	0	0	0	0	0	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]	29	396	7	31	258	82	249	19	84	11	3	48
Peak Hour Factor	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950	0.8950
Other Adjustment Factor	1.0000	1.0000	1.0000	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	111	2	9	72	23	70	5	23	3	1	13
Total Analysis Volume [veh/h]	32	442	8	35	288	92	278	21	94	12	3	54
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	0.03	0.00	0.00	0.03	0.00	0.00	1.22	0.08	0.12	0.06	0.01	0.09
d_M, Delay for Movement [s/veh]	8.11	0.00	0.00	8.31	0.00	0.00	176.68	19.20	10.44	25.72	19.87	11.36
Movement LOS	A	A	A	A	A	A	F	C	B	D	C	B
95th-Percentile Queue Length [veh/ln]	0.08	0.00	0.00	0.10	0.00	0.00	13.85	0.25	0.42	0.21	0.04	0.29
95th-Percentile Queue Length [ft/ln]	2.07	0.00	0.00	2.42	0.00	0.00	346.17	6.17	10.60	5.13	0.93	7.13
d_A, Approach Delay [s/veh]	0.54			0.70			128.50			14.23		
Approach LOS	A			A			F			B		
d_I, Intersection Delay [s/veh]	38.29											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 21: Murrieta Rd at Chambers Ave

Control Type:	All-way stop	Delay (sec / veh):	38.8
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.037

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	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	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Base Volume Input [veh/h]	36	211	2	36	188	8	28	44	51	7	10	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	26	149	0	0	275	0	1	0	78	0	0	1
Site-Generated Trips [veh/h]	0	39	0	1	10	1	5	0	0	0	0	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]	64	412	2	39	484	9	36	47	132	7	11	22
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]	17	112	1	11	132	2	10	13	36	2	3	6
Total Analysis Volume [veh/h]	70	448	2	42	526	10	39	51	143	8	12	24
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	469	501	501	481	536	483	425	451	492
Degree of Utilization, x	0.15	0.45	0.45	0.09	1.04	0.48	0.02	0.03	0.05

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.52	2.30	2.29	0.29	15.44	2.59	0.06	0.08	0.15
95th-Percentile Queue Length [ft]	13.05	57.41	57.33	7.14	385.89	64.71	1.44	2.05	3.83
Approach Delay [s/veh]	15.10			71.01		17.24	10.70		
Approach LOS	C			F		C	B		
Intersection Delay [s/veh]	38.83								
Intersection LOS	E								

Intersection Level Of Service Report
Intersection 22: Murrieta Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	38.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.591

Intersection Setup

Name	Murrieta Rd			Murrieta 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	149	111	50	90	92	79	191	1	25	113	76
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	88	96	137	164	0	0	0	0	32	0	70
Site-Generated Trips [veh/h]	0	14	0	7	3	0	0	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]	0	260	214	197	262	98	84	202	1	59	120	176
Peak Hour Factor	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160
Other Adjustment Factor	1.0000	1.0000	1.0000	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	71	58	54	72	27	23	55	0	16	33	48
Total Analysis Volume [veh/h]	0	284	234	215	286	107	92	221	1	64	131	192
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	11	27	0	43	59	0	0	24	0	0	26	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	14	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	0.0	2.0	3.3	0.0	0.0	2.6	0.0	0.0	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	L	C	R	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]	4.00	5.30	4.00	5.30	5.30	4.60	4.60	4.60	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	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	2.00	3.30	3.30	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	0	59	16	75	75	10	10	10	16	16	16
g / C, Green / Cycle	0.00	0.49	0.14	0.62	0.62	0.08	0.08	0.08	0.14	0.14	0.14
(v / s)_i Volume / Saturation Flow Rate	0.00	0.29	0.12	0.15	0.07	0.05	0.06	0.06	0.04	0.07	0.12
s, saturation flow rate [veh/h]	1810	1760	1810	1900	1615	1810	1900	1897	1810	1900	1615
c, Capacity [veh/h]	1	857	248	1186	1008	152	159	159	249	261	222
d1, Uniform Delay [s]	0.00	22.35	50.68	9.98	9.08	53.05	53.48	53.48	46.28	47.95	50.67
k, delay calibration	0.11	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	0.00	3.15	8.82	0.48	0.21	3.85	5.38	5.40	0.54	1.49	9.71
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	0.00	0.60	0.87	0.24	0.11	0.61	0.70	0.70	0.26	0.50	0.87
d, Delay for Lane Group [s/veh]	0.00	25.50	59.50	10.46	9.29	56.90	58.85	58.88	46.83	49.44	60.38
Lane Group LOS	A	C	E	B	A	E	E	E	D	D	E
Critical Lane Group	No	Yes	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	10.66	6.76	3.17	1.08	2.82	3.47	3.47	1.74	3.72	6.19
50th-Percentile Queue Length [ft/ln]	0.00	266.55	168.94	79.27	27.11	70.54	86.85	86.80	43.47	92.91	154.67
95th-Percentile Queue Length [veh/ln]	0.00	16.02	11.02	5.71	1.95	5.08	6.25	6.25	3.13	6.69	10.27
95th-Percentile Queue Length [ft/ln]	0.00	400.43	275.53	142.68	48.80	126.97	156.33	156.23	78.25	167.24	256.65

Movement, Approach, & Intersection Results

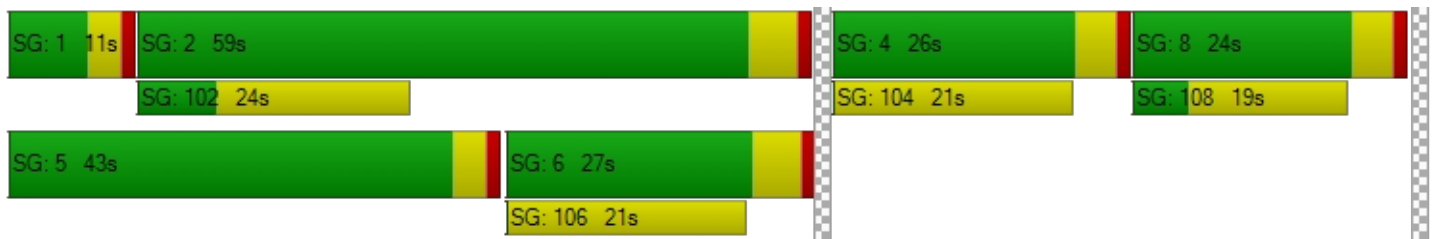
d_M, Delay for Movement [s/veh]	0.00	25.50	25.50	59.50	10.46	9.29	56.90	58.86	58.88	46.83	49.44	60.38
Movement LOS	A	C	C	E	B	A	E	E	E	D	D	E
d_A, Approach Delay [s/veh]	25.50			27.60			58.29			54.44		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	37.96											
Intersection LOS	D											
Intersection V/C	0.591											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	4.0	11.0	4.0
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	56.07	49.50	56.07
I_p,int, Pedestrian LOS Score for Intersectio	2.379	2.758	2.439	2.672
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	362	895	323	357
d_b, Bicycle Delay [s]	40.26	18.32	42.17	40.51
I_b,int, Bicycle LOS Score for Intersection	2.414	2.563	1.819	1.879
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 23: Sun City Blvd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	23.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.343

Intersection Setup

Name	Sun City Blvd			Sun City Blvd			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	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sun City Blvd			Sun City Blvd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	31	53	58	54	45	8	25	371	32	136	306	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	233	0	0	102	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	7	0	0	25	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	56	61	57	48	8	27	633	34	144	451	45
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	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	15	16	15	13	2	7	166	9	38	119	12
Total Analysis Volume [veh/h]	35	59	64	60	50	8	28	666	36	151	474	47
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	27	0	0	27	0	11	27	0	39	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	17	0	0	17	0	0	17	0	0	14	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	C	C	R	C	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	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	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	2.20	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	10	10	10	10	10	4	71	71	12	79	79
g / C, Green / Cycle	0.08	0.08	0.08	0.08	0.08	0.04	0.59	0.59	0.10	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.03	0.02	0.04	0.03	0.03	0.02	0.19	0.19	0.08	0.14	0.14
s, saturation flow rate [veh/h]	1831	1900	1615	1810	1855	1810	1900	1866	1810	1900	1841
c, Capacity [veh/h]	153	158	135	149	152	64	1125	1105	182	1249	1210
d1, Uniform Delay [s]	51.74	51.70	52.50	52.28	52.18	56.69	12.27	12.27	52.93	8.18	8.18
k, delay calibration	0.11	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]	1.12	1.04	2.59	1.76	1.56	4.60	0.73	0.75	9.19	0.39	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	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	0.31	0.30	0.48	0.40	0.38	0.44	0.31	0.31	0.83	0.21	0.21
d, Delay for Lane Group [s/veh]	52.86	52.75	55.09	54.04	53.74	61.30	13.00	13.02	62.12	8.57	8.58
Lane Group LOS	D	D	E	D	D	E	B	B	E	A	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.38	1.39	1.94	1.79	1.73	0.91	4.78	4.71	4.89	2.68	2.61
50th-Percentile Queue Length [ft/ln]	34.38	34.68	48.54	44.82	43.14	22.70	119.54	117.66	122.30	66.99	65.23
95th-Percentile Queue Length [veh/ln]	2.48	2.50	3.49	3.23	3.11	1.63	8.37	8.26	8.52	4.82	4.70
95th-Percentile Queue Length [ft/ln]	61.88	62.43	87.37	80.68	77.65	40.86	209.19	206.61	212.98	120.58	117.41

Movement, Approach, & Intersection Results

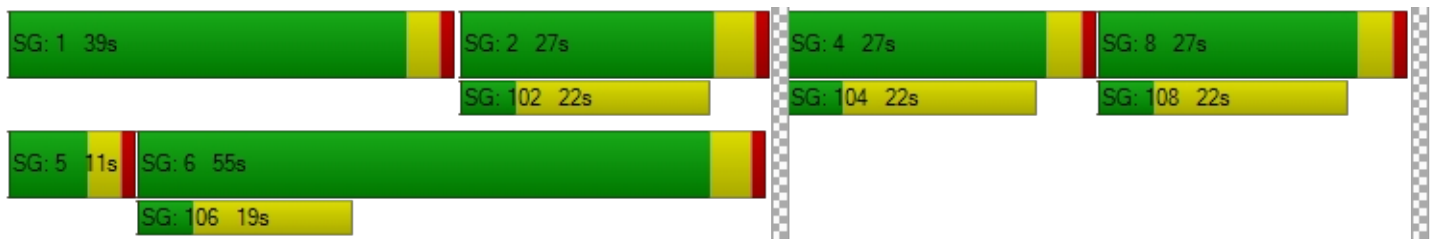
d_M, Delay for Movement [s/veh]	52.86	52.77	55.09	54.04	53.74	53.74	61.30	13.01	13.02	62.12	8.57	8.58
Movement LOS	D	D	E	D	D	D	E	B	B	E	A	A
d_A, Approach Delay [s/veh]	53.73			53.90			14.86		20.61			
Approach LOS	D			D			B		C			
d_I, Intersection Delay [s/veh]	23.57											
Intersection LOS	C											
Intersection V/C	0.343											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.392	2.208	2.599	2.648
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	380	380	373	840
d_b, Bicycle Delay [s]	39.37	39.37	39.69	20.18
I_b,int, Bicycle LOS Score for Intersection	1.690	1.657	2.162	2.114
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 24: Bradley Rd at McCall Blvd**

Control Type:	Signalized	Delay (sec / veh):	32.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.722

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	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	41	44	337	141	51	4	17	466	48	480	464	94
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	233	0	0	102	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	7	0	0	25	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	43	47	357	149	54	4	18	734	51	509	619	100
Peak Hour Factor	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550	0.9550
Other Adjustment Factor	1.0000	1.0000	1.0000	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	12	93	39	14	1	5	192	13	133	162	26
Total Analysis Volume [veh/h]	45	49	374	156	57	4	19	769	53	533	648	105
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
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	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	10	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [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
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	21	0	41	23	0	40	22	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	21	21	0	17	0	0	14	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	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	2.0	2.0	0.0	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	
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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	53	12	12	3	42	42	39	78	78
g / C, Green / Cycle	0.09	0.09	0.44	0.10	0.10	0.03	0.35	0.35	0.32	0.65	0.65
(v / s)_i Volume / Saturation Flow Rate	0.02	0.03	0.23	0.09	0.03	0.01	0.22	0.22	0.29	0.20	0.20
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1878	1810	1900	1857	1810	1900	1809
c, Capacity [veh/h]	161	169	717	187	194	51	670	655	582	1227	1169
d1, Uniform Delay [s]	51.08	51.13	24.13	52.81	49.88	57.28	32.22	32.22	39.14	9.44	9.45
k, delay calibration	0.11	0.11	0.28	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]	0.93	0.93	1.53	9.27	0.91	4.41	4.29	4.39	6.21	0.67	0.71
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.29	0.52	0.83	0.31	0.37	0.62	0.62	0.92	0.31	0.32
d, Delay for Lane Group [s/veh]	52.02	52.07	25.66	62.08	50.79	61.70	36.51	36.61	45.35	10.10	10.15
Lane Group LOS	D	D	C	E	D	E	D	D	D	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.31	1.43	7.92	5.09	1.75	0.63	10.62	10.41	15.74	4.41	4.24
50th-Percentile Queue Length [ft/ln]	32.76	35.66	198.07	127.36	43.82	15.64	265.55	260.16	393.56	110.31	105.96
95th-Percentile Queue Length [veh/ln]	2.36	2.57	12.54	8.80	3.15	1.13	15.97	15.70	22.25	7.86	7.61
95th-Percentile Queue Length [ft/ln]	58.96	64.19	313.48	219.89	78.87	28.14	399.17	392.42	556.24	196.43	190.37

Movement, Approach, & Intersection Results

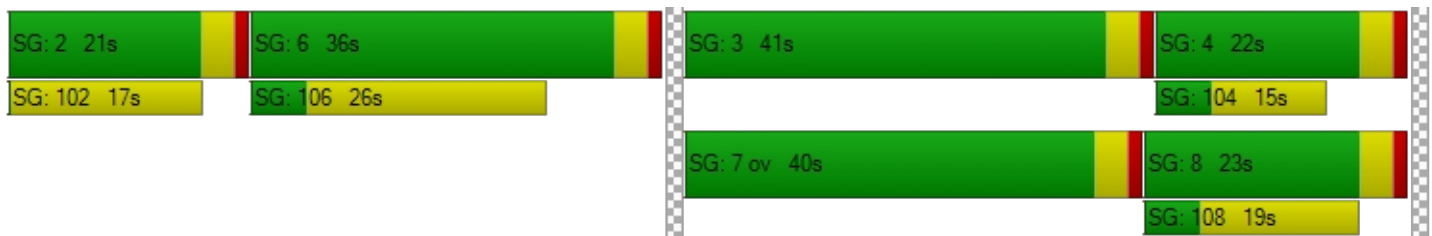
d_M, Delay for Movement [s/veh]	52.02	52.07	25.66	62.08	50.79	50.79	61.70	36.56	36.61	45.35	10.12	10.15
Movement LOS	D	D	C	E	D	D	E	D	D	D	B	B
d_A, Approach Delay [s/veh]	30.96			58.91			37.13			24.73		
Approach LOS	C			E			D			C		
d_I, Intersection Delay [s/veh]	32.11											
Intersection LOS	C											
Intersection V/C	0.722											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	4.0	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]	51.35	51.35	56.08	51.35
I_p,int, Pedestrian LOS Score for Intersectio	2.417	2.082	2.669	2.958
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	533	283	317	300
d_b, Bicycle Delay [s]	32.28	44.22	42.52	43.37
I_b,int, Bicycle LOS Score for Intersection	2.332	1.918	2.253	2.621
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: I-215 SB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	53.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.899

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	363	3	477	0	844	318	287	813	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	169	0	37	0	139	145	174	65	0
Site-Generated Trips [veh/h]	0	0	0	7	0	0	0	4	3	0	25	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	561	3	543	0	1038	485	478	952	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9880	0.9880	0.9880	1.0000	0.9880	0.9880	0.9880	0.9880	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	142	1	137	0	263	123	121	241	0
Total Analysis Volume [veh/h]	0	0	0	568	3	550	0	1051	491	484	964	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Unsigna	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	10	0	0	10	0	7	10	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	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	44	0	0	40	0	36	76	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	21	0	0	3	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	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	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	L	C
C, Cycle Length [s]		120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	2.60	2.00	2.60
g_i, Effective Green Time [s]		39	39	33	34	71
g / C, Green / Cycle		0.32	0.32	0.27	0.29	0.60
(v / s)_i Volume / Saturation Flow Rate		0.32	0.34	0.29	0.27	0.27
s, saturation flow rate [veh/h]		1810	1615	3618	1810	3618
c, Capacity [veh/h]		584	521	995	518	2152
d1, Uniform Delay [s]		40.23	40.65	43.49	41.70	13.42
k, delay calibration		0.42	0.48	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		29.33	54.21	44.43	8.27	0.68
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		0.98	1.06	1.06	0.93	0.45
d, Delay for Lane Group [s/veh]		69.56	94.86	87.92	49.96	14.09
Lane Group LOS		E	F	F	D	B
Critical Lane Group		No	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		20.62	22.46	20.61	14.84	7.03
50th-Percentile Queue Length [ft/ln]		515.48	561.59	515.24	370.97	175.73
95th-Percentile Queue Length [veh/ln]		28.07	31.34	29.01	21.16	11.38
95th-Percentile Queue Length [ft/ln]		701.65	783.58	725.35	528.90	284.43

Movement, Approach, & Intersection Results

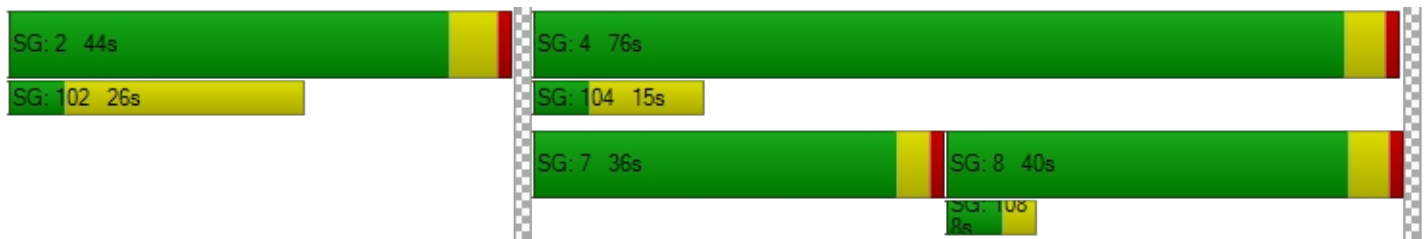
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	69.56	69.56	94.86	0.00	87.92	0.00	49.96	14.09	0.00
Movement LOS				E	E	F		F		D	B	
d_A, Approach Delay [s/veh]	0.00			81.97			60.16			26.08		
Approach LOS	A			F			E			C		
d_I, Intersection Delay [s/veh]	53.28											
Intersection LOS	D											
Intersection V/C	0.899											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	1.913	2.502	2.899	3.050
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	645	590	1190
d_b, Bicycle Delay [s]	60.00	27.54	29.82	9.84
I_b,int, Bicycle LOS Score for Intersection	4.132	3.409	2.427	2.754
Bicycle LOS	D	C	B	C

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 26: I-215 NB Ramps at McCall Blvd

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):	0.851

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	201	0	256	0	0	0	234	603	0	0	957	495
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
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]	52	0	133	0	0	0	136	172	0	0	187	250
Site-Generated Trips [veh/h]	6	0	0	0	0	0	0	11	0	0	19	29
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	271	0	404	0	0	0	384	822	0	0	1220	804
Peak Hour Factor	0.9390	0.9390	0.9390	1.0000	1.0000	1.0000	0.9390	0.9390	1.0000	1.0000	0.9390	0.9390
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	72	0	108	0	0	0	102	219	0	0	325	214
Total Analysis Volume [veh/h]	289	0	430	0	0	0	409	875	0	0	1299	856
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	39	0	0	0	0	32	81	0	0	49	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	21	0	0	0	0	0	10	0	0	3	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	3.3	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
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	2.60	2.60
g_i, Effective Green Time [s]	33	33		28	77	44
g / C, Green / Cycle	0.28	0.28		0.23	0.64	0.37
(v / s)_i Volume / Saturation Flow Rate	0.16	0.27		0.23	0.24	0.36
s, saturation flow rate [veh/h]	1810	1615		1810	3618	3618
c, Capacity [veh/h]	505	451		423	2309	1342
d1, Uniform Delay [s]	37.09	42.47		45.50	10.36	37.04
k, delay calibration	0.12	0.39		0.38	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	1.16	27.66		30.70	0.47	18.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.57	0.95		0.97	0.38	0.97
d, Delay for Lane Group [s/veh]	38.24	70.13		76.20	10.83	55.04
Lane Group LOS	D	E		E	B	E
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	7.20	15.46		15.45	5.31	21.46
50th-Percentile Queue Length [ft/ln]	180.01	386.45		386.29	132.84	536.57
95th-Percentile Queue Length [veh/ln]	11.60	21.91		21.90	9.09	29.06
95th-Percentile Queue Length [ft/ln]	290.02	547.64		547.45	227.35	726.52

Movement, Approach, & Intersection Results

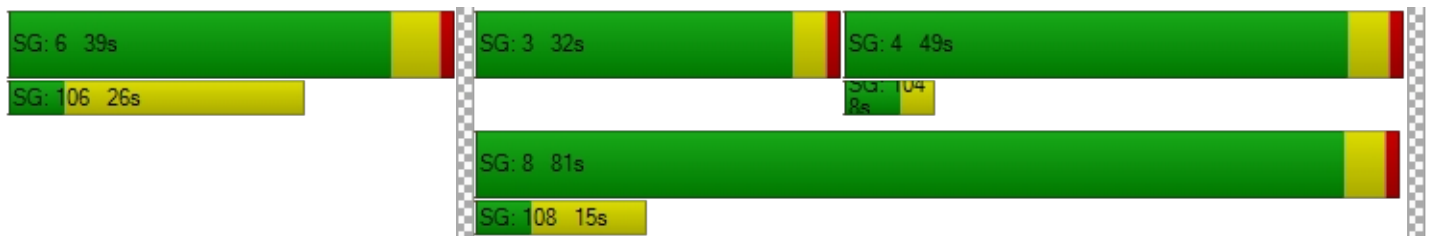
d_M, Delay for Movement [s/veh]	38.24	38.24	70.13	0.00	0.00	0.00	76.20	10.83	0.00	0.00	55.04	0.00
Movement LOS	D	D	E				E	B			E	
d_A, Approach Delay [s/veh]	57.32			0.00			31.66			34.00		
Approach LOS	E			A			C			C		
d_I, Intersection Delay [s/veh]	38.17											
Intersection LOS	D											
Intersection V/C	0.851											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.306	1.837	2.968	2.962
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	562	0	1273	740
d_b, Bicycle Delay [s]	31.03	60.00	7.92	23.81
I_b,int, Bicycle LOS Score for Intersection	2.746	4.132	2.619	2.631
Bicycle LOS	B	D	B	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 27: Encanto Dr at McCall Blvd**

Control Type:	Signalized	Delay (sec / veh):	45.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.791

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]	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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]	196	28	80	30	18	121	113	653	76	72	1129	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	81	0	0	0	0	76	36	230	37	0	279	0
Site-Generated Trips [veh/h]	19	0	0	0	0	0	0	6	5	0	29	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	308	30	85	32	19	204	156	928	123	76	1505	33
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	80	8	22	8	5	53	41	242	32	20	393	9
Total Analysis Volume [veh/h]	322	31	89	33	20	213	163	969	128	79	1571	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 m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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	10	0	0	10	0	7	10	0	7	10	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	3.0	0.0	3.0	3.0	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	46	0	0	46	0	16	63	0	11	58	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	21	0	0	17	0	0	14	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	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	4.20	4.20	4.20	4.00	4.00	4.00	4.00	4.00	4.00
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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	42	42	42	42	42	12	59	59	7	54	54
g / C, Green / Cycle	0.35	0.35	0.35	0.35	0.35	0.10	0.49	0.49	0.06	0.45	0.45
(v / s)_i Volume / Saturation Flow Rate	0.28	0.02	0.06	0.03	0.14	0.09	0.29	0.30	0.04	0.42	0.42
s, saturation flow rate [veh/h]	1166	1900	1615	1292	1636	1810	1900	1823	1810	1900	1886
c, Capacity [veh/h]	324	662	563	474	570	181	938	901	102	855	849
d1, Uniform Delay [s]	48.84	25.90	26.97	28.40	29.71	53.41	21.78	21.81	55.89	31.46	31.55
k, delay calibration	0.31	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]	37.50	0.03	0.13	0.06	0.47	14.68	2.78	2.92	11.96	19.29	19.95
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.99	0.05	0.16	0.07	0.41	0.90	0.60	0.60	0.78	0.94	0.94
d, Delay for Lane Group [s/veh]	86.34	25.93	27.10	28.46	30.18	68.10	24.56	24.73	67.85	50.75	51.50
Lane Group LOS	F	C	C	C	C	E	C	C	E	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	13.18	0.60	1.79	0.68	5.19	5.55	11.61	11.23	2.68	25.79	25.90
50th-Percentile Queue Length [ft/ln]	329.55	14.97	44.87	16.93	129.82	138.87	290.24	280.73	67.01	644.83	647.60
95th-Percentile Queue Length [veh/ln]	19.14	1.08	3.23	1.22	8.93	9.42	17.20	16.72	4.82	34.12	34.25
95th-Percentile Queue Length [ft/ln]	478.41	26.95	80.76	30.47	223.25	235.51	429.94	418.12	120.62	853.06	856.27

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	86.34	25.93	27.10	28.46	30.18	30.18	68.10	24.63	24.73	67.85	51.12	51.50
Movement LOS	F	C	C	C	C	C	E	C	C	E	D	D
d_A, Approach Delay [s/veh]	70.17			29.97			30.26			51.91		
Approach LOS	E			C			C			D		
d_I, Intersection Delay [s/veh]	45.05											
Intersection LOS	D											
Intersection V/C	0.791											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.309	2.116	0.000	3.041
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]	697	697	983	900
d_b, Bicycle Delay [s]	25.48	25.48	15.50	18.15
I_b,int, Bicycle LOS Score for Intersection	2.289	1.999	2.599	2.949
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 28: Sherman Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	33.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.709

Intersection Setup

Name	Sherman Rd			Sherman 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	26	6	26	53	10	81	112	563	19	22	1024	54
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	76	0	0	0	0	98	96	98	36	0	104	0
Site-Generated Trips [veh/h]	0	0	0	0	0	5	1	5	0	0	24	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	104	6	28	56	11	189	216	700	56	23	1213	57
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]	29	2	8	16	3	53	61	197	16	6	341	16
Total Analysis Volume [veh/h]	117	7	31	63	12	212	243	787	63	26	1363	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 m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	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	3.6	0.0	3.0	3.6	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	31	0	11	29	0	29	67	0	11	49	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	10	0	0	14	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	2.6	0.0	2.0	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.20	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]	2.00	2.20	2.00	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	9	21	6	18	18	18	72	72	4	58	58
g / C, Green / Cycle	0.08	0.17	0.05	0.15	0.15	0.15	0.60	0.60	0.03	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.06	0.02	0.03	0.01	0.13	0.13	0.23	0.23	0.01	0.38	0.38
s, saturation flow rate [veh/h]	1810	1661	1810	1900	1615	1810	1900	1851	1810	1900	1870
c, Capacity [veh/h]	136	286	93	282	240	276	1144	1115	62	920	906
d1, Uniform Delay [s]	54.89	42.08	55.95	43.78	50.08	49.81	12.27	12.27	56.78	25.65	25.71
k, delay calibration	0.11	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]	14.52	0.21	8.36	0.06	10.34	9.01	0.95	0.97	4.48	6.51	6.71
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	0.86	0.13	0.68	0.04	0.88	0.88	0.38	0.38	0.42	0.78	0.78
d, Delay for Lane Group [s/veh]	69.41	42.29	64.31	43.85	60.42	58.82	13.21	13.24	61.26	32.16	32.42
Lane Group LOS	E	D	E	D	E	E	B	B	E	C	C
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.04	0.98	2.09	0.31	6.91	7.75	5.94	5.80	0.84	17.89	17.76
50th-Percentile Queue Length [ft/ln]	101.09	24.44	52.29	7.82	172.84	193.75	148.48	144.91	21.11	447.30	444.02
95th-Percentile Queue Length [veh/ln]	7.28	1.76	3.76	0.56	11.23	12.32	9.94	9.74	1.52	24.83	24.67
95th-Percentile Queue Length [ft/ln]	181.95	44.00	94.12	14.08	280.64	307.88	248.40	243.62	37.99	620.73	616.81

Movement, Approach, & Intersection Results

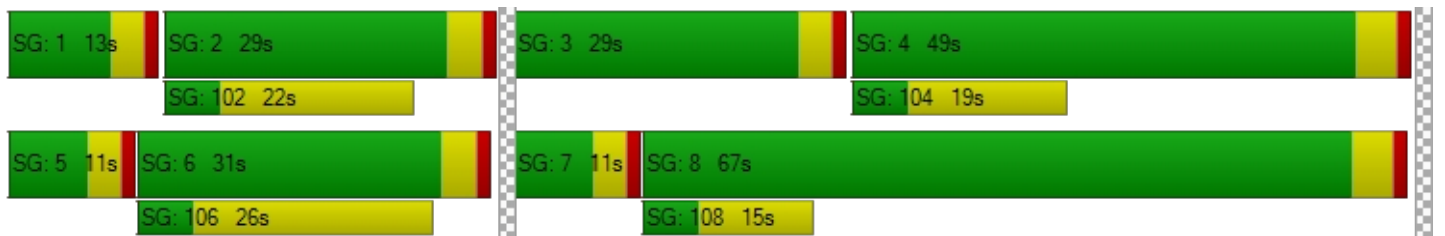
d_M, Delay for Movement [s/veh]	69.41	42.29	42.29	64.31	43.85	60.42	58.82	13.22	13.24	61.26	32.28	32.42
Movement LOS	E	D	D	E	D	E	E	B	B	E	C	C
d_A, Approach Delay [s/veh]	62.76			60.58			23.36			32.81		
Approach LOS	E			E			C			C		
d_I, Intersection Delay [s/veh]	33.57											
Intersection LOS	C											
Intersection V/C	0.709											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.039	2.293	2.949	2.911
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	447	413	1040	740
d_b, Bicycle Delay [s]	36.19	37.76	13.82	23.81
I_b,int, Bicycle LOS Score for Intersection	1.815	2.033	2.461	2.758
Bicycle LOS	A	B	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



CADO Warehouse Project

Vistro File: K:\...\Menifee CADO_PM.vistro

Scenario 4 OY CP WP PM

Report File: K:\...4 OY CP WP PM.pdf

9/29/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Case Rd	Signalized	HCM 6th Edition	WB Left	0.444	30.0	C
2	Murrieta Rd at Case Rd	All-way stop	HCM 6th Edition	EB Thru	0.526	12.3	B
3	Goetz Rd at Mapes Rd	Signalized	HCM 6th Edition	SB Left	0.621	37.9	D
4	I-215 SB Ramps/SR-74 at Bonnie Dr	Signalized	HCM 6th Edition	EB Left	0.678	17.2	B
5	I-215 NB Ramps at SR-74	Signalized	HCM 6th Edition	EB Left	0.650	20.0	C
6	Sherman Rd at SR-74	Signalized	HCM 6th Edition	WB Left	0.677	31.1	C
7	Goetz Rd at Fieldstone Dr	Signalized	HCM 6th Edition	SB Left	0.284	11.0	B
8	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	SB Left	0.585	48.5	D
9	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.663	251.0	F
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	1.331	589.6	F
11	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	EB Right	1.128	543.1	F
12	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	13.645	7,256.2	F
13	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.781	54.5	D
14	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	SB Right	1.872	335.6	F
15	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	1.843	400.7	F
16	Trumble Rd at Ethanac Rd	Signalized	HCM 6th Edition	SB Right	0.841	61.9	E
17	Sherman Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	17.422	8,805.0	F
			HCM 6th				

18	Byers Rd at McLaughlin Rd	All-way stop	HCM 6th Edition	SB Thru	0.064	7.3	A
19	Murrieta Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	WB Left	0.967	207.3	F
20	Murrieta Rd at Rouse Rd	Two-way stop	HCM 6th Edition	EB Left	2.117	622.8	F
21	Murrieta Rd at Chambers Ave	All-way stop	HCM 6th Edition	SB Thru	1.172	54.1	F
22	Murrieta Rd at McCall Blvd	Signalized	HCM 6th Edition	NB Left	0.713	44.7	D
23	Sun City Blvd at McCall Blvd	Signalized	HCM 6th Edition	WB Left	0.427	25.2	C
24	Bradley Rd at McCall Blvd	Signalized	HCM 6th Edition	SB Left	0.799	34.5	C
25	I-215 SB Ramps at McCall Blvd	Signalized	HCM 6th Edition	EB Thru	0.961	75.8	E
26	I-215 NB Ramps at McCall Blvd	Signalized	HCM 6th Edition	WB Thru	0.954	57.4	E
27	Encanto Dr at McCall Blvd	Signalized	HCM 6th Edition	NB Left	0.783	45.4	D
28	Sherman Rd at McCall Blvd	Signalized	HCM 6th Edition	NB Left	0.519	22.6	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: Goetz Rd at Case Rd

Control Type:	Signalized	Delay (sec / veh):	30.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.444

Intersection Setup

Name	Goetz Rd		Case Rd		Case 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	1	0	1	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]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Goetz Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	132	156	199	189	206	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	33	2	38	47	6	45
Site-Generated Trips [veh/h]	30	0	0	20	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]	203	167	249	267	224	321
Peak Hour Factor	0.9050	0.9050	0.9050	0.9050	0.9050	0.9050
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	46	69	74	62	89
Total Analysis Volume [veh/h]	224	185	275	295	248	355
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	10	0	7	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.7	0.0	5.0	0.0	3.0	5.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	34	0	48	0	38	86
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]	3.7	0.0	4.0	0.0	2.0	4.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.70	5.70	6.00	6.00	4.00	6.00
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]	3.70	3.70	4.00	4.00	2.00	4.00
g_i, Effective Green Time [s]	17	17	68	68	19	91
g / C, Green / Cycle	0.14	0.14	0.57	0.57	0.16	0.76
(v / s)_i Volume / Saturation Flow Rate	0.12	0.11	0.14	0.18	0.14	0.19
s, saturation flow rate [veh/h]	1810	1615	1900	1615	1810	1900
c, Capacity [veh/h]	262	234	1081	919	281	1439
d1, Uniform Delay [s]	50.07	49.55	13.05	13.65	49.59	4.34
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]	7.78	5.90	0.57	0.92	8.81	0.41
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	0.79	0.25	0.32	0.88	0.25
d, Delay for Lane Group [s/veh]	57.85	55.45	13.61	14.58	58.40	4.74
Lane Group LOS	E	E	B	B	E	A
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	6.89	5.55	3.49	3.96	7.63	1.93
50th-Percentile Queue Length [ft/ln]	172.16	138.73	87.29	99.09	190.67	48.27
95th-Percentile Queue Length [veh/ln]	11.19	9.41	6.28	7.13	12.16	3.48
95th-Percentile Queue Length [ft/ln]	279.76	235.31	157.12	178.37	303.90	86.88

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	57.85	55.45	13.61	14.58	58.40	4.74
Movement LOS	E	E	B	B	E	A
d_A, Approach Delay [s/veh]	56.76		14.11		26.81	
Approach LOS	E		B		C	
d_I, Intersection Delay [s/veh]	29.98					
Intersection LOS	C					
Intersection V/C	0.444					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
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	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.471	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	472	700	1333
d_b, Bicycle Delay [s]	35.04	25.35	6.67
I_b,int, Bicycle LOS Score for Intersection	1.560	2.500	2.555
Bicycle LOS	A	B	B

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Murrieta Rd at Case Rd**

Control Type:	All-way stop	Delay (sec / veh):	12.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.526

Intersection Setup

Name	Murrieta Rd		Case Rd		Case 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	1	0	1	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]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Murrieta Rd		Case Rd		Case Rd	
Base Volume Input [veh/h]	104	10	269	104	14	232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	15	0	31	16	0	20
Site-Generated Trips [veh/h]	0	0	0	0	11	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	11	316	126	26	266
Peak Hour Factor	0.9020	0.9020	0.9020	0.9020	0.9020	0.9020
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	3	88	35	7	74
Total Analysis Volume [veh/h]	139	12	350	140	29	295
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	523	633	666	765	593	646
Degree of Utilization, x	0.27	0.02	0.53	0.18	0.05	0.46

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.06	0.06	3.09	0.67	0.15	2.39
95th-Percentile Queue Length [ft]	26.58	1.45	77.17	16.65	3.85	59.66
Approach Delay [s/veh]	11.78		12.38		12.51	
Approach LOS	B		B		B	
Intersection Delay [s/veh]	12.33					
Intersection LOS	B					

**Intersection Level Of Service Report
Intersection 3: Goetz Rd at Mapes Rd**

Control Type:	Signalized	Delay (sec / veh):	37.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.621

Intersection Setup

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes 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	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Mapes Rd			Mapes Rd		
Base Volume Input [veh/h]	210	161	0	3	323	63	64	0	317	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	4	35	0	0	53	0	0	0	1	0	0	0
Site-Generated Trips [veh/h]	15	30	0	0	20	0	0	0	10	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	242	236	0	3	415	67	68	0	347	0	0	0
Peak Hour Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Other Adjustment Factor	1.0000	1.0000	1.0000	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	65	0	1	114	18	19	0	95	0	0	0
Total Analysis Volume [veh/h]	265	259	0	3	455	73	75	0	380	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	0	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	0.0	3.2	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	47	57	0	13	23	0	23	50	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	0.0	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	17	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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	0.0	2.2	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	C	L	C	R	L	C	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.20	4.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.20	2.20
g_i, Effective Green Time [s]	20	75	75	1	56	56	7	31	20	20
g / C, Green / Cycle	0.17	0.62	0.62	0.01	0.46	0.46	0.05	0.25	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.15	0.07	0.07	0.00	0.24	0.05	0.04	0.24	0.00	0.00
s, saturation flow rate [veh/h]	1810	1900	1900	1810	1900	1615	1810	1615	1711	1615
c, Capacity [veh/h]	300	1184	1184	12	881	749	100	411	314	268
d1, Uniform Delay [s]	48.93	9.15	9.15	59.30	22.67	18.06	55.88	43.60	0.00	0.00
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	8.50	0.19	0.19	10.46	2.16	0.26	10.73	13.56	0.00	0.00
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
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	0.88	0.11	0.11	0.25	0.52	0.10	0.75	0.92	0.00	0.00
d, Delay for Lane Group [s/veh]	57.43	9.34	9.34	69.77	24.83	18.32	66.60	57.16	0.00	0.00
Lane Group LOS	E	A	A	E	C	B	E	E	A	A
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.17	1.28	1.28	0.12	8.93	1.13	2.54	12.47	0.00	0.00
50th-Percentile Queue Length [ft/ln]	204.25	31.94	31.94	3.08	223.37	28.21	63.45	311.64	0.00	0.00
95th-Percentile Queue Length [veh/ln]	12.86	2.30	2.30	0.22	13.84	2.03	4.57	18.26	0.00	0.00
95th-Percentile Queue Length [ft/ln]	321.45	57.49	57.49	5.54	345.93	50.77	114.22	456.40	0.00	0.00

Movement, Approach, & Intersection Results

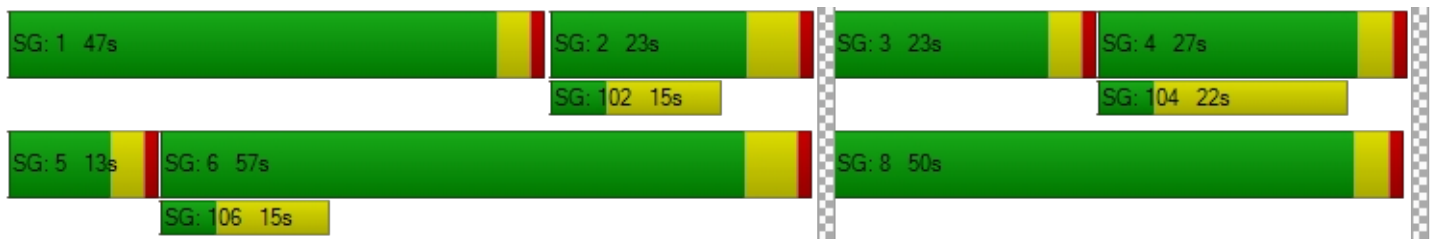
d_M, Delay for Movement [s/veh]	57.43	9.34	9.34	69.77	24.83	18.32	66.60	57.16	57.16	0.00	0.00	0.00
Movement LOS	E	A	A	E	C	B	E	E	E	A	A	A
d_A, Approach Delay [s/veh]	33.66			24.19			58.72			0.00		
Approach LOS	C			C			E			A		
d_I, Intersection Delay [s/veh]	37.88											
Intersection LOS	D											
Intersection V/C	0.621											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			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]	0.00			51.34			51.34			51.34		
I_p,int, Pedestrian LOS Score for Intersectio	0.000			2.596			2.213			1.956		
Crosswalk LOS	F			B			B			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	855			288			763			380		
d_b, Bicycle Delay [s]	19.67			43.95			22.94			39.37		
I_b,int, Bicycle LOS Score for Intersection	1.992			2.436			2.310			1.560		
Bicycle LOS	A			B			B			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: I-215 SB Ramps/SR-74 at Bonnie Dr

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):	0.678

Intersection Setup

Name	SR-74		I-215 SB Ramps		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]	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]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	SR-74		I-215 SB Ramps		Bonnie Dr	
Base Volume Input [veh/h]	194	320	706	44	38	264
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	19	174	212	3	0	26
Site-Generated Trips [veh/h]	0	16	0	11	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]	225	529	960	61	40	306
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	58	137	249	16	10	80
Total Analysis Volume [veh/h]	234	550	998	63	42	318
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protected	Permissive	Overlap	Permissive	Permissive	Unsignalized
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups			2			
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	10	10	0	7	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	4.3	4.3	0.0	4.3	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	51	95	44	0	25	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	14	0
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	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	0.0	3.3	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L
C, Cycle Length [s]	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	3.30	3.30
g_i, Effective Green Time [s]	18	104	82	82	5
g / C, Green / Cycle	0.15	0.87	0.69	0.69	0.04
(v / s)_i Volume / Saturation Flow Rate	0.13	0.29	0.53	0.04	0.02
s, saturation flow rate [veh/h]	1810	1900	1900	1615	1810
c, Capacity [veh/h]	268	1647	1302	1107	81
d1, Uniform Delay [s]	50.01	1.50	12.52	6.18	56.03
k, delay calibration	0.11	0.50	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.66	0.55	4.36	0.10	5.01
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	0.87	0.33	0.77	0.06	0.52
d, Delay for Lane Group [s/veh]	58.67	2.05	16.87	6.28	61.05
Lane Group LOS	E	A	B	A	E
Critical Lane Group	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	7.32	0.92	16.07	0.48	1.33
50th-Percentile Queue Length [ft/ln]	183.04	22.90	401.85	12.06	33.23
95th-Percentile Queue Length [veh/ln]	11.76	1.65	22.65	0.87	2.39
95th-Percentile Queue Length [ft/ln]	293.98	41.22	566.22	21.70	59.82

Movement, Approach, & Intersection Results

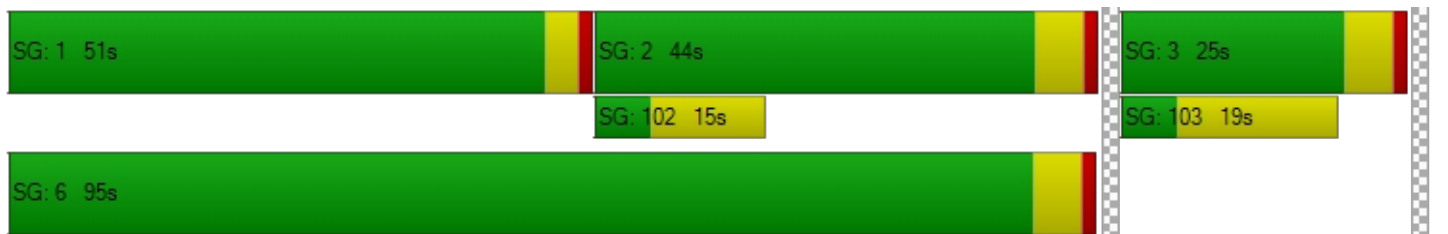
d_M, Delay for Movement [s/veh]	58.67	2.05	16.87	6.28	61.05	0.00
Movement LOS	E	A	B	A	E	
d_A, Approach Delay [s/veh]	18.95		16.24		7.37	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	17.17					
Intersection LOS	B					
Intersection V/C	0.678					

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 Intersectio	2.798	2.761	2.121
Crosswalk LOS	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1495	645	328
d_b, Bicycle Delay [s]	3.83	27.54	41.92
I_b,int, Bicycle LOS Score for Intersection	2.853	3.310	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 5: I-215 NB Ramps at SR-74

Control Type:	Signalized	Delay (sec / veh):	20.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.650

Intersection Setup

Name	I-215 NB Ramps		SR-74		SR-74	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	45.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB Ramps		SR-74		SR-74	
Base Volume Input [veh/h]	207	21	14	955	503	602
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	207	0	0	239	193	188
Site-Generated Trips [veh/h]	15	0	0	0	16	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]	441	22	15	1251	742	826
Peak Hour Factor	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	119	6	4	337	200	223
Total Analysis Volume [veh/h]	475	24	16	1348	800	890
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protected	Permissive	Permissive	Unsignalized
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	4.3	0.0	3.0	5.0	5.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	91	0	11	29	18	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	17	0	0	10	7	0
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	0.0
I2, Clearance Lost Time [s]	3.3	0.0	2.0	4.0	4.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C
C, Cycle Length [s]	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	2.00	4.00	4.00
g_i, Effective Green Time [s]	36	3	73	66
g / C, Green / Cycle	0.30	0.02	0.61	0.55
(v / s)_i Volume / Saturation Flow Rate	0.28	0.01	0.37	0.22
s, saturation flow rate [veh/h]	1799	1810	3618	3618
c, Capacity [veh/h]	535	45	2201	1991
d1, Uniform Delay [s]	40.99	57.59	14.66	15.57
k, delay calibration	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.98	4.80	1.28	0.61
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.93	0.36	0.61	0.40
d, Delay for Lane Group [s/veh]	48.97	62.39	15.94	16.17
Lane Group LOS	D	E	B	B
Critical Lane Group	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	14.90	0.52	10.08	5.79
50th-Percentile Queue Length [ft/ln]	372.56	12.99	252.11	144.72
95th-Percentile Queue Length [veh/ln]	21.23	0.94	15.29	9.73
95th-Percentile Queue Length [ft/ln]	530.84	23.38	382.31	243.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	48.97	48.97	62.39	15.94	16.17	0.00
Movement LOS	D	D	E	B	B	
d_A, Approach Delay [s/veh]	48.97		16.49		7.96	
Approach LOS	D		B		A	
d_I, Intersection Delay [s/veh]	20.01					
Intersection LOS	C					
Intersection V/C	0.650					

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 Intersectio	2.107	3.097	3.250
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]	1428	383	200
d_b, Bicycle Delay [s]	4.90	39.20	48.60
I_b,int, Bicycle LOS Score for Intersection	2.383	2.685	2.220
Bicycle LOS	B	B	B

Sequence





Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Sherman Rd at SR-74**

Control Type:	Signalized	Delay (sec / veh):	31.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.677

Intersection Setup

Name	Sherman Rd			Sherman 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	1	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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	40.00			40.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	76	0	243	2	2	2	19	936	36	183	688	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	28	0	12	0	0	0	0	303	16	8	210	0
Site-Generated Trips [veh/h]	10	0	0	0	0	0	0	15	6	0	16	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	0	270	2	2	2	20	1310	60	202	955	2
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	0	71	1	1	1	5	343	16	53	250	1
Total Analysis Volume [veh/h]	125	0	283	2	2	2	21	1373	63	212	1001	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	5.0	0.0	3.0	5.0	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	37	0	0	27	0	11	36	0	20	45	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	21	0	0	17	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			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	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	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	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	24	24	2	4	59	59	16	71	71
g / C, Green / Cycle	0.20	0.20	0.02	0.03	0.49	0.49	0.13	0.59	0.59
(v / s)_i Volume / Saturation Flow Rate	0.07	0.18	0.00	0.01	0.38	0.38	0.12	0.26	0.26
s, saturation flow rate [veh/h]	1810	1615	1767	1810	1900	1871	1810	1900	1899
c, Capacity [veh/h]	355	317	29	54	932	918	239	1126	1125
d1, Uniform Delay [s]	41.63	46.99	58.24	57.16	25.13	25.19	51.22	13.52	13.52
k, delay calibration	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
d2, Incremental Delay [s]	0.59	8.66	3.46	4.61	6.27	6.46	10.71	1.28	1.28
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	0.35	0.89	0.21	0.39	0.77	0.78	0.89	0.45	0.45
d, Delay for Lane Group [s/veh]	42.23	55.65	61.70	61.77	31.40	31.64	61.94	14.80	14.80
Lane Group LOS	D	E	E	E	C	C	E	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.21	8.81	0.21	0.67	16.70	16.58	6.69	6.89	6.89
50th-Percentile Queue Length [ft/ln]	80.20	220.27	5.13	16.76	417.43	414.52	167.34	172.36	172.26
95th-Percentile Queue Length [veh/ln]	5.77	13.68	0.37	1.21	23.40	23.26	10.94	11.20	11.20
95th-Percentile Queue Length [ft/ln]	144.36	341.96	9.24	30.17	584.96	581.47	273.42	280.01	279.88

Movement, Approach, & Intersection Results

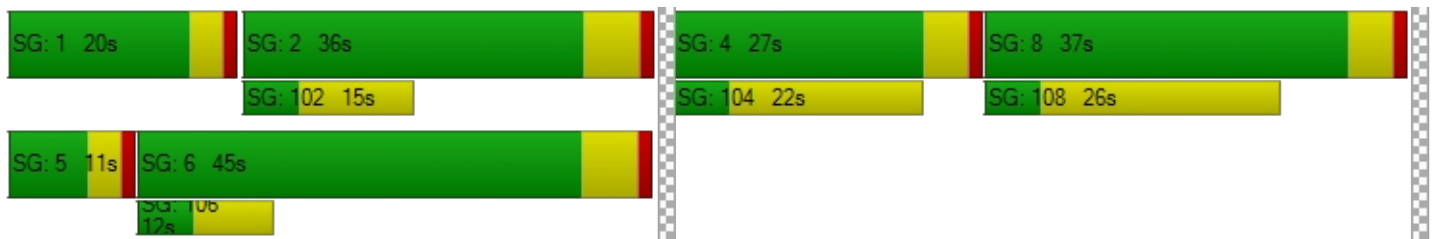
d_M, Delay for Movement [s/veh]	42.23	42.23	55.65	61.70	61.70	61.70	61.77	31.51	31.64	61.94	14.80	14.80
Movement LOS	D	D	E	E	E	E	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	51.54			61.70			31.96			23.03		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	31.09											
Intersection LOS	C											
Intersection V/C	0.677											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.252	1.749	3.239	3.324
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	535	368	500	650
d_b, Bicycle Delay [s]	32.19	39.94	33.75	27.34
I_b,int, Bicycle LOS Score for Intersection	2.233	1.570	2.762	2.562
Bicycle LOS	B	A	C	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Goetz Rd at Fieldstone Dr

Control Type:	Signalized	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.284

Intersection Setup

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Fieldstone Dr			Fieldstone Dr		
Base Volume Input [veh/h]	31	319	2	16	552	64	35	1	25	0	3	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	39	0	0	54	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	45	0	0	30	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]	33	422	2	17	669	68	37	1	27	0	3	14
Peak Hour Factor	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170
Other Adjustment Factor	1.0000	1.0000	1.0000	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	115	1	5	182	19	10	0	7	0	1	4
Total Analysis Volume [veh/h]	36	460	2	19	730	74	40	1	29	0	3	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 m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	3.2	0.0	3.0	3.2	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	11	22	0	56	76	0	11	31	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	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	24	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	2.2	0.0	2.0	2.2	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	4.20	4.00	4.20	4.20
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	3.70	3.70	2.00	3.70	3.70	2.00	2.20	2.00	2.20	2.20
g_i, Effective Green Time [s]	5	89	89	3	87	87	5	10	0	5	5
g / C, Green / Cycle	0.04	0.74	0.74	0.03	0.73	0.73	0.04	0.08	0.00	0.04	0.04
(v / s)_i Volume / Saturation Flow Rate	0.02	0.24	0.00	0.01	0.15	0.15	0.02	0.02	0.00	0.00	0.01
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1812	1810	1623	1810	1900	1615
c, Capacity [veh/h]	74	1409	1198	50	2635	1320	79	132	0	72	61
d1, Uniform Delay [s]	56.32	5.28	4.01	57.36	5.19	5.20	56.11	51.56	0.00	55.62	56.05
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
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]	4.91	0.62	0.00	4.78	0.17	0.35	4.92	0.86	0.00	0.23	2.04
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	0.49	0.33	0.00	0.38	0.20	0.20	0.51	0.23	0.00	0.04	0.24
d, Delay for Lane Group [s/veh]	61.23	5.90	4.01	62.13	5.37	5.55	61.03	52.42	0.00	55.85	58.09
Lane Group LOS	E	A	A	E	A	A	E	D	A	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.14	3.15	0.01	0.62	1.71	1.79	1.29	0.88	0.00	0.09	0.48
50th-Percentile Queue Length [ft/ln]	28.39	78.83	0.26	15.39	42.65	44.78	32.36	21.99	0.00	2.31	11.92
95th-Percentile Queue Length [veh/ln]	2.04	5.68	0.02	1.11	3.07	3.22	2.33	1.58	0.00	0.17	0.86
95th-Percentile Queue Length [ft/ln]	51.11	141.89	0.47	27.70	76.77	80.60	58.25	39.58	0.00	4.16	21.45

Movement, Approach, & Intersection Results

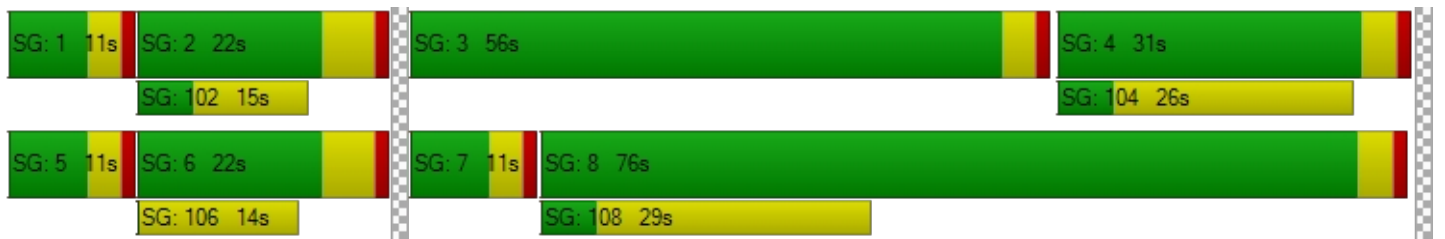
d_M, Delay for Movement [s/veh]	61.23	5.90	4.01	62.13	5.42	5.55	61.03	52.42	52.42	0.00	55.85	58.09
Movement LOS	E	A	A	E	A	A	E	D	D	A	E	E
d_A, Approach Delay [s/veh]	9.89			6.74			57.34			57.72		
Approach LOS	A			A			E			E		
d_I, Intersection Delay [s/veh]	11.02											
Intersection LOS	B											
Intersection V/C	0.284											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			4.0		
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			56.07		
I_p,int, Pedestrian LOS Score for Intersectio	2.901			2.830			2.015			2.160		
Crosswalk LOS	C			C			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	272			272			1197			447		
d_b, Bicycle Delay [s]	44.81			44.81			9.68			36.19		
I_b,int, Bicycle LOS Score for Intersection	2.381			2.012			1.675			1.589		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 8: Goetz Rd at Ethanac Rd**

Control Type:	Signalized	Delay (sec / veh):	48.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.585

Intersection Setup

Name	Goetz Rd			Goetz 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	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	7	134	227	254	245	30	17	63	5	275	67	239
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	13	28	37	19	0	0	0	0	33	1	31
Site-Generated Trips [veh/h]	0	0	10	30	0	0	0	3	0	15	5	45
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	7	155	279	336	279	32	18	70	5	340	77	329
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]	2	40	71	86	71	8	5	18	1	87	20	84
Total Analysis Volume [veh/h]	7	158	285	344	285	33	18	72	5	348	79	336
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	28	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	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	32	0	32	53	0	18	28	0	28	38	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	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	3.7	0.0	2.0	3.7	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	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	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	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	2	23	23	25	47	47	3	27	27	25	49	49
g / C, Green / Cycle	0.01	0.20	0.20	0.21	0.39	0.39	0.03	0.23	0.23	0.21	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.00	0.08	0.18	0.19	0.08	0.02	0.01	0.02	0.00	0.19	0.04	0.21
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	1900	1615
c, Capacity [veh/h]	23	371	315	372	1404	627	50	828	370	377	779	662
d1, Uniform Delay [s]	58.69	42.40	47.21	46.73	24.40	22.94	57.29	36.40	35.78	46.53	21.81	26.39
k, delay calibration	0.11	0.11	0.21	0.31	0.11	0.11	0.11	0.50	0.50	0.28	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	1.00
d2, Incremental Delay [s]	7.03	0.78	16.39	22.19	0.07	0.03	4.27	0.21	0.07	20.01	0.26	2.77
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	0.30	0.43	0.90	0.92	0.20	0.05	0.36	0.09	0.01	0.92	0.10	0.51
d, Delay for Lane Group [s/veh]	65.72	43.18	63.60	68.92	24.47	22.98	61.56	36.61	35.85	66.54	22.07	29.17
Lane Group LOS	E	D	E	E	C	C	E	D	D	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.25	4.05	9.41	11.93	2.58	0.57	0.58	0.83	0.12	11.83	1.36	7.24
50th-Percentile Queue Length [ft/ln]	6.25	101.26	235.19	298.25	64.53	14.13	14.51	20.71	2.92	295.73	34.08	180.91
95th-Percentile Queue Length [veh/ln]	0.45	7.29	14.44	17.59	4.65	1.02	1.04	1.49	0.21	17.47	2.45	11.65
95th-Percentile Queue Length [ft/ln]	11.26	182.28	360.95	439.86	116.16	25.43	26.11	37.28	5.25	436.74	61.35	291.20

Movement, Approach, & Intersection Results

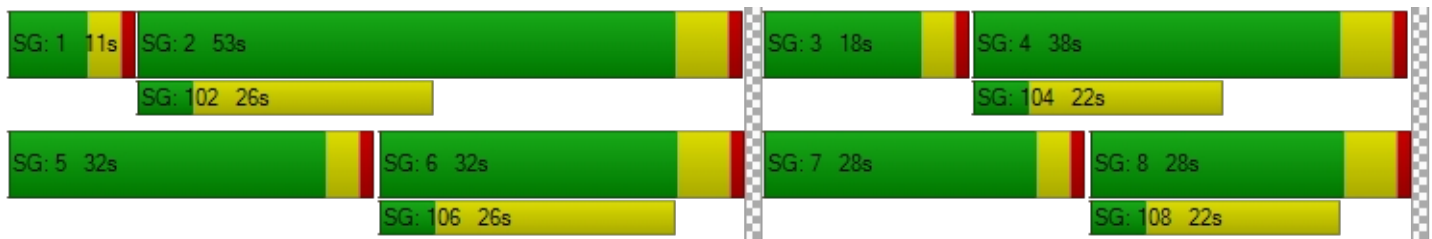
d_M, Delay for Movement [s/veh]	65.72	43.18	63.60	68.92	24.47	22.98	61.56	36.61	35.85	66.54	22.07	29.17
Movement LOS	E	D	E	E	C	C	E	D	D	E	C	C
d_A, Approach Delay [s/veh]	56.46			47.49			41.29			45.48		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	48.46											
Intersection LOS	D											
Intersection V/C	0.585											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.669	2.697	2.526	2.865
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	438	788	372	538
d_b, Bicycle Delay [s]	36.58	22.02	39.77	32.05
I_b,int, Bicycle LOS Score for Intersection	2.302	2.106	1.638	2.189
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 9: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	251.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.663

Intersection Setup

Name	Wheat St		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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	0	542	0	0	590
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	55	245	0	0	354
Site-Generated Trips [veh/h]	44	327	4	39	155	22
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]	44	382	824	39	155	1001
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	98	211	10	40	256
Total Analysis Volume [veh/h]	45	391	844	40	159	1026
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	0.66	0.69	0.01	0.00	0.21	0.01
d_M, Delay for Movement [s/veh]	250.96	204.24	0.00	0.00	10.85	0.00
Movement LOS	F	F	A	A	B	A
95th-Percentile Queue Length [veh/ln]	21.69	21.69	0.00	0.00	0.77	0.00
95th-Percentile Queue Length [ft/ln]	542.18	542.18	0.00	0.00	19.20	0.00
d_A, Approach Delay [s/veh]	209.07		0.00		1.46	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	37.08					
Intersection LOS	F					

**Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	589.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.331

Intersection Setup

Name	Byers 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	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		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	5	2	538	1	4	598
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	66	244	0	97	344
Site-Generated Trips [veh/h]	22	135	327	4	129	155
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	203	1141	5	230	1133
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]	7	53	297	1	60	295
Total Analysis Volume [veh/h]	28	212	1190	5	240	1181
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	1.33	0.47	0.01	0.00	0.41	0.01
d_M, Delay for Movement [s/veh]	589.58	426.46	0.00	0.00	15.19	0.00
Movement LOS	F	F	A	A	C	A
95th-Percentile Queue Length [veh/ln]	18.27	18.27	0.00	0.00	1.96	0.00
95th-Percentile Queue Length [ft/ln]	456.75	456.75	0.00	0.00	49.05	0.00
d_A, Approach Delay [s/veh]	445.49		0.00		2.56	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	38.71					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 11: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	543.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.128

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	0	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	106	76	143	45	75	13	6	402	108	212	484	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	55	3	174	7	9	0	0	326	40	281	407	12
Site-Generated Trips [veh/h]	18	0	0	0	0	11	0	409	54	0	255	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	185	84	326	55	89	25	6	1161	208	506	1175	57
Peak Hour Factor	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	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]	50	23	88	15	24	7	2	312	56	136	316	15
Total Analysis Volume [veh/h]	199	90	351	59	96	27	6	1250	224	545	1265	61
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	4.7	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	32	0	0	28	0	11	36	0	24	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	3	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	7	0	0	14	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	3.7	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	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.30	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
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	39	10	10	10	1	12	12	38	49	49
g / C, Green / Cycle	0.33	0.08	0.08	0.08	0.01	0.10	0.10	0.32	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.37	0.03	0.05	0.02	0.00	0.40	0.40	0.30	0.35	0.35
s, saturation flow rate [veh/h]	1708	1810	1900	1615	1810	1900	1801	1810	1900	1870
c, Capacity [veh/h]	560	150	158	134	19	189	179	580	778	765
d1, Uniform Delay [s]	40.34	52.14	53.12	51.29	58.93	54.03	54.03	39.64	32.16	32.40
k, delay calibration	0.50	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]	84.22	1.66	3.73	0.73	9.01	1351.94	1378.13	8.04	11.47	12.50
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	1.14	0.39	0.61	0.20	0.31	3.98	4.03	0.94	0.85	0.87
d, Delay for Lane Group [s/veh]	124.56	53.79	56.85	52.02	67.94	1405.97	1432.16	47.68	43.63	44.90
Lane Group LOS	F	D	E	D	E	F	F	D	D	D
Critical Lane Group	Yes	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	28.77	1.72	2.89	0.77	0.22	76.47	73.81	16.00	18.71	18.97
50th-Percentile Queue Length [ft/ln]	719.27	42.89	72.34	19.21	5.59	1911.82	1845.24	399.88	467.65	474.21
95th-Percentile Queue Length [veh/ln]	40.92	3.09	5.21	1.38	0.40	114.82	111.08	22.55	25.80	26.11
95th-Percentile Queue Length [ft/ln]	1023.12	77.21	130.20	34.58	10.06	2870.60	2776.99	563.85	644.97	652.78

Movement, Approach, & Intersection Results

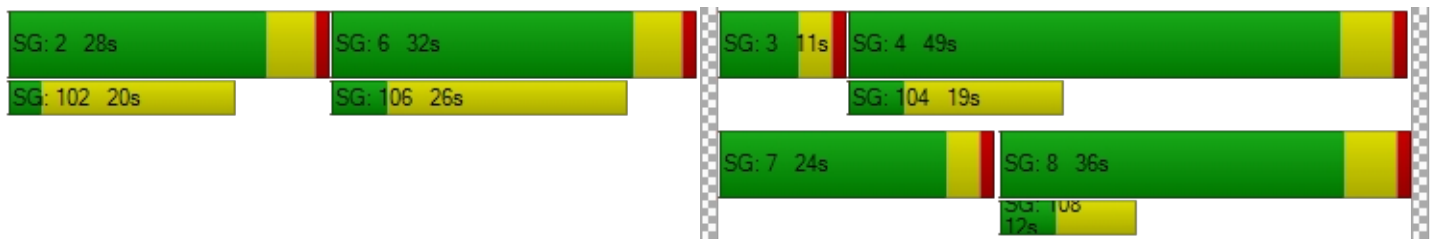
d_M, Delay for Movement [s/veh]	124.56	124.56	124.56	53.79	56.85	52.02	67.94	1416.42	1432.16	47.68	44.23	44.90
Movement LOS	F	F	F	D	E	D	E	F	F	D	D	D
d_A, Approach Delay [s/veh]	124.56			55.14			1413.33			45.26		
Approach LOS	F			E			F			D		
d_I, Intersection Delay [s/veh]	543.06											
Intersection LOS	F											
Intersection V/C	1.128											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	7.0	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	53.20	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.831	2.270	3.282	3.424
Crosswalk LOS	C	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	445	378	505	722
d_b, Bicycle Delay [s]	36.27	39.45	33.53	24.51
I_b,int, Bicycle LOS Score for Intersection	2.616	1.860	2.781	3.103
Bicycle LOS	B	A	C	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Evans Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	7,256.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	13.645

Intersection Setup

Name	Evans 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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	2	602	3	4	754
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	48	282	537	31	239	652
Site-Generated Trips [veh/h]	0	0	409	0	0	255
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]	48	284	1584	34	243	1706
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]	12	73	409	9	63	440
Total Analysis Volume [veh/h]	50	293	1635	35	251	1761
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	13.64	0.93	0.02	0.00	0.64	0.02
d_M, Delay for Movement [s/veh]	7256.21	6285.20	0.00	0.00	29.49	0.00
Movement LOS	F	F	A	A	D	A
95th-Percentile Queue Length [veh/ln]	42.93	42.93	0.00	0.00	4.34	0.00
95th-Percentile Queue Length [ft/ln]	1073.24	1073.24	0.00	0.00	108.51	0.00
d_A, Approach Delay [s/veh]	6426.75		0.00		3.68	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	549.51					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	54.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.781

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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	26	9	48	425	0	141	169	442	18	51	493	394
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	61	0	0	3	0	758	0	79	810	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	409	0	0	255	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	10	112	451	0	152	179	1636	19	133	1588	418
Peak Hour Factor	0.9690	0.9690	0.9690	0.9690	1.0000	0.9690	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	3	29	116	0	39	46	422	5	34	410	108
Total Analysis Volume [veh/h]	29	10	116	465	0	157	185	1688	20	137	1639	431
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permiss	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	5	0	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	7	0	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	30	0	0	30	30	0	30	30	0
Amber [s]	0.0	5.0	0.0	5.0	0.0	0.0	3.0	4.7	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	25	0	25	0	0	11	59	0	11	59	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	14	0	14	0	0	0	7	0	0	17	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	4.0	0.0	4.0	0.0	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	L	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	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]	4.00	4.00	4.00	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	13	18	18	14	56	56	11	53	53
g / C, Green / Cycle	0.11	0.15	0.15	0.12	0.47	0.47	0.09	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.09	0.13	0.05	0.10	0.47	0.01	0.08	0.45	0.27
s, saturation flow rate [veh/h]	1665	3514	2859	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	182	524	427	215	1702	760	164	1598	714
d1, Uniform Delay [s]	52.51	50.05	45.95	51.88	31.55	17.04	53.71	33.49	25.49
k, delay calibration	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
d2, Incremental Delay [s]	10.71	5.26	0.53	9.60	19.99	0.06	10.69	29.20	3.77
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	0.89	0.37	0.86	0.99	0.03	0.84	1.03	0.60
d, Delay for Lane Group [s/veh]	63.22	55.32	46.48	61.48	51.53	17.10	64.40	62.69	29.26
Lane Group LOS	E	E	D	E	D	B	E	F	C
Critical Lane Group	Yes	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.93	6.91	2.05	5.84	26.66	0.29	4.42	27.72	9.46
50th-Percentile Queue Length [ft/ln]	123.23	172.63	51.33	146.00	666.57	7.36	110.41	692.95	236.62
95th-Percentile Queue Length [veh/ln]	8.57	11.21	3.70	9.80	35.13	0.53	7.86	37.06	14.51
95th-Percentile Queue Length [ft/ln]	214.25	280.36	92.39	245.08	878.28	13.24	196.58	926.47	362.76

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	63.22	63.22	63.22	55.32	0.00	46.48	61.48	51.53	17.10	64.40	62.69	29.26
Movement LOS	E	E	E	E		D	E	D	B	E	F	C
d_A, Approach Delay [s/veh]	63.22			53.09			52.14			56.26		
Approach LOS	E			D			D			E		
d_I, Intersection Delay [s/veh]	54.48											
Intersection LOS	D											
Intersection V/C	0.781											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.009	2.761	3.475	3.680
Crosswalk LOS	B	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	317	317	888	888
d_b, Bicycle Delay [s]	42.50	42.50	18.54	18.54
I_b,int, Bicycle LOS Score for Intersection	1.815	1.560	3.121	3.380
Bicycle LOS	A	A	C	C

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 14: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	335.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.872

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			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 On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	193	0	361	0	602	384	125	716	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	188	0	446	0	464	363	279	454	0
Site-Generated Trips [veh/h]	0	0	0	0	0	131	0	251	158	0	124	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	393	0	960	0	1353	928	412	1337	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9460	0.9460	0.9460	1.0000	0.9460	0.9460	0.9460	0.9460	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	104	0	254	0	358	245	109	353	0
Total Analysis Volume [veh/h]	0	0	0	415	0	1015	0	1430	981	436	1413	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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	10	0	0	10	0	7	10	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	55	0	28	83	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	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	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	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]		120	120	120	120	120	120
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	42	42	31	77
g / C, Green / Cycle		0.26	0.26	0.35	0.35	0.26	0.64
(v / s)_i Volume / Saturation Flow Rate		0.23	0.63	0.75	0.61	0.24	0.39
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		478	427	668	568	469	2330
d1, Uniform Delay [s]		42.15	44.15	38.90	38.90	43.39	12.47
k, delay calibration		0.33	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]		13.44	627.80	517.88	334.47	8.65	1.18
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.87	2.38	2.14	1.73	0.93	0.61
d, Delay for Lane Group [s/veh]		55.60	671.95	556.77	373.36	52.04	13.65
Lane Group LOS		E	F	F	F	D	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		13.07	86.55	114.53	68.41	13.12	9.74
50th-Percentile Queue Length [ft/ln]		326.84	2163.82	2863.30	1710.28	327.99	243.41
95th-Percentile Queue Length [veh/ln]		19.00	137.11	181.25	107.05	19.06	14.85
95th-Percentile Queue Length [ft/ln]		475.08	3427.75	4531.36	2676.23	476.49	371.34

Movement, Approach, & Intersection Results

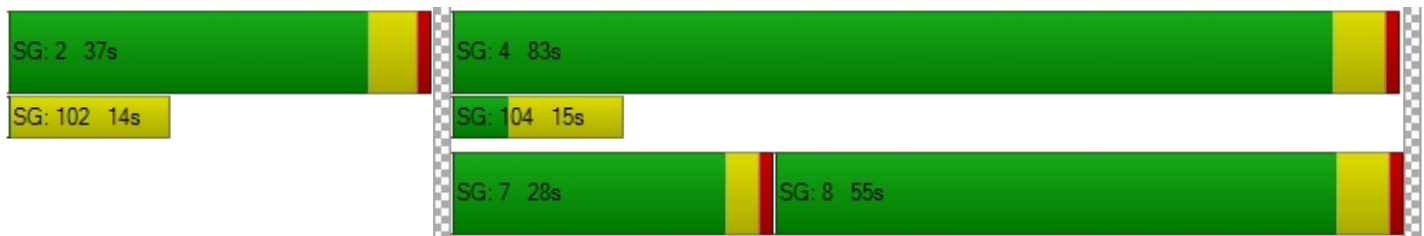
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	55.60	55.60	671.95	0.00	556.77	373.36	52.04	13.65	0.00
Movement LOS				E	E	F		F	F	D	B	
d_A, Approach Delay [s/veh]	0.00			493.08			482.15			22.70		
Approach LOS	A			F			F			C		
d_I, Intersection Delay [s/veh]	335.59											
Intersection LOS	F											
Intersection V/C	1.872											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	4.0
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	51.34	0.00	56.07
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.653	0.000	3.651
Crosswalk LOS	F	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	528	822	1288
d_b, Bicycle Delay [s]	60.00	32.49	20.83	7.60
I_b,int, Bicycle LOS Score for Intersection	4.132	3.919	5.538	3.085
Bicycle LOS	D	D	F	C

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	400.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.843

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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]	45.00			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 Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	426	2	198	0	0	0	246	570	0	0	413	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
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]	425	0	185	0	0	0	431	221	0	0	308	284
Site-Generated Trips [veh/h]	105	0	0	0	0	0	211	40	0	0	19	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	982	2	395	0	0	0	903	865	0	0	765	491
Peak Hour Factor	0.9570	0.9570	0.9570	1.0000	1.0000	1.0000	0.9570	0.9570	1.0000	1.0000	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]	257	1	103	0	0	0	236	226	0	0	200	128
Total Analysis Volume [veh/h]	1026	2	413	0	0	0	944	904	0	0	799	513
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

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	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	38	0	0	0	0	30	82	0	0	52	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	10	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	3.3	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]	5.30	5.30		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]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	33	33		26	76	46
g / C, Green / Cycle	0.27	0.27		0.22	0.64	0.39
(v / s)_i Volume / Saturation Flow Rate	0.57	0.26		0.52	0.48	0.74
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1777
c, Capacity [veh/h]	493	440		392	1208	686
d1, Uniform Delay [s]	43.65	42.67		47.00	15.18	36.85
k, delay calibration	0.50	0.38		0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	494.99	25.13		641.26	4.27	416.36
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	2.08	0.94		2.41	0.75	1.91
d, Delay for Lane Group [s/veh]	538.64	67.80		688.26	19.45	453.21
Lane Group LOS	F	E		F	B	F
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	81.83	14.55		81.01	15.83	97.94
50th-Percentile Queue Length [ft/ln]	2045.66	363.76		2025.18	395.63	2448.43
95th-Percentile Queue Length [veh/ln]	128.55	20.81		126.83	22.35	154.71
95th-Percentile Queue Length [ft/ln]	3213.65	520.15		3170.76	558.73	3867.80

Movement, Approach, & Intersection Results

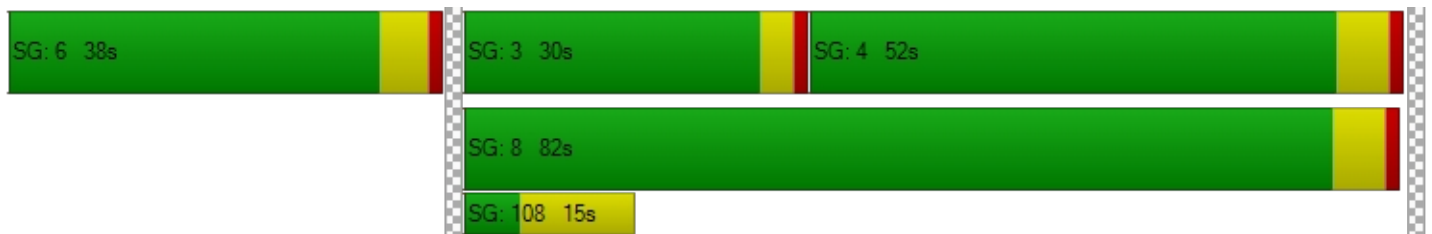
d_M, Delay for Movement [s/veh]	538.64	538.64	67.80	0.00	0.00	0.00	688.26	19.45	0.00	0.00	453.21	453.21
Movement LOS	F	F	E				F	B			F	F
d_A, Approach Delay [s/veh]	403.69			0.00			361.09			453.21		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	400.70											
Intersection LOS	F											
Intersection V/C	1.843											

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 Intersectio	2.658	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]	545	0	1272	772
d_b, Bicycle Delay [s]	31.76	60.00	7.96	22.63
I_b,int, Bicycle LOS Score for Intersection	3.937	4.132	4.609	3.724
Bicycle LOS	D	D	E	D

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Trumble Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	61.9
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.841

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	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	84	5	37	30	15	141	73	588	33	44	361	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	62	0	0	0	0	62	42	319	42	0	466	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	40	0	0	19	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	151	5	39	32	16	211	119	982	77	47	868	4
Peak Hour Factor	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	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]	41	1	11	9	4	58	33	270	21	13	238	1
Total Analysis Volume [veh/h]	166	5	43	35	18	232	131	1079	85	52	954	4
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	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]	16	19	0	20	23	0	15	70	0	11	66	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	14	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	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	4.00	4.00	4.00	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	2.00	2.00	2.00	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	12	26	5	19	10	66	66	6	61
g / C, Green / Cycle	0.10	0.22	0.04	0.16	0.09	0.55	0.55	0.05	0.51
(v / s)_i Volume / Saturation Flow Rate	0.09	0.03	0.02	0.15	0.07	0.57	0.05	0.03	0.50
s, saturation flow rate [veh/h]	1810	1641	1810	1633	1810	1900	1615	1810	1899
c, Capacity [veh/h]	181	356	75	259	157	1037	882	87	963
d1, Uniform Delay [s]	53.51	37.92	56.20	50.19	53.92	27.24	13.06	55.97	29.41
k, delay calibration	0.11	0.11	0.11	0.17	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]	16.52	0.17	4.40	25.19	10.76	38.93	0.22	6.37	27.78
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	0.92	0.14	0.46	0.97	0.83	1.04	0.10	0.60	0.99
d, Delay for Lane Group [s/veh]	70.03	38.09	60.60	75.38	64.68	66.17	13.27	62.33	57.19
Lane Group LOS	E	D	E	E	E	F	B	E	E
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.79	1.16	1.13	9.24	4.23	37.12	1.07	1.65	31.86
50th-Percentile Queue Length [ft/ln]	144.66	29.10	28.25	230.99	105.82	928.09	26.77	41.25	796.47
95th-Percentile Queue Length [veh/ln]	9.73	2.10	2.03	14.22	7.61	48.70	1.93	2.97	41.12
95th-Percentile Queue Length [ft/ln]	243.28	52.38	50.86	355.62	190.18	1217.52	48.18	74.25	1027.89

Movement, Approach, & Intersection Results

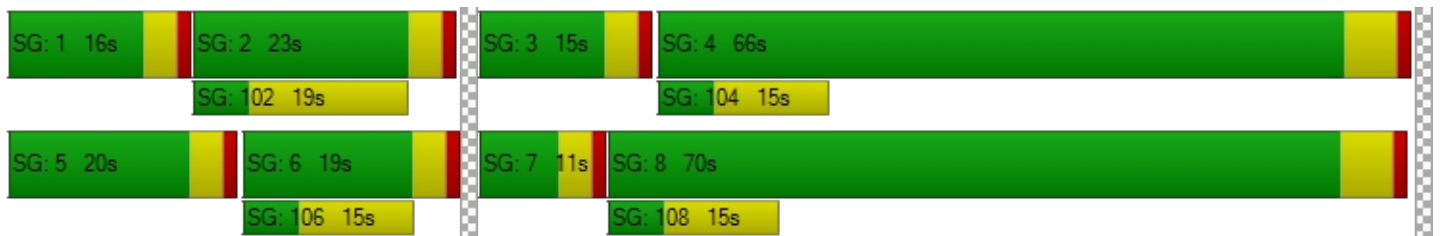
d_M, Delay for Movement [s/veh]	70.03	38.09	38.09	60.60	75.38	75.38	64.68	66.17	13.27	62.33	57.19	57.19
Movement LOS	E	D	D	E	E	E	E	F	B	E	E	E
d_A, Approach Delay [s/veh]	62.87			73.57			62.55			57.45		
Approach LOS	E			E			E			E		
d_I, Intersection Delay [s/veh]	61.86											
Intersection LOS	E											
Intersection V/C	0.841											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.075	2.094	3.222	3.129
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	250	317	1072	1005
d_b, Bicycle Delay [s]	45.94	42.50	12.93	14.85
I_b,int, Bicycle LOS Score for Intersection	1.913	2.030	3.696	3.226
Bicycle LOS	A	B	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 17: Sherman Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	8,805.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	17.422

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews 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	Yes			Yes			Yes			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews Rd		
Base Volume Input [veh/h]	19	5	2	4	2	191	271	173	15	2	95	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	62	0	0	15	0	1	3	356	43	0	527	25
Site-Generated Trips [veh/h]	3	0	0	0	0	6	10	25	5	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
Total Hourly Volume [veh/h]	85	5	2	19	2	209	300	564	64	2	638	28
Peak Hour Factor	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760	0.8760
Other Adjustment Factor	1.0000	1.0000	1.0000	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	1	1	5	1	60	86	161	18	1	182	8
Total Analysis Volume [veh/h]	97	6	2	22	2	239	342	644	73	2	728	32
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	17.42	0.36	0.00	1.71	0.12	0.57	0.40	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	8804.98	8375.52	8166.32	969.32	913.29	698.22	11.91	0.00	0.00	9.04	0.00	0.00
Movement LOS	F	F	F	F	F	F	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	15.01	15.01	15.01	23.42	23.42	23.42	1.92	1.92	1.92	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	375.26	375.26	375.26	585.51	585.51	585.51	48.01	48.01	48.01	0.17	0.17	0.17
d_A, Approach Delay [s/veh]	8768.27			722.53			3.85			0.02		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	509.27											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 18: Byers Rd at McLaughlin Rd

Control Type:	All-way stop	Delay (sec / veh):	7.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.064

Intersection Setup

Name	Byers Rd			Byers 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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Byers Rd			Byers Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	17	0	10	29	0	0	56	0	11	10	14
Site-Generated Trips [veh/h]	0	0	0	9	0	0	0	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]	0	17	0	19	29	0	0	56	0	11	10	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	0	5	7	0	0	14	0	3	3	8
Total Analysis Volume [veh/h]	0	17	0	19	29	0	0	56	0	11	10	32
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	863	853	880	953
Degree of Utilization, x	0.02	0.06	0.06	0.06

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.06	0.18	0.20	0.18
95th-Percentile Queue Length [ft]	1.51	4.47	5.09	4.41
Approach Delay [s/veh]	7.26	7.47	7.37	7.00
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.28			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 19: Murrieta Rd at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	207.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.967

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	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]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	2	297	3	25	368	7	6	0	3	7	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	14	244	30	0	337	0	0	0	10	47	0	0
Site-Generated Trips [veh/h]	18	18	0	0	54	0	0	0	9	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	577	33	27	781	7	6	0	22	54	0	24
Peak Hour Factor	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	163	9	8	221	2	2	0	6	15	0	7
Total Analysis Volume [veh/h]	38	653	37	31	883	8	7	0	25	61	0	27
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	0.05	0.01	0.00	0.03	0.01	0.00	0.11	0.00	0.07	0.97	0.00	0.06
d_M, Delay for Movement [s/veh]	9.92	0.00	0.00	9.08	0.00	0.00	65.86	52.54	19.90	207.33	192.41	158.07
Movement LOS	A	A	A	A	A	A	F	F	C	F	F	F
95th-Percentile Queue Length [veh/ln]	0.16	0.00	0.00	0.11	0.00	0.00	0.64	0.64	0.64	5.89	5.89	5.89
95th-Percentile Queue Length [ft/ln]	3.89	0.00	0.00	2.63	0.00	0.00	16.10	16.10	16.10	147.16	147.16	147.16
d_A, Approach Delay [s/veh]	0.52			0.31			29.95			192.21		
Approach LOS	A			A			D			F		
d_I, Intersection Delay [s/veh]	10.47											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 20: Murrieta Rd at Rouse Rd

Control Type:	Two-way stop	Delay (sec / veh):	622.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.117

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	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	4	227	12	65	297	26	9	8	2	4	10	61
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	87	133	0	1	132	262	154	0	51	0	0	0
Site-Generated Trips [veh/h]	0	33	0	5	57	0	0	0	0	0	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	91	407	13	75	504	290	164	8	53	4	11	68
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	109	3	20	135	78	44	2	14	1	3	18
Total Analysis Volume [veh/h]	97	436	14	80	540	310	176	9	57	4	12	73
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	0.12	0.00	0.00	0.07	0.01	0.00	2.12	0.07	0.10	0.06	0.15	0.12
d_M, Delay for Movement [s/veh]	10.14	0.00	0.00	8.46	0.00	0.00	622.79	36.06	12.36	58.14	55.86	11.53
Movement LOS	B	A	A	A	A	A	F	E	B	F	F	B
95th-Percentile Queue Length [veh/ln]	0.41	0.00	0.00	0.23	0.00	0.00	15.79	0.23	0.35	0.17	0.48	0.39
95th-Percentile Queue Length [ft/ln]	10.35	0.00	0.00	5.75	0.00	0.00	394.71	5.73	8.70	4.34	12.09	9.87
d_A, Approach Delay [s/veh]	1.80			0.73			457.19			19.60		
Approach LOS	A			A			F			C		
d_I, Intersection Delay [s/veh]	63.08											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 21: Murrieta Rd at Chambers Ave

Control Type:	All-way stop	Delay (sec / veh):	54.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.172

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	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	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	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	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			Chambers Ave			Chambers Ave		
Base Volume Input [veh/h]	50	256	9	44	222	38	11	24	24	6	31	57
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	87	308	0	1	233	1	0	0	51	0	0	0
Site-Generated Trips [veh/h]	0	27	0	5	47	5	3	0	0	0	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	140	606	10	53	515	46	15	25	76	6	33	63
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]	37	159	3	14	136	12	4	7	20	2	9	17
Total Analysis Volume [veh/h]	147	638	11	56	542	48	16	26	80	6	35	66
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	480	514	516	467	590	451	425	450	492
Degree of Utilization, x	0.31	0.63	0.63	0.12	1.17	0.27	0.01	0.08	0.13

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.28	4.34	4.31	0.41	21.22	1.09	0.04	0.25	0.46
95th-Percentile Queue Length [ft]	32.11	108.55	107.83	10.13	530.57	27.14	1.07	6.29	11.53
Approach Delay [s/veh]	19.50			111.46		13.93	11.23		
Approach LOS	C			F		B	B		
Intersection Delay [s/veh]	54.11								
Intersection LOS	F								

Intersection Level Of Service Report
Intersection 22: Murrieta Rd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	44.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.713

Intersection Setup

Name	Murrieta Rd			Murrieta 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Murrieta Rd			Murrieta Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	3	184	130	80	115	48	38	121	1	77	153	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	182	63	113	137	0	0	0	0	108	0	155
Site-Generated Trips [veh/h]	0	10	0	32	15	0	0	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]	3	387	201	230	274	51	40	128	1	190	162	305
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	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	53	60	72	13	11	34	0	50	43	80
Total Analysis Volume [veh/h]	3	407	211	242	288	54	42	135	1	200	170	321
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	7	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	0.0	3.6	0.0	0.0	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	11	27	0	21	37	0	0	24	0	0	48	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	14	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.3	0.0	2.0	3.3	0.0	0.0	2.6	0.0	0.0	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	L	C	R	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]	4.00	5.30	4.00	5.30	5.30	4.60	4.60	4.60	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	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	2.00	3.30	3.30	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	1	48	17	64	64	10	10	10	27	27	27
g / C, Green / Cycle	0.01	0.40	0.14	0.53	0.53	0.08	0.08	0.08	0.22	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.00	0.34	0.13	0.15	0.03	0.02	0.04	0.04	0.11	0.09	0.20
s, saturation flow rate [veh/h]	1810	1792	1810	1900	1615	1810	1900	1895	1810	1900	1615
c, Capacity [veh/h]	11	711	256	1012	860	152	159	159	404	424	361
d1, Uniform Delay [s]	59.38	33.30	51.03	15.44	13.55	51.57	52.24	52.25	40.68	39.74	45.16
k, delay calibration	0.11	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.12
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]	13.33	13.60	15.87	0.71	0.14	0.98	1.81	1.82	0.94	0.61	8.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.87	0.94	0.28	0.06	0.28	0.43	0.43	0.49	0.40	0.89
d, Delay for Lane Group [s/veh]	72.72	46.89	66.90	16.15	13.69	52.55	54.06	54.07	41.62	40.35	53.59
Lane Group LOS	E	D	E	B	B	D	D	D	D	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.13	18.27	8.13	4.27	0.70	1.22	2.02	2.02	5.23	4.32	9.97
50th-Percentile Queue Length [ft/ln]	3.22	456.78	203.17	106.71	17.58	30.53	50.41	50.38	130.68	108.12	249.27
95th-Percentile Queue Length [veh/ln]	0.23	25.28	12.80	7.66	1.27	2.20	3.63	3.63	8.98	7.74	15.15
95th-Percentile Queue Length [ft/ln]	5.80	632.03	320.05	191.42	31.65	54.96	90.74	90.68	224.42	193.39	378.73

Movement, Approach, & Intersection Results

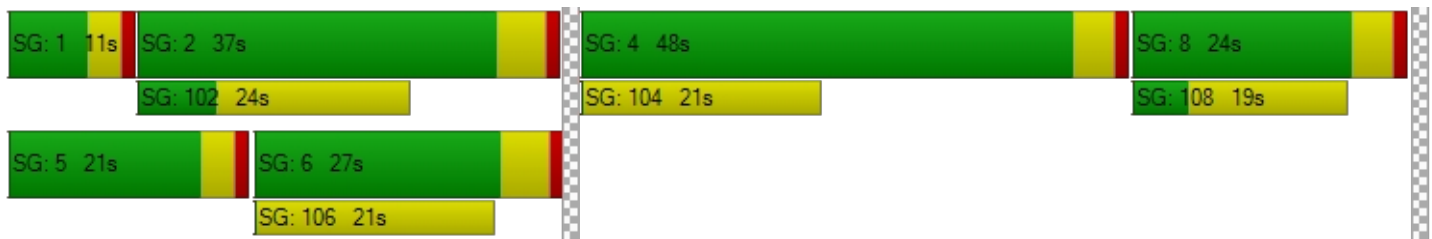
d_M, Delay for Movement [s/veh]	72.72	46.89	46.89	66.90	16.15	13.69	52.55	54.06	54.07	41.62	40.35	53.59
Movement LOS	E	D	D	E	B	B	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	47.02			36.95			53.71			46.87		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	44.71											
Intersection LOS	D											
Intersection V/C	0.713											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	4.0	11.0	4.0
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	56.07	49.50	56.07
I_p,int, Pedestrian LOS Score for Intersectio	2.497	2.802	2.406	2.714
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	362	528	323	723
d_b, Bicycle Delay [s]	40.26	32.49	42.17	24.45
I_b,int, Bicycle LOS Score for Intersection	2.584	2.523	1.706	2.130
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 23: Sun City Blvd at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	25.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.427

Intersection Setup

Name	Sun City Blvd			Sun City Blvd			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	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sun City Blvd			Sun City Blvd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	80	121	148	65	77	10	25	324	59	67	416	228
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	176	0	0	263	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	32	0	0	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	128	157	69	82	11	27	551	63	71	721	242
Peak Hour Factor	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860
Other Adjustment Factor	1.0000	1.0000	1.0000	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	32	40	17	21	3	7	140	16	18	183	61
Total Analysis Volume [veh/h]	86	130	159	70	83	11	27	559	64	72	731	245
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	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	48	0	0	22	0	11	37	0	13	39	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	1	0	0	0	0	0	0	0	0	2	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	14	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	C	C	R	C	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	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	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	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	10	10	4	72	72	6	74	74
g / C, Green / Cycle	0.12	0.12	0.12	0.08	0.08	0.03	0.60	0.60	0.05	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.10	0.04	0.04	0.01	0.17	0.17	0.04	0.27	0.27
s, saturation flow rate [veh/h]	1826	1900	1615	1822	1856	1810	1900	1832	1810	1900	1739
c, Capacity [veh/h]	221	230	196	152	155	63	1141	1100	96	1176	1076
d1, Uniform Delay [s]	49.22	49.18	51.41	52.77	52.74	56.74	11.49	11.50	56.01	11.90	11.91
k, delay calibration	0.11	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]	1.63	1.52	7.90	2.93	2.80	4.55	0.60	0.63	10.92	1.16	1.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.48	0.81	0.54	0.53	0.43	0.28	0.28	0.75	0.43	0.43
d, Delay for Lane Group [s/veh]	50.85	50.70	59.31	55.70	55.54	61.30	12.09	12.13	66.93	13.07	13.18
Lane Group LOS	D	D	E	E	E	E	B	B	E	B	B
Critical Lane Group	No	No	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.09	3.16	5.09	2.49	2.50	0.88	4.06	3.94	2.43	7.04	6.48
50th-Percentile Queue Length [ft/ln]	77.34	79.08	127.26	62.32	62.55	21.91	101.43	98.46	60.64	175.96	161.96
95th-Percentile Queue Length [veh/ln]	5.57	5.69	8.79	4.49	4.50	1.58	7.30	7.09	4.37	11.39	10.65
95th-Percentile Queue Length [ft/ln]	139.21	142.35	219.76	112.17	112.59	39.43	182.57	177.23	109.15	284.74	266.31

Movement, Approach, & Intersection Results

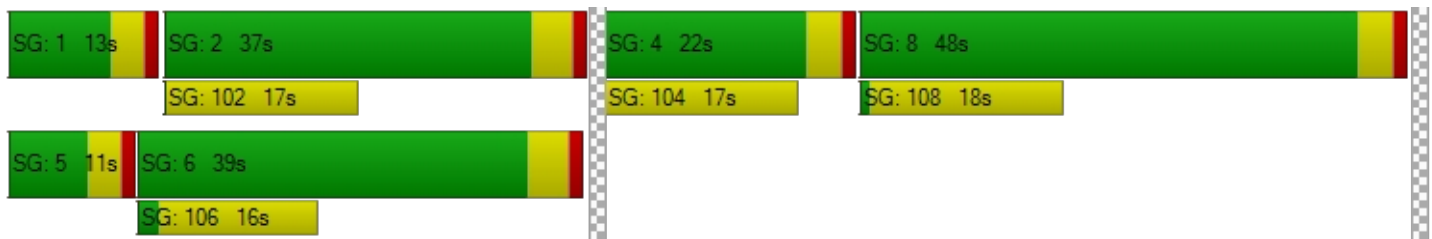
d_M, Delay for Movement [s/veh]	50.85	50.72	59.31	55.70	55.56	55.54	61.30	12.11	12.13	66.93	13.10	13.18
Movement LOS	D	D	E	E	E	E	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	54.39			55.62			14.15			16.82		
Approach LOS	D			E			B			B		
d_I, Intersection Delay [s/veh]	25.19											
Intersection LOS	C											
Intersection V/C	0.427											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	6.0	4.0	5.0
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]	56.07	54.15	56.07	55.10
I_p,int, Pedestrian LOS Score for Intersectio	2.434	2.286	2.655	2.736
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	730	297	540	573
d_b, Bicycle Delay [s]	24.19	43.52	31.97	30.53
I_b,int, Bicycle LOS Score for Intersection	1.869	1.695	2.096	2.424
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 24: Bradley Rd at McCall Blvd**

Control Type:	Signalized	Delay (sec / veh):	34.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.799

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	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	57	84	516	115	89	3	26	509	67	568	667	120
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	176	0	0	263	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	32	0	0	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	60	89	547	122	94	3	28	748	71	602	987	127
Peak Hour Factor	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	23	140	31	24	1	7	192	18	154	253	33
Total Analysis Volume [veh/h]	62	91	561	125	96	3	29	767	73	617	1012	130
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
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	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	10	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [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
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	30	30	0	21	0	38	23	0	46	31	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	21	21	0	17	0	0	14	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	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	2.0	2.0	0.0	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	
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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	16	64	10	10	4	33	33	45	73	73
g / C, Green / Cycle	0.13	0.13	0.54	0.09	0.09	0.04	0.28	0.28	0.37	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.03	0.05	0.35	0.07	0.05	0.02	0.22	0.22	0.34	0.30	0.31
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1890	1810	1900	1843	1810	1900	1826
c, Capacity [veh/h]	238	250	868	158	165	67	523	508	674	1161	1116
d1, Uniform Delay [s]	46.89	47.56	19.68	53.73	52.79	56.57	40.63	40.64	35.85	13.02	13.17
k, delay calibration	0.11	0.11	0.50	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]	0.58	0.89	3.70	8.62	3.49	4.35	13.07	13.45	5.44	1.51	1.65
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	0.36	0.65	0.79	0.60	0.43	0.81	0.82	0.92	0.50	0.51
d, Delay for Lane Group [s/veh]	47.46	48.45	23.38	62.35	56.27	60.92	53.71	54.09	41.29	14.53	14.83
Lane Group LOS	D	D	C	E	E	E	D	D	D	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.71	2.55	11.67	4.08	3.04	0.94	13.46	13.12	17.69	8.60	8.60
50th-Percentile Queue Length [ft/ln]	42.80	63.84	291.85	101.96	75.97	23.40	336.61	327.90	442.36	214.94	215.05
95th-Percentile Queue Length [veh/ln]	3.08	4.60	17.28	7.34	5.47	1.68	19.48	19.06	24.59	13.41	13.41
95th-Percentile Queue Length [ft/ln]	77.03	114.92	431.94	183.52	136.75	42.12	487.06	476.39	614.82	335.16	335.30

Movement, Approach, & Intersection Results

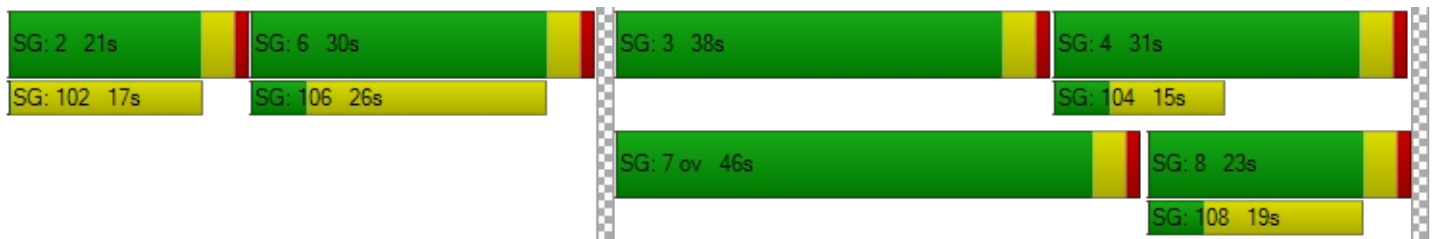
d_M, Delay for Movement [s/veh]	47.46	48.45	23.38	62.35	56.27	56.27	60.92	53.88	54.09	41.29	14.66	14.83
Movement LOS	D	D	C	E	E	E	E	D	D	D	B	B
d_A, Approach Delay [s/veh]	28.67			59.67			54.13			24.01		
Approach LOS	C			E			D			C		
d_I, Intersection Delay [s/veh]	34.52											
Intersection LOS	C											
Intersection V/C	0.799											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	4.0	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]	51.35	51.35	56.08	51.35
I_p,int, Pedestrian LOS Score for Intersectio	2.512	2.110	2.761	3.077
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	283	317	450
d_b, Bicycle Delay [s]	36.83	44.22	42.52	36.05
I_b,int, Bicycle LOS Score for Intersection	2.738	1.929	2.277	3.011
Bicycle LOS	B	A	B	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: I-215 SB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	75.8
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.961

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	358	3	462	0	845	315	285	794	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	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	312	0	124	0	103	108	185	139	0
Site-Generated Trips [veh/h]	0	0	0	30	0	0	0	20	12	0	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	721	3	614	0	1019	454	487	998	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9890	0.9890	0.9890	1.0000	0.9890	0.9890	0.9890	0.9890	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	182	1	155	0	258	115	123	252	0
Total Analysis Volume [veh/h]	0	0	0	729	3	621	0	1030	459	492	1009	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Unsigna	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	10	0	0	10	0	7	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	32	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	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	48	0	0	36	0	36	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	21	0	0	3	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	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	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	L	C
C, Cycle Length [s]		120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	2.60	2.00	2.60
g_i, Effective Green Time [s]		43	43	28	35	67
g / C, Green / Cycle		0.36	0.36	0.24	0.29	0.56
(v / s)_i Volume / Saturation Flow Rate		0.40	0.38	0.28	0.27	0.28
s, saturation flow rate [veh/h]		1810	1615	3618	1810	3618
c, Capacity [veh/h]		644	575	860	526	2032
d1, Uniform Delay [s]		38.65	38.65	45.73	41.48	15.99
k, delay calibration		0.50	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		79.47	61.18	100.07	8.36	0.87
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		1.14	1.08	1.20	0.94	0.50
d, Delay for Lane Group [s/veh]		118.12	99.83	145.80	49.84	16.86
Lane Group LOS		F	F	F	D	B
Critical Lane Group		Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		32.12	25.74	24.55	15.08	8.29
50th-Percentile Queue Length [ft/ln]		802.98	643.52	613.81	377.06	207.29
95th-Percentile Queue Length [veh/ln]		45.10	35.90	36.04	21.45	13.01
95th-Percentile Queue Length [ft/ln]		1127.58	897.57	901.06	536.28	325.36

Movement, Approach, & Intersection Results

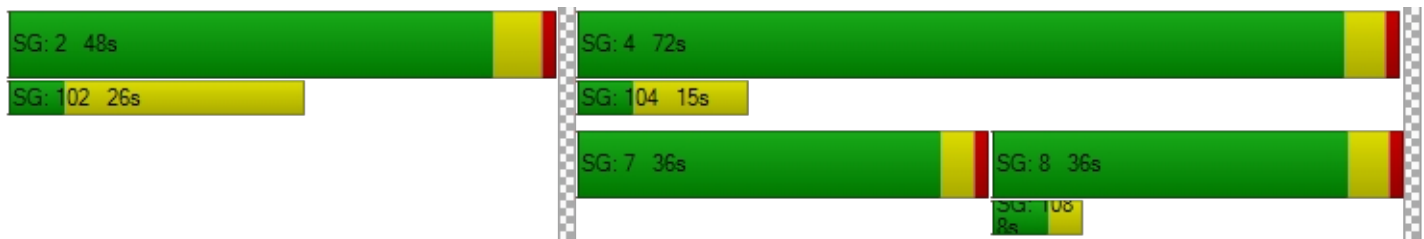
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	118.12	118.12	99.83	0.00	145.80	0.00	49.84	16.86	0.00
Movement LOS				F	F	F		F		D	B	
d_A, Approach Delay [s/veh]	0.00			109.72			101.19			27.67		
Approach LOS	A			F			F			C		
d_I, Intersection Delay [s/veh]	75.75											
Intersection LOS	E											
Intersection V/C	0.961											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	1.921	2.615	2.920	3.086
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	712	523	1123
d_b, Bicycle Delay [s]	60.00	24.90	32.71	11.53
I_b,int, Bicycle LOS Score for Intersection	4.132	3.792	2.409	2.798
Bicycle LOS	D	D	B	C

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 26: I-215 NB Ramps at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	57.4
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.954

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			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	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	383	4	480	0	0	0	283	897	0	0	740	244
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
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]	135	0	222	0	0	0	90	325	0	0	189	247
Site-Generated Trips [veh/h]	4	0	0	0	0	0	0	50	0	0	13	19
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	545	4	731	0	0	0	390	1326	0	0	986	525
Peak Hour Factor	0.9860	0.9860	0.9860	1.0000	1.0000	1.0000	0.9860	0.9860	1.0000	1.0000	0.9860	0.9860
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	138	1	185	0	0	0	99	336	0	0	250	133
Total Analysis Volume [veh/h]	553	4	741	0	0	0	396	1345	0	0	1000	532
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	56	0	0	0	0	29	64	0	0	35	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	21	0	0	0	0	0	10	0	0	3	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	3.3	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
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	2.60	2.60
g_i, Effective Green Time [s]	51	51		25	59	30
g / C, Green / Cycle	0.42	0.42		0.21	0.50	0.25
(v / s)_i Volume / Saturation Flow Rate	0.31	0.46		0.22	0.37	0.28
s, saturation flow rate [veh/h]	1810	1615		1810	3618	3618
c, Capacity [veh/h]	765	682		377	1791	916
d1, Uniform Delay [s]	28.90	34.65		47.50	24.36	44.80
k, delay calibration	0.25	0.50		0.36	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	3.10	60.13		53.20	2.96	57.73
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	0.73	1.09		1.05	0.75	1.09
d, Delay for Lane Group [s/veh]	32.01	94.78		100.70	27.31	102.53
Lane Group LOS	C	F		F	C	F
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	13.28	29.93		16.66	15.43	20.71
50th-Percentile Queue Length [ft/ln]	331.97	748.22		416.39	385.63	517.83
95th-Percentile Queue Length [veh/ln]	19.26	41.30		23.99	21.87	29.66
95th-Percentile Queue Length [ft/ln]	481.38	1032.62		599.80	546.66	741.49

Movement, Approach, & Intersection Results

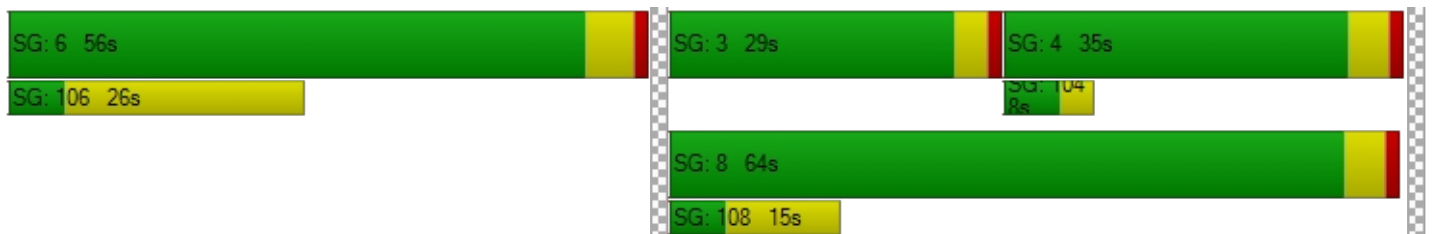
d_M, Delay for Movement [s/veh]	32.01	32.01	94.78	0.00	0.00	0.00	100.70	27.31	0.00	0.00	102.53	0.00
Movement LOS	C	C	F				F	C			F	
d_A, Approach Delay [s/veh]	67.84			0.00			44.00			67.23		
Approach LOS	E			A			D			E		
d_I, Intersection Delay [s/veh]	57.42											
Intersection LOS	E											
Intersection V/C	0.954											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.588	1.829	3.064	3.053
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	845	0	990	507
d_b, Bicycle Delay [s]	20.01	60.00	15.30	33.45
I_b,int, Bicycle LOS Score for Intersection	3.701	4.132	2.996	2.385
Bicycle LOS	D	D	C	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: Encanto Dr at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	45.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.783

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]	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	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	172	19	40	30	17	140	184	982	261	32	671	22
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	64	0	0	0	0	62	90	361	95	0	312	0
Site-Generated Trips [veh/h]	13	0	0	0	0	0	0	30	20	0	19	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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]	259	20	42	32	18	210	285	1432	392	34	1042	23
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]	67	5	11	8	5	54	74	370	101	9	269	6
Total Analysis Volume [veh/h]	268	21	43	33	19	217	294	1479	405	35	1076	24
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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	10	0	0	10	0	7	10	0	7	10	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	3.0	0.0	3.0	3.0	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	42	0	0	42	0	42	67	0	11	36	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	21	0	0	17	0	0	14	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	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	4.20	4.20	4.20	4.00	4.00	4.00	4.00	4.00	4.00
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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	38	38	38	38	38	22	65	65	5	48	48
g / C, Green / Cycle	0.32	0.32	0.32	0.32	0.32	0.18	0.54	0.54	0.04	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.23	0.01	0.03	0.02	0.14	0.16	0.50	0.53	0.02	0.29	0.29
s, saturation flow rate [veh/h]	1162	1900	1615	1359	1635	1810	1900	1766	1810	1900	1885
c, Capacity [veh/h]	273	599	509	455	515	328	1031	959	73	764	758
d1, Uniform Delay [s]	51.29	28.47	28.92	30.94	32.90	48.02	24.87	26.87	56.33	30.24	30.24
k, delay calibration	0.26	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]	35.16	0.02	0.07	0.07	0.64	8.63	13.62	25.15	4.77	5.87	5.91
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	0.98	0.04	0.08	0.07	0.46	0.90	0.91	0.98	0.48	0.72	0.72
d, Delay for Lane Group [s/veh]	86.45	28.49	28.99	31.01	33.54	56.65	38.49	52.02	61.10	36.11	36.16
Lane Group LOS	F	C	C	C	C	E	D	D	E	D	D
Critical Lane Group	Yes	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.82	0.43	0.89	0.71	5.59	9.28	26.55	31.17	1.13	14.33	14.23
50th-Percentile Queue Length [ft/ln]	270.60	10.69	22.28	17.76	139.84	231.97	663.73	779.27	28.19	358.14	355.74
95th-Percentile Queue Length [veh/ln]	16.22	0.77	1.60	1.28	9.47	14.27	35.00	40.33	2.03	20.53	20.42
95th-Percentile Queue Length [ft/ln]	405.49	19.24	40.11	31.98	236.81	356.85	874.99	1008.17	50.75	513.32	510.40

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	86.45	28.49	28.99	31.01	33.54	33.54	56.65	43.40	52.02	61.10	36.13	36.16
Movement LOS	F	C	C	C	C	C	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	75.34			33.23			46.79			36.90		
Approach LOS	E			C			D			D		
d_I, Intersection Delay [s/veh]	45.41											
Intersection LOS	D											
Intersection V/C	0.783											

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]	51.34		51.34		51.34		51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.339		2.153		3.547		3.025
Crosswalk LOS	B		B		D		C
s_b, Saturation Flow Rate of the bicycle lane	2000		2000		2000		2000
c_b, Capacity of the bicycle lane [bicycles/h]	630		630		1050		533
d_b, Bicycle Delay [s]	28.15		28.15		13.54		32.27
I_b,int, Bicycle LOS Score for Intersection	2.107		2.003		3.356		2.496
Bicycle LOS	B		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 at McCall Blvd

Control Type:	Signalized	Delay (sec / veh):	22.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.519

Intersection Setup

Name	Sherman Rd			Sherman 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	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
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			Yes		

Volumes

Name	Sherman Rd			Sherman Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	26	1	8	32	3	18	12	907	23	14	622	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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]	62	0	0	0	0	124	133	139	90	0	126	0
Site-Generated Trips [veh/h]	0	0	0	0	0	3	5	25	0	0	16	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	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	1	8	34	3	146	151	1125	114	15	801	14
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]	24	0	2	9	1	39	41	303	31	4	216	4
Total Analysis Volume [veh/h]	97	1	9	37	3	157	163	1214	123	16	864	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 m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-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	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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	23	30	0	30	30	0
Amber [s]	3.0	3.2	0.0	3.0	3.2	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	12	31	0	26	45	0	38	52	0	11	25	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	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	10	0	0	14	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	2.6	0.0	2.0	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.20	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]	2.00	2.20	2.00	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	8	17	5	14	14	13	78	78	3	68	68
g / C, Green / Cycle	0.07	0.14	0.04	0.12	0.12	0.11	0.65	0.65	0.02	0.57	0.57
(v / s)_i Volume / Saturation Flow Rate	0.05	0.01	0.02	0.00	0.10	0.09	0.36	0.36	0.01	0.23	0.23
s, saturation flow rate [veh/h]	1810	1640	1810	1900	1615	1810	1900	1840	1810	1900	1889
c, Capacity [veh/h]	121	229	77	220	187	196	1241	1202	44	1082	1076
d1, Uniform Delay [s]	55.23	44.67	56.16	47.01	51.99	52.44	11.19	11.25	57.62	14.48	14.48
k, delay calibration	0.11	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]	11.68	0.08	4.61	0.02	9.73	8.81	1.72	1.81	4.93	1.14	1.15
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	0.80	0.04	0.48	0.01	0.84	0.83	0.54	0.55	0.36	0.41	0.41
d, Delay for Lane Group [s/veh]	66.91	44.75	60.78	47.03	61.72	61.25	12.91	13.06	62.55	15.62	15.62
Lane Group LOS	E	D	E	D	E	E	B	B	E	B	B
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.28	0.26	1.20	0.08	5.13	5.25	9.44	9.29	0.54	6.78	6.74
50th-Percentile Queue Length [ft/ln]	82.11	6.61	29.90	2.04	128.31	131.23	235.88	232.30	13.38	169.43	168.48
95th-Percentile Queue Length [veh/ln]	5.91	0.48	2.15	0.15	8.85	9.01	14.47	14.29	0.96	11.05	11.00
95th-Percentile Queue Length [ft/ln]	147.81	11.90	53.81	3.67	221.19	225.17	361.82	357.28	24.09	276.17	274.91

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	66.91	44.75	44.75	60.78	47.03	61.72	61.25	12.98	13.06	62.55	15.62	15.62
Movement LOS	E	D	D	E	D	E	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	64.84			61.32			18.23			16.46		
Approach LOS	E			E			B			B		
d_I, Intersection Delay [s/veh]	22.63											
Intersection LOS	C											
Intersection V/C	0.519											

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]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.036	2.238	2.911	2.877
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	447	680	790	340
d_b, Bicycle Delay [s]	36.19	26.14	21.96	41.33
I_b,int, Bicycle LOS Score for Intersection	1.736	1.885	2.797	2.298
Bicycle LOS	A	A	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX C-5

**INTERSECTION ANALYSIS
WORKSHEETS -
OPENING YEAR 2024 CUMULATIVE
PLUS PROJECT WITH
IMPROVEMENTS**

Option 1: Modify NB Approach

Number	9					
Intersection	Wheat St at Ethanac Rd					
Control Type	Two-way stop					
Analysis Method	HCM 6th Edition					
Name	Wheat St		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↱		↱↲		↲↱	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	0	0	689	0	0	519
Total Analysis Volume [veh/h]	9	93	1078	57	240	751

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

Capacity Analysis

Calculated Rank	0	2	1	1	2	1
v_c, Conflicting Flow Rate	0	568	0	0	1135	0
v_c, Stage 1	0	568	0	0	1135	0
v_c, Stage 2	0	0	0	0	0	0
c_p,x, Potential Capacity [veh/h]	0	471	0	0	623	0
c_p,x, Stage 1 [veh/h]	0	1399	0	0	2269	0
c_p,x, Stage 2 [veh/h]	0	1091	0	0	1636	0
c_m,x, Movement Capacity [veh/h]	0	471	100000	100000	623	100000
c_m,x, Stage 1 [veh/h]	0	0	0	0	0	0
c_m,x, Stage 2 [veh/h]	0	0	0	0	0	0
c_T, Total Capacity [veh/h]	0	471	100000	100000	623	100000

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.20	0.01	0.00	0.39	0.01
d_M, Delay for Movement [s/veh]	0.00	14.50	0.00	0.00	14.35	0.00
Movement LOS		B	A	A	B	A
Critical Movement		Yes	No	No	No	No
95th-Percentile Queue Length [veh/ln]	0.00	0.73	0.00	0.00	1.81	0.00
95th-Percentile Queue Length [ft/ln]	0.00	18.15	0.00	0.00	45.29	0.00
d_A, Approach Delay [s/veh]	14.50		0.00		3.48	
Approach LOS	B		A		A	
V/C_I, Worst Movement V/C Ratio	0.20					
d_I, Worst Movement Control Delay [s/veh]	14.50					
d_I, Intersection Delay [s/veh]	2.16					
Intersection LOS	B					

Option 1: Modify NB Approach

Number	9					
Intersection	Wheat St at Ethanac Rd					
Control Type	Two-way stop					
Analysis Method	HCM 6th Edition					
Name	Wheat St		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	0	0	542	0	0	635
Total Analysis Volume [veh/h]	45	391	844	40	159	1075

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

Capacity Analysis

Calculated Rank	0	2	1	1	2	1
v_c, Conflicting Flow Rate	0	442	0	0	884	0
v_c, Stage 1	0	442	0	0	884	0
v_c, Stage 2	0	0	0	0	0	0
c_p,x, Potential Capacity [veh/h]	0	569	0	0	774	0
c_p,x, Stage 1 [veh/h]	0	1327	0	0	2118	0
c_p,x, Stage 2 [veh/h]	0	1091	0	0	1636	0
c_m,x, Movement Capacity [veh/h]	0	569	100000	100000	774	100000
c_m,x, Stage 1 [veh/h]	0	0	0	0	0	0
c_m,x, Stage 2 [veh/h]	0	0	0	0	0	0
c_T, Total Capacity [veh/h]	0	569	100000	100000	774	100000

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.69	0.01	0.00	0.21	0.01
d_M, Delay for Movement [s/veh]	0.00	24.10	0.00	0.00	10.85	0.00
Movement LOS		C	A	A	B	A
Critical Movement		Yes	No	No	No	No
95th-Percentile Queue Length [veh/ln]	0.00	5.32	0.00	0.00	0.77	0.00
95th-Percentile Queue Length [ft/ln]	0.00	133.12	0.00	0.00	19.20	0.00
d_A, Approach Delay [s/veh]	24.10		0.00		1.40	
Approach LOS	C		A		A	
V/C_I, Worst Movement V/C Ratio	0.69					
d_I, Worst Movement Control Delay [s/veh]	24.10					
d_I, Intersection Delay [s/veh]	4.44					
Intersection LOS	C					

Option 1: Install TS, Modify NB Approach

Number	10					
Intersection	Byers Rd at Ethanac Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	9	6	692	2	6	512
Total Analysis Volume [veh/h]	14	129	1169	8	276	980

Intersection Settings

Cycle Length [s]	120					
Active Pattern	Pattern 1					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Semi-actuated					
Lost time [s]	0.00					
Control Type	Permissive	Overlap	Permissive	Permissive	Protected	Permissive
Signal Group	3	3	2	0	1	6
Auxiliary Signal Groups		1,3				
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	7	10	0	7	10
Maximum Green [s]	15	15	97	0	7	97
Amber [s]	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	11	11	70	0	39	109
Walk [s]	5	5	5	0	0	5
Pedestrian Clearance [s]	10	10	7	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	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.06	0.27	0.67	0.67	0.17	0.88
(v / s)_i Volume / Saturation Flow Rate	0.01	0.08	0.31	0.31	0.15	0.27
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]	1810	1615	1900	1895	1810	3618
c, Capacity [veh/h]	106	429	1268	1265	315	3165
X, volume / capacity	0.13	0.30	0.46	0.47	0.88	0.31
d, Delay for Lane Group [s/veh]	54.18	35.54	10.83	10.85	55.94	1.54

Lane Group LOS	D	D	B	B	E	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.42	3.08	6.62	6.63	8.41	0.36
50th-Percentile Queue Length [ft/ln]	10.47	76.92	165.57	165.79	210.22	9.08
95th-Percentile Queue Length [veh/ln]	0.75	5.54	10.84	10.85	13.16	0.65
95th-Percentile Queue Length [ft/ln]	18.84	138.46	271.09	271.37	329.11	16.35

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	54.18	35.54	10.84	10.85	55.94	1.54
Movement LOS	D	D	B	B	E	A
Critical Movement	No	No	No	No	Yes	No
d_A, Approach Delay [s/veh]	37.36		10.84		13.49	
Approach LOS	D		B		B	
d_I, Intersection Delay [s/veh]	13.61					
Intersection LOS	B					
Intersection V/C	0.528					

Option 1: Install TS, Modify NB Approach

Number	10					
Intersection	Byers Rd at Ethanac Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	50	2	538	1	4	598
Total Analysis Volume [veh/h]	78	212	1190	5	240	1181

Intersection Settings

Cycle Length [s]	120					
Active Pattern	Pattern 1					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Semi-actuated					
Lost time [s]	0.00					
Control Type	Permissive	Overlap	Permissive	Permissive	Protected	Permissive
Signal Group	3	3	2	0	1	6
Auxiliary Signal Groups		1,3				
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	7	10	0	7	10
Maximum Green [s]	33	33	79	0	7	79
Amber [s]	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	11	11	74	0	35	109
Walk [s]	5	5	5	0	0	5
Pedestrian Clearance [s]	10	10	7	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	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.06	0.25	0.69	0.69	0.15	0.88
(v / s)_i Volume / Saturation Flow Rate	0.04	0.13	0.31	0.31	0.13	0.33
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]	1810	1615	1900	1897	1810	3618
c, Capacity [veh/h]	106	399	1304	1302	281	3165
X, volume / capacity	0.74	0.53	0.46	0.46	0.85	0.37
d, Delay for Lane Group [s/veh]	65.24	40.24	9.79	9.80	56.54	1.73

Lane Group LOS	E	D	A	A	E	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.61	5.55	6.21	6.22	7.31	0.48
50th-Percentile Queue Length [ft/ln]	65.15	138.70	155.25	155.38	182.77	11.91
95th-Percentile Queue Length [veh/ln]	4.69	9.41	10.30	10.30	11.75	0.86
95th-Percentile Queue Length [ft/ln]	117.28	235.28	257.43	257.59	293.63	21.44

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	65.24	40.24	9.79	9.80	56.54	1.73
Movement LOS	E	D	A	A	E	A
Critical Movement	Yes	No	No	No	No	No
d_A, Approach Delay [s/veh]	46.96		9.79		10.99	
Approach LOS	D		A		B	
d_I, Intersection Delay [s/veh]	14.09					
Intersection LOS	B					
Intersection V/C	0.539					

Option 1: Add NBL, NBR with Overlap Phasing, SBL, and EBR Lanes. NBL/SBL Protected Phasing.

Number	11											
Intersection	Murrieta Rd at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
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
Base Volume Input [veh/h]	97	90	162	67	34	9	6	665	51	78	357	48
Total Analysis Volume [veh/h]	160	108	451	85	40	28	6	1214	119	182	1024	60

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
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]	7	10	10	7	10	0	7	10	0	7	10	0
Maximum Green [s]	7	30	30	7	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.3	4.3	3.0	4.3	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]	25	37	37	14	26	0	11	51	0	18	58	0
Walk [s]	0	5	5	0	3	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	21	0	17	0	0	7	0	0	14	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	0.10	0.13	0.35	0.06	0.08	0.08	0.01	0.47	0.47	0.18	0.65	0.65
(v / s)_i Volume / Saturation Flow Rate	0.09	0.06	0.28	0.05	0.02	0.02	0.00	0.34	0.07	0.10	0.29	0.29
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]	1810	1900	1615	1810	1900	1615	1810	3618	1615	1810	1900	1863
c, Capacity [veh/h]	190	239	571	108	153	130	20	1710	763	332	1225	1201
X, volume / capacity	0.84	0.45	0.79	0.79	0.26	0.22	0.29	0.71	0.16	0.55	0.45	0.45
d, Delay for Lane Group [s/veh]	62.17	49.95	43.76	67.38	52.74	52.47	66.52	27.63	18.44	45.91	11.81	11.85

Lane Group LOS	E	D	D	E	D	D	E	C	B	D	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	5.11	3.02	12.68	2.83	1.14	0.80	0.22	13.18	1.86	4.88	6.57	6.47
50th-Percentile Queue Length [ft/ln]	127.81	75.41	317.09	70.76	28.61	20.03	5.48	329.38	46.51	121.89	164.35	161.77
95th-Percentile Queue Length [veh/ln]	8.82	5.43	18.52	5.09	2.06	1.44	0.39	19.13	3.35	8.50	10.78	10.64
95th-Percentile Queue Length [ft/ln]	220.51	135.73	463.10	127.36	51.51	36.05	9.87	478.20	83.72	212.42	269.47	266.06

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	62.17	49.95	43.76	67.38	52.74	52.47	66.52	27.63	18.44	45.91	11.83	11.85
Movement LOS	E	D	D	E	D	D	E	C	B	D	B	B
Critical Movement	No	No	No	Yes	No	No	No	No	No	No	No	No
d_A, Approach Delay [s/veh]	48.78			60.82			26.99			16.73		
Approach LOS	D			E			C			B		
d_I, Intersection Delay [s/veh]	29.25											
Intersection LOS	C											
Intersection V/C	0.553											

Option 1: Add NBL, NBR with Overlap Phasing, SBL, and EBR Lanes. NBL/SBL Protected Phasing.

Number	11											
Intersection	Murrieta Rd at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
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
Base Volume Input [veh/h]	106	76	143	45	75	13	6	402	108	212	484	42
Total Analysis Volume [veh/h]	199	90	351	59	96	27	6	1250	224	545	1265	61

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
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]	7	10	10	7	10	0	7	10	0	7	10	0
Maximum Green [s]	7	30	30	7	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.3	4.3	3.0	4.3	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]	18	33	33	11	26	0	11	47	0	29	65	0
Walk [s]	0	5	5	0	3	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	21	0	17	0	0	7	0	0	14	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	0.12	0.15	0.49	0.05	0.08	0.08	0.01	0.34	0.34	0.30	0.63	0.63
(v / s)_i Volume / Saturation Flow Rate	0.11	0.05	0.22	0.03	0.05	0.02	0.00	0.35	0.14	0.30	0.35	0.35
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]	1810	1900	1615	1810	1900	1615	1810	3618	1615	1810	1900	1870
c, Capacity [veh/h]	211	282	792	91	156	132	19	1249	558	539	1202	1182
X, volume / capacity	0.94	0.32	0.44	0.65	0.62	0.20	0.31	1.00	0.40	1.01	0.55	0.56
d, Delay for Lane Group [s/veh]	92.51	46.31	21.11	63.54	57.17	52.17	67.91	64.85	32.00	82.52	14.29	14.47

Lane Group LOS	F	D	C	E	E	D	E	F	C	F	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.13	2.40	6.27	1.90	2.90	0.77	0.22	21.66	5.03	21.07	9.24	9.30
50th-Percentile Queue Length [ft/ln]	203.17	59.88	156.84	47.62	72.58	19.25	5.59	541.51	125.66	526.75	231.05	232.61
95th-Percentile Queue Length [veh/ln]	12.80	4.31	10.38	3.43	5.23	1.39	0.40	29.30	8.70	28.82	14.23	14.31
95th-Percentile Queue Length [ft/ln]	320.05	107.79	259.54	85.72	130.64	34.65	10.06	732.58	217.59	720.58	355.69	357.67

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	92.51	46.31	21.11	63.54	57.17	52.17	67.91	64.85	32.00	82.52	14.38	14.47
Movement LOS	F	D	C	E	E	D	E	F	C	F	B	B
Critical Movement	Yes	No	No	No	No	No	No	No	No	No	No	No
d_A, Approach Delay [s/veh]	46.85			58.50			59.89			34.23		
Approach LOS	D			E			E			C		
d_I, Intersection Delay [s/veh]	46.33											
Intersection LOS	D											
Intersection V/C	0.828											

Option 1: Add NBR w/ ovl, Add EBR

Number	12					
Intersection	Evans Rd at Ethanac Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Evans 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	854	1	0	549
Total Analysis Volume [veh/h]	32	194	1708	33	320	1338

Intersection Settings

Cycle Length [s]	120					
Active Pattern	Pattern 1					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Semi-actuated					
Lost time [s]	0.00					
Control Type	Permissive	Overlap	Permissive	Permissive	Protected	Permissive
Signal Group	3	3	2	0	1	6
Auxiliary Signal Groups		1,3				
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	7	10	0	7	10
Maximum Green [s]	12	12	100	0	7	100
Amber [s]	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	11	11	75	0	34	109
Walk [s]	5	5	5	0	0	5
Pedestrian Clearance [s]	10	10	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	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.06	0.29	0.64	0.64	0.20	0.88
(v / s)_i Volume / Saturation Flow Rate	0.02	0.12	0.46	0.46	0.18	0.37
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]	1810	1615	1900	1887	1810	3618
c, Capacity [veh/h]	106	468	1223	1215	358	3165
X, volume / capacity	0.30	0.41	0.71	0.72	0.89	0.42
d, Delay for Lane Group [s/veh]	55.76	35.01	17.58	17.76	62.09	1.90

Lane Group LOS	E	D	B	B	E	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.98	4.67	14.14	14.24	10.44	0.58
50th-Percentile Queue Length [ft/ln]	24.38	116.71	353.40	355.91	261.02	14.49
95th-Percentile Queue Length [veh/ln]	1.76	8.21	20.30	20.42	15.74	1.04
95th-Percentile Queue Length [ft/ln]	43.89	205.30	507.55	510.60	393.50	26.09

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.76	35.01	17.67	17.76	62.09	1.90
Movement LOS	E	D	B	B	E	A
Critical Movement	No	No	No	No	Yes	No
d_A, Approach Delay [s/veh]	37.95		17.67		13.52	
Approach LOS	D		B		B	
d_I, Intersection Delay [s/veh]	17.04					
Intersection LOS	B					
Intersection V/C	0.730					

Option 1: Add NBR w/ ovl, Add EBR

Number	12					
Intersection	Evans Rd at Ethanac Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Evans 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	602	3	4	754
Total Analysis Volume [veh/h]	50	293	1635	35	251	1761

Intersection Settings

Cycle Length [s]	120					
Active Pattern	Pattern 1					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Semi-actuated					
Lost time [s]	0.00					
Control Type	Permissive	Overlap	Permissive	Permissive	Protected	Permissive
Signal Group	3	3	2	0	1	6
Auxiliary Signal Groups		1,3				
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	7	10	0	7	10
Maximum Green [s]	20	20	92	0	7	92
Amber [s]	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	11	11	81	0	28	109
Walk [s]	5	5	5	0	0	5
Pedestrian Clearance [s]	10	10	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	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations




g / C, Green / Cycle	0.06	0.25	0.68	0.68	0.16	0.88
(v / s)_i Volume / Saturation Flow Rate	0.03	0.18	0.44	0.44	0.14	0.49
so, Base Saturation Flow per Lane [pc/h/lane]	1900	1900	1900	1900	1900	1900
Arrival type	3		3		3	
s, saturation flow rate [veh/h]	1810	1615	1900	1886	1810	3618
c, Capacity [veh/h]	106	407	1295	1285	290	3165
X, volume / capacity	0.47	0.72	0.64	0.65	0.87	0.56
d, Delay for Lane Group [s/veh]	57.99	48.99	13.35	13.49	63.23	2.54

Lane Group LOS	E	D	B	B	E	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.56	8.80	11.03	11.10	8.20	0.95
50th-Percentile Queue Length [ft/ln]	39.04	220.08	275.67	277.61	204.90	23.85
95th-Percentile Queue Length [veh/ln]	2.81	13.67	16.47	16.57	12.89	1.72
95th-Percentile Queue Length [ft/ln]	70.27	341.73	411.82	414.24	322.27	42.92

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	57.99	48.99	13.42	13.49	63.23	2.54
Movement LOS	E	D	B	B	E	A
Critical Movement	No	No	No	No	Yes	No
d_A, Approach Delay [s/veh]	50.30		13.42		10.11	
Approach LOS	D		B		B	
d_I, Intersection Delay [s/veh]	14.91					
Intersection LOS	B					
Intersection V/C	0.673					

Option 1: Add 2nd EBT and WBL Turn Lanes. Modify SB Approach to dedicated SBL, SBR, and SB-Shared Lanes. Dedicated EBR Turn Lane.

Number	14											
Intersection	I-215 SB Ramps at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	124	0	245	0	722	499	105	703	0
Total Analysis Volume [veh/h]	0	0	0	419	0	780	0	1271	954	208	1229	0

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	16.00											
Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Unsigna	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	10	0	0	10	0	7	10	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	49	0	0	59	0	12	71	0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	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
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
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	0.28		0.52		0.08		0.63
(v / s)_i Volume / Saturation Flow Rate		0.22	0.25	0.25		0.35		0.06		0.34
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]		1810	1623	1615		3618		3514		3618
c, Capacity [veh/h]		507	455	452		1868		276		2273
X, volume / capacity		0.79	0.88	0.88		0.68		0.75		0.54
d, Delay for Lane Group [s/veh]		43.94	51.38	51.95		23.67		58.26		13.49

Lane Group LOS		D	D	D	C	E	B
Critical Lane Group		No	No	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		11.06	12.13	12.20	12.59	3.13	8.27
50th-Percentile Queue Length [ft/ln]		276.53	303.17	305.01	314.76	78.32	206.75
95th-Percentile Queue Length [veh/ln]		16.52	17.84	17.93	18.41	5.64	12.99
95th-Percentile Queue Length [ft/ln]		412.89	445.95	448.23	460.25	140.97	324.66

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	44.28	51.38	51.67	0.00	23.67	0.00	58.26	13.49	0.00
Movement LOS				D	D	D		C		E	B	
Critical Movement				No	No	No		No	No	Yes	No	
d_A, Approach Delay [s/veh]	0.00			49.09			13.61			19.97		
Approach LOS	A			D			B			B		
d_I, Intersection Delay [s/veh]	26.83											
Intersection LOS	C											
Intersection V/C	0.759											

Option 1: Add 2nd EBT and WBL Turn Lanes. Modify SB Approach to dedicated SBL, SBR, and SB-Shared Lanes. Dedicated EBR Turn Lane.

Number	14											
Intersection	I-215 SB Ramps at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	193	0	361	0	602	384	125	716	0
Total Analysis Volume [veh/h]	0	0	0	415	0	1015	0	1430	981	436	1413	0

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	16.00											
Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Unsigna	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	10	0	0	10	0	7	10	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	45	0	0	55	0	20	75	0
Walk [s]	0	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	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
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
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	0.33		0.40		0.15		0.58
(v / s)_i Volume / Saturation Flow Rate		0.23	0.30	0.33		0.40		0.12		0.39
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]		1810	1615	1615		3618		3514		3618
c, Capacity [veh/h]		599	534	534		1438		515		2089
X, volume / capacity		0.69	0.90	1.00		0.99		0.85		0.68
d, Delay for Lane Group [s/veh]		37.76	55.22	75.42		58.47		53.80		19.35

Lane Group LOS		D	E	E	E	D	B
Critical Lane Group		No	No	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		10.57	15.42	20.11	23.77	6.41	12.45
50th-Percentile Queue Length [ft/ln]		264.35	385.53	502.86	594.29	160.26	311.15
95th-Percentile Queue Length [veh/ln]		15.91	21.86	27.47	31.77	10.56	18.23
95th-Percentile Queue Length [ft/ln]		397.67	546.53	686.74	794.19	264.07	455.80

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	37.76	55.22	65.81	0.00	58.47	0.00	53.80	19.35	0.00
Movement LOS				D	E	E		E		D	B	
Critical Movement				No	No	Yes		No	No	No	No	
d_A, Approach Delay [s/veh]	0.00			57.67			35.46			27.48		
Approach LOS	A			E			D			C		
d_I, Intersection Delay [s/veh]	39.07											
Intersection LOS	D											
Intersection V/C	0.979											

Option 1: Add 2nd EBT, 2nd WBT, 2nd EBL, WBR, 2nd NBL

Number	15											
Intersection	I-215 NB Ramps at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 NB Off Ramp			I-215 NB On Ramp			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]	351	0	135	0	0	0	270	580	0	0	456	143
Total Analysis Volume [veh/h]	812	0	433	0	0	0	762	969	0	0	654	255

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	1.00											
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	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	54	0	0	0	0	35	66	0	0	31	0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
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	0.30	0.30	0.30		0.24	0.61	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.22	0.22	0.27		0.22	0.27	0.18	0.16
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]	1810	1810	1615		3514	3618	3618	1615
c, Capacity [veh/h]	544	544	486		857	2198	1195	534
X, volume / capacity	0.75	0.75	0.89		0.89	0.44	0.55	0.48
d, Delay for Lane Group [s/veh]	40.15	40.15	50.22		47.22	13.26	34.64	34.99

Lane Group LOS	D	D	D		D	B	C	C
Critical Lane Group	No	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	10.70	10.70	13.06		10.82	6.33	7.69	6.05
50th-Percentile Queue Length [ft/ln]	267.49	267.49	326.61		270.55	158.13	192.13	151.37
95th-Percentile Queue Length [veh/ln]	16.06	16.06	18.99		16.22	10.45	12.23	10.09
95th-Percentile Queue Length [ft/ln]	401.60	401.60	474.80		405.42	261.24	305.79	252.25

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	40.15	40.15	50.22	0.00	0.00	0.00	47.22	13.26	0.00	0.00	34.64	34.99
Movement LOS	D	D	D				D	B			C	C
Critical Movement	No	No	Yes				No	No			No	No
d_A, Approach Delay [s/veh]	43.65			0.00			28.21			34.74		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	34.69											
Intersection LOS	C											
Intersection V/C	0.671											

Option 1: Add 2nd EBT, 2nd WBT, 2nd EBL, WBR, 2nd NBL

Number	15											
Intersection	I-215 NB Ramps at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 NB Off Ramp			I-215 NB On Ramp			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]	426	2	198	0	0	0	246	570	0	0	413	195
Total Analysis Volume [veh/h]	1026	2	413	0	0	0	944	904	0	0	799	513

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	1.00											
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	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	40	0	0	0	0	36	80	0	0	44	0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
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	0.29	0.29	0.29		0.27	0.62	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.28	0.28	0.26		0.27	0.25	0.22	0.32
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]	1810	1810	1615		3514	3618	3618	1615
c, Capacity [veh/h]	523	523	467		937	2240	1155	515
X, volume / capacity	0.98	0.98	0.88		1.01	0.40	0.69	1.00
d, Delay for Lane Group [s/veh]	74.30	74.24	56.52		59.47	12.14	39.11	79.25

Lane Group LOS	E	E	E		F	B	D	E
Critical Lane Group	Yes	No	No		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	19.10	19.09	13.22		15.21	5.53	10.24	19.72
50th-Percentile Queue Length [ft/ln]	477.38	477.20	330.46		380.22	138.32	256.00	493.04
95th-Percentile Queue Length [veh/ln]	26.26	26.25	19.18		21.70	9.39	15.49	27.00
95th-Percentile Queue Length [ft/ln]	656.55	656.33	479.52		542.55	234.76	387.20	675.11

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	74.27	74.24	56.52	0.00	0.00	0.00	59.47	12.14	0.00	0.00	39.11	79.25
Movement LOS	E	E	E				F	B			D	E
Critical Movement	No	No	No				No	No			No	Yes
d_A, Approach Delay [s/veh]	69.18			0.00			36.32			54.81		
Approach LOS	E			A			D			D		
d_I, Intersection Delay [s/veh]	51.89											
Intersection LOS	D											
Intersection V/C	0.878											

Option 1: Add 2nd EBT, 2nd WBT

Number	16											
Intersection	Trumble Rd at Ethanac 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]	99	9	34	8	9	109	87	558	34	61	341	11
Total Analysis Volume [veh/h]	140	11	40	9	11	153	169	1187	107	72	618	13

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	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]	15	26	0	31	42	0	35	52	0	11	28	0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	14	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	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	0.02	0.12	0.11	0.59	0.59	0.05	0.53	0.53		
(v / s)_i Volume / Saturation Flow Rate	0.08	0.03	0.00	0.10	0.09	0.34	0.35	0.04	0.17	0.17		
so, Base Saturation Flow per Lane [pc/h/lane]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	1810	1669	1810	1631	1810	1900	1846	1810	1900	1886		
c, Capacity [veh/h]	166	323	30	194	202	1119	1087	96	1008	1001		
X, volume / capacity	0.84	0.16	0.30	0.85	0.84	0.58	0.59	0.75	0.31	0.31		
d, Delay for Lane Group [s/veh]	64.63	40.47	63.62	61.55	61.14	17.69	17.85	67.07	16.67	16.68		

Lane Group LOS	E	D	E	E	E	B	B	E	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.66	1.28	0.32	5.36	5.31	10.56	10.40	2.38	4.72	4.69
50th-Percentile Queue Length [ft/ln]	116.56	32.05	7.89	133.91	132.85	264.02	259.94	59.42	118.03	117.29
95th-Percentile Queue Length [veh/ln]	8.20	2.31	0.57	9.15	9.09	15.89	15.69	4.28	8.28	8.24
95th-Percentile Queue Length [ft/ln]	205.08	57.68	14.20	228.80	227.37	397.26	392.14	106.96	207.11	206.10

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	64.63	40.47	40.47	63.62	61.55	61.55	61.14	17.76	17.85	67.07	16.68	16.68
Movement LOS	E	D	D	E	E	E	E	B	B	E	B	B
Critical Movement	No	No	No	No	No	No	No	No	No	Yes	No	No
d_A, Approach Delay [s/veh]	58.18			61.65			22.78			21.84		
Approach LOS	E			E			C			C		
d_I, Intersection Delay [s/veh]	27.85											
Intersection LOS	C											
Intersection V/C	0.564											

Option 1: Add 2nd EBT, 2nd WBT

Number	16											
Intersection	Trumble Rd at Ethanac 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]	84	5	37	30	15	141	73	588	33	44	361	4
Total Analysis Volume [veh/h]	166	5	43	35	18	232	131	1079	85	52	954	4

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
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]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	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	31	0	21	33	0	20	57	0	11	48	0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	14	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	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	0.11	0.24	0.04	0.17	0.09	0.53	0.53	0.05	0.49	0.49	
(v / s)_i Volume / Saturation Flow Rate	0.09	0.03	0.02	0.15	0.07	0.31	0.31	0.03	0.25	0.25	
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]	1810	1641	1810	1633	1810	1900	1852	1810	1900	1897	
c, Capacity [veh/h]	194	388	76	279	161	1000	974	87	922	921	
X, volume / capacity	0.86	0.12	0.46	0.90	0.81	0.59	0.59	0.60	0.52	0.52	
d, Delay for Lane Group [s/veh]	62.93	36.18	60.54	61.74	63.25	22.07	22.18	62.33	23.34	23.34	

Lane Group LOS	E	D	E	E	E	C	C	E	C	C
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.47	1.13	1.13	8.32	4.18	10.93	10.72	1.65	9.09	9.08
50th-Percentile Queue Length [ft/ln]	136.66	28.26	28.24	208.00	104.53	273.37	268.00	41.25	227.24	226.93
95th-Percentile Queue Length [veh/ln]	9.30	2.03	2.03	13.05	7.53	16.36	16.09	2.97	14.03	14.02
95th-Percentile Queue Length [ft/ln]	232.52	50.86	50.83	326.26	188.15	408.95	402.24	74.25	350.86	350.46

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	62.93	36.18	36.18	60.54	61.74	61.74	63.25	22.12	22.18	62.33	23.34	23.34
Movement LOS	E	D	D	E	E	E	E	C	C	E	C	C
Critical Movement	No	No	No	No	No	No	Yes	No	No	No	No	No
d_A, Approach Delay [s/veh]	56.93			61.59			26.28			25.35		
Approach LOS	E			E			C			C		
d_I, Intersection Delay [s/veh]	31.87											
Intersection LOS	C											
Intersection V/C	0.584											

Option 1: Install Traffic Signal. Add NB, SB, EB, and WB left-turn lanes, add EB and WB through lanes, add NB/SB split phasing, and add EB/WB left-turn phasing.

Number	17											
Intersection	Sherman Rd at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews 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	3	2	5	7	196	229	222	14	0	246	8
Total Analysis Volume [veh/h]	36	4	2	41	8	259	288	897	89	0	535	19

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	37	0	0	37	0	7	75	0	7	75	0
Amber [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
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	37	0	38	44	0	13	19	0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	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
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
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	0.06	0.06	0.18	0.18	0.18	0.62	0.62	0.00	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.02	0.00	0.02	0.16	0.16	0.26	0.26	0.00	0.15	0.15
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]	1810	1794	1810	1622	1810	1900	1841	1810	1900	1877
c, Capacity [veh/h]	114	114	331	297	320	1178	1141	1	842	832
X, volume / capacity	0.31	0.05	0.12	0.90	0.90	0.42	0.43	0.00	0.33	0.33
d, Delay for Lane Group [s/veh]	55.27	53.02	41.14	57.95	59.03	12.88	12.93	0.00	22.83	22.86

Lane Group LOS	E	D	D	E	E	B	B	A	C	C
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.09	0.18	1.04	8.61	9.05	6.38	6.22	0.00	5.06	5.01
50th-Percentile Queue Length [ft/ln]	27.26	4.42	25.92	215.20	226.25	159.48	155.41	0.00	126.42	125.31
95th-Percentile Queue Length [veh/ln]	1.96	0.32	1.87	13.42	13.98	10.52	10.31	0.00	8.74	8.68
95th-Percentile Queue Length [ft/ln]	49.08	7.95	46.65	335.49	349.59	263.03	257.64	0.00	218.62	217.10

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.27	53.02	53.02	41.14	57.95	57.95	59.03	12.90	12.93	0.00	22.84	22.86
Movement LOS	E	D	D	D	E	E	E	B	B	A	C	C
Critical Movement	No	No	No	No	No	No	Yes	No	No	No	No	No
d_A, Approach Delay [s/veh]	54.95			55.71			23.33			22.84		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	28.40											
Intersection LOS	C											
Intersection V/C	0.490											

Option 1: Install Traffic Signal. Add NB, SB, EB, and WB left-turn lanes, add EB and WB through lanes, add NB/SB split phasing, and add EB/WB left-turn phasing.

Number	17											
Intersection	Sherman Rd at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Sherman Rd			Sherman Rd			Ethanac Rd			Matthews 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	5	2	4	2	191	271	173	15	2	95	3
Total Analysis Volume [veh/h]	97	6	2	22	2	239	342	644	73	2	728	32

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	22	0	0	63	0	7	23	0	7	23	0
Amber [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
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	26	0	49	51	0	17	19	0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	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
l1, 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
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	0.08	0.08	0.16	0.16	0.21	0.62	0.62	0.00	0.41	0.41		
(v / s)_i Volume / Saturation Flow Rate	0.05	0.00	0.01	0.15	0.19	0.19	0.19	0.00	0.20	0.20		
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]	1810	1820	1810	1617	1810	1900	1833	1810	1900	1872		
c, Capacity [veh/h]	147	148	298	266	376	1172	1131	8	785	774		
X, volume / capacity	0.66	0.05	0.07	0.91	0.91	0.31	0.31	0.27	0.49	0.49		
d, Delay for Lane Group [s/veh]	58.49	51.02	42.51	60.39	55.08	11.60	11.62	77.21	28.02	28.06		

Lane Group LOS	E	D	D	E	E	B	B	E	C	C
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.05	0.23	0.56	7.90	10.44	4.28	4.13	0.10	8.02	7.92
50th-Percentile Queue Length [ft/ln]	76.18	5.73	14.12	197.39	261.01	106.88	103.34	2.40	200.52	197.91
95th-Percentile Queue Length [veh/ln]	5.48	0.41	1.02	12.50	15.74	7.67	7.44	0.17	12.67	12.53
95th-Percentile Queue Length [ft/ln]	137.12	10.31	25.41	312.60	393.49	191.65	186.01	4.31	316.64	313.27

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.49	51.02	51.02	42.51	60.39	60.39	55.08	11.61	11.62	77.21	28.04	28.06
Movement LOS	E	D	D	D	E	E	E	B	B	E	C	C
Critical Movement	No	No	No	No	No	No	No	No	No	Yes	No	No
d_A, Approach Delay [s/veh]	57.92			58.89			25.65			28.17		
Approach LOS	E			E			C			C		
d_I, Intersection Delay [s/veh]	32.07											
Intersection LOS	C											
Intersection V/C	0.593											

Option 1: Install TS

Number	20											
Intersection	Murrieta Rd at Rouse Rd											
Control Type	Signalized											
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]	3	234	7	28	120	4	14	18	6	10	3	40
Total Analysis Volume [veh/h]	32	442	8	35	288	92	278	21	94	12	3	54

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	55	0	0	55	0	0	57	0	0	57	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	59	0	0	59	0	0	61	0	0	61	0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	14	0	0	14	0	0	14	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	2.0	0.0	0.0	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	0.71	0.71	0.71	0.71	0.71	0.71	0.23	0.23	0.23	0.23	0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.03	0.23	0.00	0.04	0.15	0.06	0.20	0.01	0.06	0.01	0.00	0.03
so, Base Saturation Flow per Lane [pc/h/lane]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	1019	1900	1615	955	1900	1615	1368	1900	1615	1298	1900	1615
c, Capacity [veh/h]	669	1339	1138	589	1339	1138	366	434	369	346	434	369
X, volume / capacity	0.05	0.33	0.01	0.06	0.22	0.08	0.76	0.05	0.25	0.03	0.01	0.15
d, Delay for Lane Group [s/veh]	10.18	7.47	5.26	12.60	6.52	5.68	48.59	36.17	38.29	36.86	35.79	37.14

Lane Group LOS	B	A	A	B	A	A	D	D	D	D	D	D
Critical Lane Group	No	Yes	No	No	No	No	Yes	No	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.35	3.84	0.05	0.44	2.26	0.65	8.36	0.49	2.32	0.28	0.07	1.30
50th-Percentile Queue Length [ft/ln]	8.75	96.11	1.34	11.04	56.44	16.34	208.91	12.27	57.96	7.10	1.74	32.39
95th-Percentile Queue Length [veh/ln]	0.63	6.92	0.10	0.80	4.06	1.18	13.10	0.88	4.17	0.51	0.12	2.33
95th-Percentile Queue Length [ft/ln]	15.75	173.01	2.42	19.88	101.60	29.41	327.43	22.09	104.33	12.78	3.12	58.30

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.18	7.47	5.26	12.60	6.52	5.68	48.59	36.17	38.29	36.86	35.79	37.14
Movement LOS	B	A	A	B	A	A	D	D	D	D	D	D
Critical Movement	No	No	No	No	No	No	Yes	No	No	No	No	No
d_A, Approach Delay [s/veh]	7.61			6.85			45.46			37.03		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	19.82											
Intersection LOS	B											
Intersection V/C	0.436											

Option 1: Install TS

Number	20											
Intersection	Murrieta Rd at Rouse Rd											
Control Type	Signalized											
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]	4	227	12	65	297	26	9	8	2	4	10	61
Total Analysis Volume [veh/h]	97	436	14	80	540	310	176	9	57	4	12	73

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	79	0	0	79	0	0	33	0	0	33	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	83	0	0	83	0	0	37	0	0	37	0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	14	0	0	14	0	0	14	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	2.0	0.0	0.0	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	0.76	0.76	0.76	0.76	0.76	0.76	0.17	0.17	0.17	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.15	0.23	0.01	0.08	0.28	0.19	0.13	0.00	0.04	0.00	0.01	0.05
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]	659	1900	1615	955	1900	1615	1333	1900	1615	1357	1900	1615
c, Capacity [veh/h]	490	1444	1227	705	1444	1227	259	329	280	264	329	280
X, volume / capacity	0.20	0.30	0.01	0.11	0.37	0.25	0.68	0.03	0.20	0.02	0.04	0.26
d, Delay for Lane Group [s/veh]	9.42	5.02	3.50	7.22	5.57	4.77	53.19	41.24	42.86	43.47	41.31	43.44

Lane Group LOS	A	A	A	A	A	A	D	D	D	D	D	D
Critical Lane Group	No	No	No	No	Yes	No	Yes	No	No	No	No	No
50th-Percentile Queue Length [veh/ln]	1.04	2.73	0.07	0.70	3.65	1.87	5.39	0.23	1.48	0.10	0.30	1.92
50th-Percentile Queue Length [ft/ln]	25.96	68.31	1.71	17.46	91.33	46.87	134.72	5.65	37.11	2.59	7.55	48.08
95th-Percentile Queue Length [veh/ln]	1.87	4.92	0.12	1.26	6.58	3.37	9.20	0.41	2.67	0.19	0.54	3.46
95th-Percentile Queue Length [ft/ln]	46.73	122.97	3.09	31.43	164.40	84.37	229.90	10.17	66.81	4.66	13.58	86.55

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.42	5.02	3.50	7.22	5.57	4.77	53.19	41.24	42.86	43.47	41.31	43.44
Movement LOS	A	A	A	A	A	A	D	D	D	D	D	D
Critical Movement	No	No	No	No	No	No	Yes	No	No	No	No	No
d_A, Approach Delay [s/veh]	5.76			5.44			50.31			43.15		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	13.40											
Intersection LOS	B											
Intersection V/C	0.416											

Option 1: Add 2nd SBR, SBL

Number	25											
Intersection	I-215 SB Ramps at McCall Blvd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	363	3	477	0	844	318	287	813	0
Total Analysis Volume [veh/h]	0	0	0	568	3	550	0	1051	491	484	964	0

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Unsigna	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	10	0	0	10	0	7	10	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	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	32	0	0	39	0	49	88	0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	21	0	0	3	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	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		0.21	0.21	0.21		0.38		0.29		0.71
(v / s)_i Volume / Saturation Flow Rate		0.16	0.16	0.19		0.29		0.27		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]		1810	1810	2859		3618		1810		3618
c, Capacity [veh/h]		384	384	606		1389		521		2552
X, volume / capacity		0.74	0.74	0.91		0.76		0.93		0.38
d, Delay for Lane Group [s/veh]		48.48	48.46	51.67		35.98		49.30		7.52

Lane Group LOS	D	D	D	D	D	D	A
Critical Lane Group	No	No	Yes	Yes	Yes	No	
50th-Percentile Queue Length [veh/ln]	8.15	8.15	8.20	13.64	14.77	4.56	
50th-Percentile Queue Length [ft/ln]	203.76	203.71	204.96	340.88	369.14	113.88	
95th-Percentile Queue Length [veh/ln]	12.83	12.83	12.89	19.69	21.07	8.06	
95th-Percentile Queue Length [ft/ln]	320.81	320.74	322.35	492.27	526.68	201.38	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	48.47	48.46	51.67	0.00	35.98	0.00	49.30	7.52	0.00
Movement LOS				D	D	D		D		D	A	
Critical Movement				No	No	Yes		No	No	No	No	
d_A, Approach Delay [s/veh]	0.00			50.04			24.62			21.49		
Approach LOS	A			D			C			C		
d_I, Intersection Delay [s/veh]	31.24											
Intersection LOS	C											
Intersection V/C	0.750											

Option 1: Add 2nd SBR, SBL

Number	25											
Intersection	I-215 SB Ramps at McCall Blvd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 SB On Ramp			I-215 SB Off Ramp			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	358	3	462	0	845	315	285	794	0
Total Analysis Volume [veh/h]	0	0	0	729	3	621	0	1030	459	492	1009	0

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Unsigna	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	10	0	0	10	0	7	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	32	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	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	35	0	0	44	0	41	85	0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	21	0	0	3	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	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		0.24	0.24	0.24		0.35		0.29		0.68
(v / s)_i Volume / Saturation Flow Rate		0.20	0.20	0.22		0.28		0.27		0.28
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]		1810	1810	2859		3618		1810		3618
c, Capacity [veh/h]		431	431	681		1280		529		2457
X, volume / capacity		0.85	0.85	0.91		0.80		0.93		0.41
d, Delay for Lane Group [s/veh]		55.18	55.14	49.70		40.49		49.17		9.07

Lane Group LOS	E	E	D	D	D	A
Critical Lane Group	No	No	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	11.40	11.40	9.16	14.22	15.01	5.47
50th-Percentile Queue Length [ft/ln]	285.06	284.95	228.95	355.54	375.17	136.69
95th-Percentile Queue Length [veh/ln]	16.94	16.93	14.12	20.41	21.36	9.30
95th-Percentile Queue Length [ft/ln]	423.51	423.36	353.02	510.15	534.00	232.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	55.16	55.14	49.70	0.00	40.49	0.00	49.17	9.07	0.00
Movement LOS				E	E	D		D		D	A	
Critical Movement				Yes	No	No		No	No	No	No	
d_A, Approach Delay [s/veh]	0.00			52.66			28.10			22.21		
Approach LOS	A			D			C			C		
d_I, Intersection Delay [s/veh]	34.38											
Intersection LOS	C											
Intersection V/C	0.774											

Option 1: Add 2nd NBR

Number	26											
Intersection	I-215 NB Ramps at McCall Blvd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 NB Off Ramp			I-215 NB On Ramp			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]	201	0	256	0	0	0	234	603	0	0	957	495
Total Analysis Volume [veh/h]	289	0	430	0	0	0	409	875	0	0	1299	856

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	32	0	0	0	0	51	88	0	0	37	0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	0	0	0	10	0	0	3	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	0.18	0.18		0.25	0.74	0.46
(v / s)_i Volume / Saturation Flow Rate	0.16	0.15		0.23	0.24	0.36
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900		1900	1900	1900
Arrival type	3		3	3		3
s, saturation flow rate [veh/h]	1810	2859		1810	3618	3618
c, Capacity [veh/h]	330	521		445	2660	1649
X, volume / capacity	0.88	0.83		0.92	0.33	0.79
d, Delay for Lane Group [s/veh]	58.56	50.60		52.39	5.88	31.61

Lane Group LOS	E	D		D	A	C
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	9.14	6.24		12.68	3.42	16.09
50th-Percentile Queue Length [ft/ln]	228.57	156.07		316.89	85.38	402.30
95th-Percentile Queue Length [veh/ln]	14.10	10.34		18.51	6.15	22.67
95th-Percentile Queue Length [ft/ln]	352.54	258.51		462.86	153.68	566.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.56	58.56	50.60	0.00	0.00	0.00	52.39	5.88	0.00	0.00	31.61	0.00
Movement LOS	E	E	D				D	A			C	
Critical Movement	Yes	No	No				No	No			No	No
d_A, Approach Delay [s/veh]	53.80			0.00			20.70			19.52		
Approach LOS	D			A			C			B		
d_I, Intersection Delay [s/veh]	27.44											
Intersection LOS	C											
Intersection V/C	0.745											

Option 1: Add 2nd NBR

Number	26											
Intersection	I-215 NB Ramps at McCall Blvd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 NB Off Ramp			I-215 NB On Ramp			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]	383	4	480	0	0	0	283	897	0	0	740	244
Total Analysis Volume [veh/h]	553	4	741	0	0	0	396	1345	0	0	1000	532

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	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	47	0	0	0	0	33	73	0	0	40	0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	0	0	0	10	0	0	3	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		0.23	0.59	0.32
(v / s)_i Volume / Saturation Flow Rate	0.31	0.26		0.22	0.37	0.28
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900		1900	1900	1900
Arrival type	3		3	3		3
s, saturation flow rate [veh/h]	1810	2859		1810	3618	3618
c, Capacity [veh/h]	597	943		424	2125	1157
X, volume / capacity	0.93	0.79		0.93	0.63	0.86
d, Delay for Lane Group [s/veh]	57.49	37.85		68.06	17.70	47.03

Lane Group LOS	E	D		E	B	D
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	18.20	9.59		14.08	11.80	14.90
50th-Percentile Queue Length [ft/ln]	454.94	239.77		351.89	294.93	372.44
95th-Percentile Queue Length [veh/ln]	25.19	14.67		20.23	17.43	21.23
95th-Percentile Queue Length [ft/ln]	629.84	366.75		505.72	435.75	530.69

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	57.49	57.49	37.85	0.00	0.00	0.00	68.06	17.70	0.00	0.00	47.03	0.00
Movement LOS	E	E	D				E	B			D	
Critical Movement	No	No	No				Yes	No			No	No
d_A, Approach Delay [s/veh]	46.28			0.00			29.15			30.84		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	35.07											
Intersection LOS	D											
Intersection V/C	0.803											

APPENDIX D

**CUMULATIVE PROJECTS
INFORMATION**

CUMULATIVE PROJECTS - DISTRIBUTION

TOTAL OF ALL CUMULATIVE PROJECTS

		AM Peak Hour											
		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Goetz Rd at Case Rd	42	0	6	0	0	0	0	30	19	2	32	0
2	Murrieta Rd at Case Rd	14	0	0	0	0	0	0	14	6	0	29	0
3	Goetz Rd at Mapes Rd	0	48	0	0	21	0	0	0	0	0	0	0
4	I-215 SB Ramps/SR-74 at Bonnie Dr	22	168	0	0	137	0	0	0	10	0	0	0
5	I-215 NB Ramps at SR-74	0	0	0	137	0	0	0	147	0	0	190	168
6	SR-74 at Sherman Rd	0	0	4	0	0	0	0	137	0	12	281	0
7	Goetz Rd at Fieldstone Dr	0	48	0	0	21	0	0	0	0	0	0	0
8	Goetz Rd at Ethanac Rd	0	16	12	16	5	0	0	0	0	25	0	32
9	Wheat St at Ethanac Rd	0	0	0	0	0	0	0	305	0	0	152	0
10	Byers Rd at Ethanac Rd	0	0	89	0	0	0	0	305	0	39	152	0
11	Murrieta Rd at Ethanac Rd	24	9	241	3	3	0	0	343	50	89	167	5
12	Evans Rd at Ethanac Rd	23	0	136	0	0	0	0	573	14	85	238	0
13	Barnett Rd/Case Rd at Ethanac Rd	0	0	68	0	0	0	0	641	0	43	281	0
14	I-215 SB Ramps at Ethanac Rd	0	0	0	238	0	159	0	361	348	85	165	0
15	I-215 NB Ramps at Ethanac Rd	159	0	238	0	0	0	348	251	0	0	91	85
16	Trumble Rd at Ethanac Rd	21	0	0	0	0	21	60	370	60	0	133	0
17	Sherman Rd at Ethanac Rd	21	0	0	0	0	0	0	430	60	0	154	0
18	Byers Rd at McLaughlin Rd	0	26	0	13	9	0	0	0	0	0	0	6
19	Murrieta Rd at McLaughlin Rd	6	281	14	0	154	0	0	0	13	23	0	0
20	Murrieta Rd at Rouse Rd	26	67	0	0	111	78	234	0	78	0	0	0
21	Murrieta Rd at Chambers Ave	26	119	0	0	267	0	0	0	78	0	0	0
22	Murrieta Rd at McCall Blvd	0	84	96	130	163	0	0	0	0	32	0	44
23	Sun City Blvd at McCall Blvd	0	0	0	0	0	0	0	226	0	0	76	0
24	Bradley Rd at McCall Blvd	0	0	0	0	0	0	0	226	0	0	76	0
25	I-215 SB Ramps at McCall Blvd	0	0	0	169	0	37	0	136	141	174	39	0
26	I-215 NB Ramps at McCall Blvd	39	0	133	0	0	0	136	169	0	0	174	250
27	Encanto Dr at McCall Blvd	76	0	0	0	0	76	36	228	36	0	271	0
28	Sherman Rd at McCall Blvd	76	0	0	0	0	97	96	96	36	0	97	0

		PM Peak Hour											
		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Goetz Rd at Case Rd	33	0	2	0	0	0	0	36	47	6	37	0
2	Murrieta Rd at Case Rd	7	0	0	0	0	0	0	31	14	0	20	0
3	Goetz Rd at Mapes Rd	0	35	0	0	53	0	0	0	0	0	0	0
4	I-215 SB Ramps/SR-74 at Bonnie Dr	14	173	0	0	203	0	0	0	23	0	0	0
5	I-215 NB Ramps at SR-74	0	0	0	203	0	0	0	227	0	0	187	173
6	SR-74 at Sherman Rd	0	0	12	0	0	0	0	299	0	8	209	0
7	Goetz Rd at Fieldstone Dr	0	35	0	0	53	0	0	0	0	0	0	0
8	Goetz Rd at Ethanac Rd	0	9	27	35	18	0	0	0	0	20	0	26
9	Wheat St at Ethanac Rd	0	0	0	0	0	0	0	242	0	0	335	0
10	Byers Rd at Ethanac Rd	0	0	66	0	0	0	0	242	0	97	335	0
11	Murrieta Rd at Ethanac Rd	55	3	167	5	9	0	0	269	39	272	377	4
12	Evans Rd at Ethanac Rd	20	0	122	0	0	0	0	415	26	157	633	0
13	Barnett Rd/Case Rd at Ethanac Rd	0	0	61	0	0	0	0	476	0	79	712	0
14	I-215 SB Ramps at Ethanac Rd	0	0	0	166	0	389	0	274	264	249	403	0
15	I-215 NB Ramps at Ethanac Rd	389	0	166	0	0	0	264	176	0	0	263	249
16	Trumble Rd at Ethanac Rd	62	0	0	0	0	62	42	260	42	0	388	0
17	Sherman Rd at Ethanac Rd	62	0	0	0	0	0	0	301	42	0	450	0
18	Byers Rd at McLaughlin Rd	0	17	0	10	29	0	0	0	0	0	0	14
19	Murrieta Rd at McLaughlin Rd	14	238	26	0	330	0	0	0	10	20	0	0
20	Murrieta Rd at Rouse Rd	87	123	0	0	99	262	154	0	51	0	0	0
21	Murrieta Rd at Chambers Ave	87	298	0	0	202	0	0	0	51	0	0	0
22	Murrieta Rd at McCall Blvd	0	181	63	86	133	0	0	0	0	108	0	146
23	Sun City Blvd at McCall Blvd	0	0	0	0	0	0	0	149	0	0	254	0
24	Bradley Rd at McCall Blvd	0	0	0	0	0	0	0	149	0	0	254	0
25	I-215 SB Ramps at McCall Blvd	0	0	0	312	0	124	0	90	94	185	130	0
26	I-215 NB Ramps at McCall Blvd	130	0	222	0	0	0	90	312	0	0	185	247
27	Encanto Dr at McCall Blvd	62	0	0	0	0	62	90	353	90	0	310	0
28	Sherman Rd at McCall Blvd	62	0	0	0	0	124	132	132	90	0	124	0

CUMULATIVE PROJECTS - HAND ENTERED FROM TRAFFIC STUDIES

		AM Peak Hour											
		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Goetz Rd at Case Rd	0	0	0	0	0	0	0	8	0	0	2	0
2	Murrieta Rd at Case Rd	2	0	0	0	0	0	0	0	8	0	0	0
3	Goetz Rd at Mapes Rd	1	0	0	0	0	0	0	0	4	0	0	0
4	I-215 SB Ramps/SR-74 at Bonnie Dr	2	4	0	0	18	9	0	0	6	0	0	0
5	I-215 NB Ramps at SR-74	0	0	0	1	0	0	0	24	0	0	6	4
6	SR-74 at Sherman Rd	9	0	0	0	0	0	0	1	33	0	4	0
7	Goetz Rd at Fieldstone Rd	0	1	0	0	4	0	0	0	0	0	0	0
8	Goetz Rd at Ethanac Rd	0	1	5	6	3	0	0	1	0	26	0	1
9	Wheat St at Ethanac Rd	0	0	15	0	0	0	0	11	1	0	27	0
10	Byers Rd at Ethanac Rd	0	0	0	0	0	0	0	26	0	30	27	0
11	Murrieta Rd at Ethanac Rd	0	0	22	8	0	0	0	26	0	3	57	2
12	Evans Rd at Ethanac Rd	7	0	45	0	0	0	0	35	16	216	55	0
13	Barnett Rd/Case Rd at Ethanac Rd	0	0	0	0	0	9	0	80	0	0	262	0
14	I-215 SB Ramps at Ethanac Rd	0	0	0	44	0	151	0	66	27	9	114	0
15	I-215 NB Ramps at Ethanac Rd	95	0	37	0	0	0	49	61	0	0	28	9
16	Trumble Rd at Ethanac Rd	0	0	0	0	0	0	0	97	0	0	32	0
17	Sherman Rd at Ethanac Rd	1	0	0	30	0	3	1	96	0	0	28	8
18	Byers Rd at McLaughlin Rd	0	0	0	0	0	0	0	0	0	0	0	0
19	Murrieta Rd at McLaughlin Rd	0	20	13	0	2	0	0	0	0	6	0	0
20	Murrieta Rd at Rouse Rd	0	32	0	0	8	0	0	0	0	0	0	1
21	Murrieta Rd at Chambers Ave	0	30	0	0	8	0	1	0	0	0	0	1
22	Murrieta Rd at McCall Blvd	0	4	0	7	1	0	0	0	0	0	0	26
23	Sun City Blvd at McCall Blvd	0	0	0	0	0	0	0	7	0	0	26	0
24	Bradley Rd at McCall Blvd	0	0	0	0	0	0	0	7	0	0	26	0
25	I-215 SB Ramps at McCall Blvd	0	0	0	0	0	0	0	3	4	0	26	0
26	I-215 NB Ramps at McCall Blvd	13	0	0	0	0	0	0	3	0	0	13	0
27	Encanto Dr at McCall Blvd	5	0	0	0	0	0	0	2	1	0	8	0
28	Sherman Rd at McCall Blvd	0	0	0	0	0	1	0	2	0	0	7	0

		PM Peak Hour											
		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Goetz Rd at Case Rd	0	0	0	0	0	0	0	2	0	0	8	0
2	Murrieta Rd at Case Rd	8	0	0	0	0	0	0	0	2	0	0	0
3	Goetz Rd at Mapes Rd	4	0	0	0	0	0	0	0	1	0	0	0
4	I-215 SB Ramps/SR-74 at Bonnie Dr	5	1	0	0	9	3	0	0	3	0	0	0
5	I-215 NB Ramps at SR-74	0	0	0	4	0	0	0	12	0	0	6	15
6	SR-74 at Sherman Rd	28	0	0	0	0	0	0	4	16	0	1	0
7	Goetz Rd at Fieldstone Dr	0	4	0	0	1	0	0	0	0	0	0	0
8	Goetz Rd at Ethanac Rd	0	4	1	2	1	0	0	0	0	13	1	5
9	Wheat St at Ethanac Rd	0	0	55	0	0	0	0	3	0	0	19	0
10	Byers Rd at Ethanac Rd	0	0	0	0	0	0	0	2	0	0	9	0
11	Murrieta Rd at Ethanac Rd	0	0	7	2	0	0	0	57	1	9	30	8
12	Evans Rd at Ethanac Rd	28	0	160	0	0	0	0	122	5	82	19	0
13	Barnett Rd/Case Rd at Ethanac Rd	0	0	0	0	0	3	0	282	0	0	98	0
14	I-215 SB Ramps at Ethanac Rd	0	0	0	22	0	57	0	190	99	30	51	0
15	I-215 NB Ramps at Ethanac Rd	36	0	19	0	0	0	167	45	0	0	45	35
16	Trumble Rd at Ethanac Rd	0	0	0	0	0	0	0	59	0	0	78	0
17	Sherman Rd at Ethanac Rd	0	0	0	15	0	1	3	55	1	0	77	25
18	Byers Rd at McLaughlin Rd	0	0	0	0	0	0	0	56	0	11	10	0
19	Murrieta Rd at McLaughlin Rd	0	6	4	0	7	0	0	0	0	27	0	0
20	Murrieta Rd at Rouse Rd	0	10	0	1	33	0	0	0	0	0	0	0
21	Murrieta Rd at Chambers Ave	0	10	0	1	31	1	0	0	0	0	0	0
22	Murrieta Rd at McCall Blvd	0	1	0	27	4	0	0	0	0	0	0	9
23	Sun City Blvd at McCall Blvd	0	0	0	0	0	0	0	27	0	0	9	0
24	Bradley Rd at McCall Blvd	0	0	0	0	0	0	0	27	0	0	9	0
25	I-215 SB Ramps at McCall Blvd	0	0	0	0	0	0	0	13	14	0	9	0
26	I-215 NB Ramps at McCall Blvd	5	0	0	0	0	0	0	13	0	0	4	0
27	Encanto Dr at McCall Blvd	2	0	0	0	0	0	0	8	5	0	2	0
28	Sherman Rd at McCall Blvd	0	0	0	0	0	0	1	7	0	0	2	0

TOTAL CUMULATIVE PROJECTS TRAFFIC

		AM Peak Hour											
		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Goetz Rd at Case Rd	42	0	6	0	0	0	0	38	19	2	34	0
2	Murrieta Rd at Case Rd	16	0	0	0	0	0	0	14	14	0	29	0
3	Goetz Rd at Mapes Rd	1	48	0	0	21	0	0	0	4	0	0	0
4	I-215 SB Ramps/SR-74 at Bonnie Dr	24	172	0	0	155	9	0	0	16	0	0	0
5	I-215 NB Ramps at SR-74	0	0	0	138	0	0	0	171	0	0	196	172
6	SR-74 at Sherman Rd	9	0	4	0	0	0	0	138	33	12	285	0
7	Goetz Rd at Fieldstone Rd	0	49	0	0	25	0	0	0	0	0	0	0
8	Goetz Rd at Ethanac Rd	0	17	17	22	8	0	0	1	0	51	0	33
9	Wheat St at Ethanac Rd	0	0	15	0	0	0	0	316	1	0	179	0
10	Byers Rd at Ethanac Rd	0	0	89	0	0	0	0	331	0	69	179	0
11	Murrieta Rd at Ethanac Rd	24	9	263	11	3	0	0	369	50	92	224	7
12	Evans Rd at Ethanac Rd	30	0	181	0	0	0	0	608	30	301	293	0
13	Barnett Rd/Case Rd at Ethanac Rd	0	0	68	0	0	9	0	721	0	43	543	0
14	I-215 SB Ramps at Ethanac Rd	0	0	0	282	0	310	0	427	375	94	279	0
15	I-215 NB Ramps at Ethanac Rd	254	0	275	0	0	0	397	312	0	0	119	94
16	Trumble Rd at Ethanac Rd	21	0	0	0	0	21	60	467	60	0	165	0
17	Sherman Rd at Ethanac Rd	22	0	0	30	0	3	1	526	60	0	182	8
18	Byers Rd at McLaughlin Rd	0	26	0	13	9	0	0	0	0	0	0	6
19	Murrieta Rd at McLaughlin Rd	6	301	27	0	156	0	0	0	13	29	0	0
20	Murrieta Rd at Rouse Rd	26	99	0	0	119	78	234	0	78	0	0	1
21	Murrieta Rd at Chambers Ave	26	149	0	0	275	0	1	0	78	0	0	1
22	Murrieta Rd at McCall Blvd	0	88	96	137	164	0	0	0	0	32	0	70
23	Sun City Blvd at McCall Blvd	0	0	0	0	0	0	0	233	0	0	102	0
24	Bradley Rd at McCall Blvd	0	0	0	0	0	0	0	233	0	0	102	0
25	I-215 SB Ramps at McCall Blvd	0	0	0	169	0	37	0	139	145	174	65	0
26	I-215 NB Ramps at McCall Blvd	52	0	133	0	0	0	136	172	0	0	187	250
27	Encanto Dr at McCall Blvd	81	0	0	0	0	76	36	230	37	0	279	0
28	Sherman Rd at McCall Blvd	76	0	0	0	0	98	96	98	36	0	104	0

		PM Peak Hour											
		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Goetz Rd at Case Rd	33	0	2	0	0	0	0	38	47	6	45	0
2	Murrieta Rd at Case Rd	15	0	0	0	0	0	0	31	16	0	20	0
3	Goetz Rd at Mapes Rd	4	35	0	0	53	0	0	0	1	0	0	0
4	I-215 SB Ramps/SR-74 at Bonnie Dr	19	174	0	0	212	3	0	0	26	0	0	0
5	I-215 NB Ramps at SR-74	0	0	0	207	0	0	0	239	0	0	193	188
6	SR-74 at Sherman Rd	28	0	12	0	0	0	0	303	16	8	210	0
7	Goetz Rd at Fieldstone Dr	0	39	0	0	54	0	0	0	0	0	0	0
8	Goetz Rd at Ethanac Rd	0	13	28	37	19	0	0	0	0	33	1	31
9	Wheat St at Ethanac Rd	0	0	55	0	0	0	0	245	0	0	354	0
10	Byers Rd at Ethanac Rd	0	0	66	0	0	0	0	244	0	97	344	0
11	Murrieta Rd at Ethanac Rd	55	3	174	7	9	0	0	326	40	281	407	12
12	Evans Rd at Ethanac Rd	48	0	282	0	0	0	0	537	31	239	652	0
13	Barnett Rd/Case Rd at Ethanac Rd	0	0	61	0	0	3	0	758	0	79	810	0
14	I-215 SB Ramps at Ethanac Rd	0	0	0	188	0	446	0	464	363	279	454	0
15	I-215 NB Ramps at Ethanac Rd	425	0	185	0	0	0	431	221	0	0	308	284
16	Trumble Rd at Ethanac Rd	62	0	0	0	0	62	42	319	42	0	466	0
17	Sherman Rd at Ethanac Rd	62	0	0	15	0	1	3	356	43	0	527	25
18	Byers Rd at McLaughlin Rd	0	17	0	10	29	0	0	56	0	11	10	14
19	Murrieta Rd at McLaughlin Rd	14	244	30	0	337	0	0	0	10	47	0	0
20	Murrieta Rd at Rouse Rd	87	133	0	1	132	262	154	0	51	0	0	0
21	Murrieta Rd at Chambers Ave	87	308	0	1	233	1	0	0	51	0	0	0
22	Murrieta Rd at McCall Blvd	0	182	63	113	137	0	0	0	0	108	0	155
23	Sun City Blvd at McCall Blvd	0	0	0	0	0	0	0	176	0	0	263	0
24	Bradley Rd at McCall Blvd	0	0	0	0	0	0	0	176	0	0	263	0
25	I-215 SB Ramps at McCall Blvd	0	0	0	312	0	124	0	103	108	185	139	0
26	I-215 NB Ramps at McCall Blvd	135	0	222	0	0	0	90	325	0	0	189	247
27	Encanto Dr at McCall Blvd	64	0	0	0	0	62	90	361	95	0	312	0
28	Sherman Rd at McCall Blvd	62	0	0	0	0	124	133	139	90	0	126	0

Enter only in blue cells Yellow cells calculate

Int. #: 1 Goetz Rd at Case Rd

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM In	0	0	6	0	0	0	0	30	19	0	0	0	
AM Out	42	0	0	0	0	0	0	0	0	2	32	0	
AM Tot	42	0	6	0	0	0	0	30	19	2	32	0	
PM In	0	0	2	0	0	0	0	36	47	0	0	0	
PM Out	33	0	0	0	0	0	0	0	0	6	37	0	
PM Tot	33	0	2	0	0	0	0	36	47	6	37	0	

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In			2%					5%		2%	5%	
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	5%	0%
AM Out												
PM In	0%	0%	2%	0%	0%	0%	0%	5%	0%		0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	5%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	0	6	0	0	0	0	15	0	0	0	0
AM Out	90	0	0	0	0	0	0	0	0	0	2	5	0
PM In	115	0	0	2	0	0	0	0	6	0	0	0	0
PM Out	299	0	0	0	0	0	0	0	0	0	6	15	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In							2%					
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	8	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	16	0
PM In	857	0	0	0	0	0	0	0	17	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	12	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 1 Goetz Rd at Case Rd

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In									4%			
Y	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	0%
PM Out	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	12	0	0	0
AM Out	627	25	0	0	0	0	0	0	0	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	27	0	0	0
PM Out	488	20	0	0	0	0	0	0	0	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In							5%	3%				
Y	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	5%	3%	0%	0%	0%	0%
PM Out	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	7	4	0	0	0	0
AM Out	226	7	0	0	0	0	0	0	0	0	11	0	0
PM In	262	0	0	0	0	0	0	13	8	0	0	0	0
PM Out	204	6	0	0	0	0	0	0	0	0	10	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In									2%			
Y	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
PM Out	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	3	0	0	0
AM Out	519	10	0	0	0	0	0	0	0	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	12	0	0	0
PM Out	342	7	0	0	0	0	0	0	0	0	0	0	0

Int. #: 2 Murrieta Rd at Case Rd

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM In	9	0	0	0	0	0	0	12	3	0	6	0	
AM Out	5	0	0	0	0	0	0	2	3	0	23	0	
AM Tot	14	0	0	0	0	0	0	14	6	0	29	0	
PM In	3	0	0	0	0	0	0	25	5	0	2	0	
PM Out	4	0	0	0	0	0	0	6	9	0	18	0	
PM Tot	7	0	0	0	0	0	0	31	14	0	20	0	

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	3%										2%	
Y	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%	0%	0%
AM Out												
PM In	3%	0%	0%	0%	0%	0%	0%	0%	0%		2%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	9	0	0	0	0	0	0	0	0	0	6	0
AM Out	90	0	0	0	0	0	0	0	2	3	0	0	0
PM In	115	3	0	0	0	0	0	0	0	0	0	2	0
PM Out	299	0	0	0	0	0	0	0	6	9	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In								2%				
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	8	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	16	0
PM In	857	0	0	0	0	0	0	0	17	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	12	0

Int. #: 2 Murrieta Rd at Case Rd

Zone # 5 2, 8, 26, 34,35, 38

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	627	0	0	0	0	0	0	0	0	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	488	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In								3%	2%			
Y	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	3%	2%	0%	0%	0%
PM Out	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	0	4	3	0	0	0
AM Out	226	5	0	0	0	0	0	0	0	0	7	0	0
PM In	262	0	0	0	0	0	0	0	8	5	0	0	0
PM Out	204	4	0	0	0	0	0	0	0	0	6	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	519	0	0	0	0	0	0	0	0	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	342	0	0	0	0	0	0	0	0	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 3 Goetz Rd at Mapes Rd

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM In	0	6	0	0	19	0	0	0	0	0	0	0	
AM Out	0	42	0	0	2	0	0	0	0	0	0	0	
AM Tot	0	48	0	0	21	0	0	0	0	0	0	0	
PM In	0	2	0	0	47	0	0	0	0	0	0	0	
PM Out	0	33	0	0	6	0	0	0	0	0	0	0	
PM Tot	0	35	0	0	53	0	0	0	0	0	0	0	

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	2%											
Y	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	6	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	2	0	0	0	0	0	0	0
PM In	115	0	2	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	6	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 3 Goetz Rd at Mapes Rd

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					4%							
Y	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	12	0	0	0	0	0	0	0
AM Out	627	0	25	0	0	0	0	0	0	0	0	0	0
PM In	685	0	0	0	0	27	0	0	0	0	0	0	0
PM Out	488	0	20	0	0	0	0	0	0	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					3%							
Y	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	4	0	0	0	0	0	0	0
AM Out	226	0	7	0	0	0	0	0	0	0	0	0	0
PM In	262	0	0	0	0	8	0	0	0	0	0	0	0
PM Out	204	0	6	0	0	0	0	0	0	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					2%							
Y	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	3	0	0	0	0	0	0	0
AM Out	519	0	10	0	0	0	0	0	0	0	0	0	0
PM In	582	0	0	0	0	12	0	0	0	0	0	0	0
PM Out	342	0	7	0	0	0	0	0	0	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 4 I-215 SB Ramps/SR-74 at Bonnie Dr

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		6	0	0	0	137	0	0	0	8	0	0	0
AM Out		16	168	0	0	0	0	0	0	2	0	0	0
AM Tot		22	168	0	0	137	0	0	0	10	0	0	0
PM In		2	0	0	0	203	0	0	0	17	0	0	0
PM Out		12	173	0	0	0	0	0	0	6	0	0	0
PM Tot		14	173	0	0	203	0	0	0	23	0	0	0

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	2%											
Y	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
AM Out												
PM In	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	6	0	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	0	0	0	0	2	0	0	0
PM In	115	2	0	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	0	0	0	0	6	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					15%				2%			
Y	2%	15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	15%	0%	0%	0%	2%	0%	0%	0%
PM Out	2%	15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	58	0	0	0	8	0	0	0
AM Out	804	16	121	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	128	0	0	0	17	0	0	0
PM Out	593	12	89	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 4 I-215 SB Ramps/SR-74 at Bonnie Dr

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					45%							
Y	0%	45%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	45%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	45%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	627	0	0	0	0	0	0	0	0	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	488	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	0	0	0	0	0	0	0	0
PM In	262	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	79	0	0	0	0	0	0	0
AM Out	104	0	47	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	75	0	0	0	0	0	0	0
PM Out	187	0	84	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	519	0	0	0	0	0	0	0	0	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	342	0	0	0	0	0	0	0	0	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 5 I-215 NB Ramps at SR-74

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		0	0	0	137	0	0	0	145	0	0	6	0
AM Out		0	0	0	0	0	0	0	2	0	0	184	168
AM Tot		0	0	0	137	0	0	0	147	0	0	190	168
PM In		0	0	0	203	0	0	0	221	0	0	2	0
PM Out		0	0	0	0	0	0	0	6	0	0	185	173
PM Tot		0	0	0	203	0	0	0	227	0	0	187	173

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											2%	
Y	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	0	0	0	0	0	0	0	0	0	6	0
AM Out	90	0	0	0	0	0	0	0	2	0	0	0	0
PM In	115	0	0	0	0	0	0	0	0	0	0	2	0
PM Out	299	0	0	0	0	0	0	0	6	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In				15%				17%				
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	15%
AM Out												
PM In	0%	0%	0%	15%	0%	0%	0%	17%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	15%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	58	0	0	0	66	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	137	121	
PM In	857	0	0	0	128	0	0	0	146	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	101	89	

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 5 I-215 NB Ramps at SR-74

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	627	0	0	0	0	0	0	0	0	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	488	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	0	0	0	0	0	0	0	0
PM In	262	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In				45%				45%				
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	45%	45%
AM Out												
PM In	0%	0%	0%	45%	0%	0%	0%	45%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	45%	45%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	79	0	0	0	79	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	47	47	
PM In	166	0	0	0	75	0	0	0	75	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	84	84	

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	519	0	0	0	0	0	0	0	0	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	342	0	0	0	0	0	0	0	0	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 6 SR-74 at Sherman Rd

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM In	0	0	0	0	0	0	0	125	0	12	24	0	
AM Out	0	0	4	0	0	0	0	12	0	0	257	0	
AM Tot	0	0	4	0	0	0	0	137	0	12	281	0	
PM In	0	0	0	0	0	0	0	274	0	8	19	0	
PM Out	0	0	12	0	0	0	0	25	0	0	190	0	
PM Tot	0	0	12	0	0	0	0	299	0	8	209	0	

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											2%	
Y	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	0	0	0	0	0	0	0	0	0	6	0
AM Out	90	0	0	0	0	0	0	0	2	0	0	0	0
PM In	115	0	0	0	0	0	0	0	0	0	0	2	0
PM Out	299	0	0	0	0	0	0	0	6	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In							32%					
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	32%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	32%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	32%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	125	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	257	0	0
PM In	857	0	0	0	0	0	0	274	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	190	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 6 SR-74 at Sherman Rd

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	627	0	0	0	0	0	0	0	0	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	488	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In										1%		
Y	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
PM Out	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	12	0	0
AM Out	423	0	0	4	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	8	0	0
PM Out	1,247	0	0	12	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	0	0	0	0	0	0	0	0
PM In	262	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											10%	
Y	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	18	0
AM Out	104	0	0	0	0	0	0	10	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	17	0
PM Out	187	0	0	0	0	0	0	19	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	519	0	0	0	0	0	0	0	0	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	342	0	0	0	0	0	0	0	0	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 7 Goetz Rd at Fieldstone Dr

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM In	0	6	0	0	19	0	0	0	0	0	0	0	
AM Out	0	42	0	0	2	0	0	0	0	0	0	0	
AM Tot	0	48	0	0	21	0	0	0	0	0	0	0	
PM In	0	2	0	0	47	0	0	0	0	0	0	0	
PM Out	0	33	0	0	6	0	0	0	0	0	0	0	
PM Tot	0	35	0	0	53	0	0	0	0	0	0	0	

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	2%											
Y	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	6	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	2	0	0	0	0	0	0	0
PM In	115	0	2	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	6	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: **7** Goetz Rd at Fieldstone Dr

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					4%							
Y	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # **6** 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # **7** '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					3%							
Y	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # **8** 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # **9** 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					2%							
Y	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	12	0	0	0	0	0	0	0
AM Out	627	0	25	0	0	0	0	0	0	0	0	0	0
PM In	685	0	0	0	0	27	0	0	0	0	0	0	0
PM Out	488	0	20	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	4	0	0	0	0	0	0	0
AM Out	226	0	7	0	0	0	0	0	0	0	0	0	0
PM In	262	0	0	0	0	8	0	0	0	0	0	0	0
PM Out	204	0	6	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	3	0	0	0	0	0	0	0
AM Out	519	0	10	0	0	0	0	0	0	0	0	0	0
PM In	582	0	0	0	0	12	0	0	0	0	0	0	0
PM Out	342	0	7	0	0	0	0	0	0	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 8 Goetz Rd at Ethanac Rd

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC												
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	0	6	12	16	3	0	0	0	0	0	0	0
AM Out	0	10	0	0	2	0	0	0	0	25	0	32
AM Tot	0	16	12	16	5	0	0	0	0	25	0	32
PM In	0	2	27	35	12	0	0	0	0	0	0	0
PM Out	0	7	0	0	6	0	0	0	0	20	0	26
PM Tot	0	9	27	35	18	0	0	0	0	20	0	26

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		2%										
Y	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	6	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	2	0	0	0	0	0	0	0
PM In	115	0	2	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	6	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 8 Goetz Rd at Ethanac Rd

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In			4%	4%								
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	4%
AM Out												
PM In	0%	0%	4%	4%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	4%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	12	12	0	0	0	0	0	0	0	0
AM Out	627	0	0	0	0	0	0	0	0	0	25	0	25
PM In	685	0	0	27	27	0	0	0	0	0	0	0	0
PM Out	488	0	0	0	0	0	0	0	0	0	20	0	20

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In				3%								
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%
AM Out												
PM In	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	4	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	0	0	0	0	0	0	0	7
PM In	262	0	0	0	8	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	6

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					2%							
Y	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	3	0	0	0	0	0	0	0
AM Out	519	0	10	0	0	0	0	0	0	0	0	0	0
PM In	582	0	0	0	0	12	0	0	0	0	0	0	0
PM Out	342	0	7	0	0	0	0	0	0	0	0	0	0

Int. #: 11 Murrieta Rd at Ethanac Rd

Zone # 5 2, 8, 26, 34,35, 38

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	8%										50%	
Y	0%	0%	0%	0%	0%	0%	0%	50%	8%	0%	0%	0%
AM Out												
PM In	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	50%	8%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	24	0	0	0	0	0	0	0	0	0	151	0
AM Out	627	0	0	0	0	0	0	0	313	50	0	0	0
PM In	685	55	0	0	0	0	0	0	0	0	0	342	0
PM Out	488	0	0	0	0	0	0	0	244	39	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In			5%	2%				3%				
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	3%	2%
AM Out												
PM In	0%	0%	5%	2%	0%	0%	0%	3%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	3%	2%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	7	3	0	0	0	4	0	0	0	0
AM Out	226	0	0	0	0	0	0	0	0	0	11	7	5
PM In	262	0	0	13	5	0	0	0	8	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	10	6	4

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In										45%	5%	
Y	0%	0%	45%	0%	0%	0%	0%	5%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	45%	5%	0%
PM Out	0%	0%	45%	0%	0%	0%	0%	5%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	78	9	0
AM Out	519	0	0	234	0	0	0	0	26	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	262	29	0
PM Out	342	0	0	154	0	0	0	0	17	0	0	0	0

Int. #: 12 Evans Rd at Ethanac Rd

Zone # 5 2, 8, 26, 34,35, 38

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											50%	
Y	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	0	0	151	0
AM Out	627	0	0	0	0	0	0	0	313	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	0	0	342	0
PM Out	488	0	0	0	0	0	0	0	244	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In									10%	60%		
Y	10%	0%	60%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	10%	60%	0%	0%
PM Out	10%	0%	60%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	0	0	14	85	0	0
AM Out	226	23	0	136	0	0	0	0	0	0	0	0	0
PM In	262	0	0	0	0	0	0	0	0	26	157	0	0
PM Out	204	20	0	122	0	0	0	0	0	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											50%	
Y	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	0	87	0
AM Out	519	0	0	0	0	0	0	0	260	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	0	291	0
PM Out	342	0	0	0	0	0	0	0	171	0	0	0	0

Int. #: 13 Barnett Rd/Case Rd at Ethanac Rd

Zone # 5 2, 8, 26, 34,35, 38

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											50%	
Y	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	0	0	151	0
AM Out	627	0	0	0	0	0	0	0	313	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	0	0	342	0
PM Out	488	0	0	0	0	0	0	0	244	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In										30%	30%	
Y	0%	0%	30%	0%	0%	0%	0%	30%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	30%	0%
PM Out	0%	0%	30%	0%	0%	0%	0%	30%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	0	0	0	43	43	0
AM Out	226	0	0	68	0	0	0	0	68	0	0	0	0
PM In	262	0	0	0	0	0	0	0	0	0	79	79	0
PM Out	204	0	0	61	0	0	0	0	61	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											50%	
Y	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	0	87	0
AM Out	519	0	0	0	0	0	0	0	260	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	0	291	0
PM Out	342	0	0	0	0	0	0	0	171	0	0	0	0

Int. #: 14 I-215 SB Ramps at Ethanac Rd

Zone # 5 2, 8, 26, 34, 35, 38

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In						24%					26%	
N	0%	0%	0%	0%	0%	0%	0%	26%	24%	0%	0%	0%
AM Out								26%	24%			
PM In	0%	0%	0%	0%	0%	24%	0%	0%	0%	0%	26%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	26%	24%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	72	0	0	0	0	78	0
AM Out	627	0	0	0	0	0	0	163	150	0	0	0	0
PM In	685	0	0	0	0	0	164	0	0	0	0	178	0
PM Out	488	0	0	0	0	0	0	127	117	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In				20%								
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%
AM Out										20%		
PM In	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	238	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	85	0	0
PM In	832	0	0	0	166	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	249	0	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In						30%					30%	
N	0%	0%	0%	0%	0%	0%	0%	30%	30%	0%	0%	0%
AM Out								30%	30%			
PM In	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	30%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	30%	30%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	43	0	0	0	0	43	0
AM Out	226	0	0	0	0	0	0	68	68	0	0	0	0
PM In	262	0	0	0	0	0	79	0	0	0	0	79	0
PM Out	204	0	0	0	0	0	0	61	61	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In						25%					25%	
N	0%	0%	0%	0%	0%	0%	0%	25%	25%	0%	0%	0%
AM Out								25%	25%			
PM In	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	25%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	25%	25%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	44	0	0	0	0	44	0
AM Out	519	0	0	0	0	0	0	130	130	0	0	0	0
PM In	582	0	0	0	0	0	146	0	0	0	0	146	0
PM Out	342	0	0	0	0	0	0	86	86	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 15 I-215 NB Ramps at Ethanac Rd

N

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM In	159	0	238	0	0	0	0	238	0	0	6	0	
AM Out	0	0	0	0	0	0	348	13	0	0	85	85	
AM Tot	159	0	238	0	0	0	348	251	0	0	91	85	
PM In	389	0	166	0	0	0	0	166	0	0	14	0	
PM Out	0	0	0	0	0	0	264	10	0	0	249	249	
PM Tot	389	0	166	0	0	0	264	176	0	0	263	249	

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	0	0	0	0	0	0	0	0
PM In	115	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 15 I-215 NB Ramps at Ethanac Rd

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	24%										2%	
N	0%	0%	0%	0%	0%	0%	24%	2%	0%	0%	0%	0%
AM Out							24%	2%				
PM In	24%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
PM Out	0%	0%	0%	0%	0%	0%	24%	2%	0%	0%	0%	0%

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In			20%					20%				
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	20%
AM Out										20%	20%	
PM In	0%	0%	20%	0%	0%	0%	0%	20%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	20%

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	30%											
N	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%
AM Out							30%					
PM In	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	25%											
N	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%
AM Out							25%					
PM In	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	72	0	0	0	0	0	0	0	0	0	6	0
AM Out	627	0	0	0	0	0	0	150	13	0	0	0	0
PM In	685	164	0	0	0	0	0	0	0	0	0	14	0
PM Out	488	0	0	0	0	0	0	117	10	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	238	0	0	0	0	238	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	85	85
PM In	832	0	0	166	0	0	0	0	166	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	249	249

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	43	0	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	0	0	68	0	0	0	0	0
PM In	262	79	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	61	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	44	0	0	0	0	0	0	0	0	0	0	0
AM Out	519	0	0	0	0	0	0	130	0	0	0	0	0
PM In	582	146	0	0	0	0	0	0	0	0	0	0	0
PM Out	342	0	0	0	0	0	0	86	0	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 16 Trumble Rd at Ethanac Rd

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		0	0	0	0	0	0	60	357	60	0	6	0
AM Out		21	0	0	0	0	21	0	13	0	0	127	0
AM Tot		21	0	0	0	0	21	60	370	60	0	133	0
PM In		0	0	0	0	0	0	42	250	42	0	14	0
PM Out		62	0	0	0	0	62	0	10	0	0	374	0
PM Tot		62	0	0	0	0	62	42	260	42	0	388	0

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	0	0	0	0	0	0	0	0
PM In	115	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 16 Trumble Rd at Ethanac Rd

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											2%	
Y	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	0	0	6	0
AM Out	627	0	0	0	0	0	0	0	13	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	0	0	14	0
PM Out	488	0	0	0	0	0	0	0	10	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In							5%	30%	5%			
Y	5%	0%	0%	0%	0%	5%	0%	0%	0%	0%	30%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	5%	30%	5%	0%	0%	0%
PM Out	5%	0%	0%	0%	0%	5%	0%	0%	0%	0%	30%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	60	357	60	0	0	0
AM Out	423	21	0	0	0	0	21	0	0	0	0	127	0
PM In	832	0	0	0	0	0	0	42	250	42	0	0	0
PM Out	1,247	62	0	0	0	0	62	0	0	0	0	374	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	0	0	0	0	0	0	0	0
PM In	262	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	519	0	0	0	0	0	0	0	0	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	342	0	0	0	0	0	0	0	0	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 17 Sherman Rd at Ethanac Rd

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		0	0	0	0	0	0	0	417	60	0	6	0
AM Out		21	0	0	0	0	0	0	13	0	0	148	0
AM Tot		21	0	0	0	0	0	0	430	60	0	154	0
PM In		0	0	0	0	0	0	0	291	42	0	14	0
PM Out		62	0	0	0	0	0	0	10	0	0	436	0
PM Tot		62	0	0	0	0	0	0	301	42	0	450	0

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	0	0	0	0	0	0	0	0
PM In	115	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 17 Sherman Rd at Ethanac Rd

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											2%	
Y	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In								35%	5%			
Y	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	35%	5%	0%	0%	0%
PM Out	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	0	0	6	0
AM Out	627	0	0	0	0	0	0	0	13	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	0	0	14	0
PM Out	488	0	0	0	0	0	0	0	10	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	417	60	0	0	0
AM Out	423	21	0	0	0	0	0	0	0	0	0	148	0
PM In	832	0	0	0	0	0	0	0	291	42	0	0	0
PM Out	1,247	62	0	0	0	0	0	0	0	0	0	436	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	0	0	0	0	0	0	0	0
PM In	262	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	519	0	0	0	0	0	0	0	0	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	342	0	0	0	0	0	0	0	0	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 18 Byers Rd at McLaughlin Rd

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		0	0	0	0	9	0	0	0	0	0	0	6
AM Out		0	26	0	13	0	0	0	0	0	0	0	0
AM Tot		0	26	0	13	9	0	0	0	0	0	0	6
PM In		0	0	0	0	29	0	0	0	0	0	0	14
PM Out		0	17	0	10	0	0	0	0	0	0	0	0
PM Tot		0	17	0	10	29	0	0	0	0	0	0	14

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	0	0	0	0	0	0	0	0
PM In	115	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 18 Byers Rd at McLaughlin Rd

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												2%
Y	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%
PM Out	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	0	0	0	6
AM Out	627	0	0	0	13	0	0	0	0	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	0	0	0	14
PM Out	488	0	0	0	10	0	0	0	0	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	0	0	0	0	0	0	0	0
PM In	262	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					5%							
Y	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	9	0	0	0	0	0	0	0
AM Out	519	0	26	0	0	0	0	0	0	0	0	0	0
PM In	582	0	0	0	0	29	0	0	0	0	0	0	0
PM Out	342	0	17	0	0	0	0	0	0	0	0	0	0

Int. #: 20 Murrieta Rd at Rouse Rd

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		26	67	0	0	0	78	0	0	0	0	0	0
AM Out		0	0	0	0	111	0	234	0	78	0	0	0
AM Tot		26	67	0	0	111	78	234	0	78	0	0	0
PM In		87	123	0	0	0	262	0	0	0	0	0	0
PM Out		0	0	0	0	99	0	154	0	51	0	0	0
PM Tot		87	123	0	0	99	262	154	0	51	0	0	0

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		3%										
Y	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	9	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	3	0	0	0	0	0	0	0
PM In	115	0	3	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	9	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Int. #: 20 Murrieta Rd at Rouse Rd

Zone # 5 2, 8, 26, 34,35, 38

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		10%										
Y	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	30	0	0	0	0	0	0	0	0	0	0
AM Out	627	0	0	0	0	63	0	0	0	0	0	0	0
PM In	685	0	68	0	0	0	0	0	0	0	0	0	0
PM Out	488	0	0	0	0	49	0	0	0	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		20%										
Y	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	28	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	45	0	0	0	0	0	0	0
PM In	262	0	52	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	41	0	0	0	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	15%					45%						
Y	0%	0%	0%	0%	0%	0%	45%	0%	15%	0%	0%	0%
AM Out												
PM In	15%	0%	0%	0%	0%	45%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	45%	0%	15%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	26	0	0	0	0	78	0	0	0	0	0	0
AM Out	519	0	0	0	0	0	0	234	0	78	0	0	0
PM In	582	87	0	0	0	0	262	0	0	0	0	0	0
PM Out	342	0	0	0	0	0	0	154	0	51	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 21 Murrieta Rd at Chambers Ave

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM In	26	119	0	0	0	0	0	0	0	0	0	0	0
AM Out	0	0	0	0	267	0	0	0	78	0	0	0	0
AM Tot	26	119	0	0	267	0	0	0	78	0	0	0	0
PM In	87	298	0	0	0	0	0	0	0	0	0	0	0
PM Out	0	0	0	0	202	0	0	0	51	0	0	0	0
PM Tot	87	298	0	0	202	0	0	0	51	0	0	0	0

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		3%										
Y	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	9	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	3	0	0	0	0	0	0	0
PM In	115	0	3	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	9	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 21 Murrieta Rd at Chambers Ave

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		10%										
Y	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		20%										
Y	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	15%	30%										
Y	0%	0%	0%	0%	30%	0%	0%	0%	15%	0%	0%	0%
AM Out												
PM In	15%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	30%	0%	0%	0%	15%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	30	0	0	0	0	0	0	0	0	0	0
AM Out	627	0	0	0	0	63	0	0	0	0	0	0	0
PM In	685	0	68	0	0	0	0	0	0	0	0	0	0
PM Out	488	0	0	0	0	49	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	28	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	45	0	0	0	0	0	0	0
PM In	262	0	52	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	41	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	26	52	0	0	0	0	0	0	0	0	0	0
AM Out	519	0	0	0	0	156	0	0	0	78	0	0	0
PM In	582	87	175	0	0	0	0	0	0	0	0	0	0
PM Out	342	0	0	0	0	103	0	0	0	51	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 22 Murrieta Rd at McCall Blvd

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC												
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	0	84	0	0	0	0	0	0	0	32	0	44
AM Out	0	0	96	130	163	0	0	0	0	0	0	0
AM Tot	0	84	96	130	163	0	0	0	0	32	0	44
PM In	0	181	0	0	0	0	0	0	0	108	0	146
PM Out	0	0	63	86	133	0	0	0	0	0	0	0
PM Tot	0	181	63	86	133	0	0	0	0	108	0	146

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		3%										
Y	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	9	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	3	0	0	0	0	0	0	0
PM In	115	0	3	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	9	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In										30%		
Y	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%
PM Out	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	32	0	0
AM Out	319	0	0	96	0	0	0	0	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	108	0	0
PM Out	211	0	0	63	0	0	0	0	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 22 Murrieta Rd at McCall Blvd

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		10%										
Y	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		20%										
Y	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		10%										25%
Y	0%	0%	0%	25%	10%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%
PM Out	0%	0%	0%	25%	10%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	30	0	0	0	0	0	0	0	0	0	0
AM Out	627	0	0	0	0	63	0	0	0	0	0	0	0
PM In	685	0	68	0	0	0	0	0	0	0	0	0	0
PM Out	488	0	0	0	0	49	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	28	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	45	0	0	0	0	0	0	0
PM In	262	0	52	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	41	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	17	0	0	0	0	0	0	0	0	0	44
AM Out	519	0	0	0	130	52	0	0	0	0	0	0	0
PM In	582	0	58	0	0	0	0	0	0	0	0	0	146
PM Out	342	0	0	0	86	34	0	0	0	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 23 Sun City Blvd at McCall Blvd

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM In	0	0	0	0	0	0	0	0	0	0	76	0	
AM Out	0	0	0	0	0	0	0	226	0	0	0	0	
AM Tot	0	0	0	0	0	0	0	226	0	0	76	0	
PM In	0	0	0	0	0	0	0	0	0	0	254	0	
PM Out	0	0	0	0	0	0	0	149	0	0	0	0	
PM Tot	0	0	0	0	0	0	0	149	0	0	254	0	

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	0	0	0	0	0	0	0	0
PM In	115	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In										30%		
Y	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	32	0
AM Out	319	0	0	0	0	0	0	96	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	108	0
PM Out	211	0	0	0	0	0	0	63	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 23 Sun City Blvd at McCall Blvd

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											25%	
Y	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	627	0	0	0	0	0	0	0	0	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	488	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	0	0	0	0	0	0	0	0
PM In	262	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	0	44	0
AM Out	519	0	0	0	0	0	0	0	130	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	0	146	0
PM Out	342	0	0	0	0	0	0	0	86	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 24 Bradley Rd at McCall Blvd

Y

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM In	0	0	0	0	0	0	0	0	0	0	76	0	
AM Out	0	0	0	0	0	0	0	226	0	0	0	0	
AM Tot	0	0	0	0	0	0	0	226	0	0	76	0	
PM In	0	0	0	0	0	0	0	0	0	0	254	0	
PM Out	0	0	0	0	0	0	0	149	0	0	0	0	
PM Tot	0	0	0	0	0	0	0	149	0	0	254	0	

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	0	0	0	0	0	0	0	0
PM In	115	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,799	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											30%	
Y	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	0	0	0	0	0	32	0
AM Out	319	0	0	0	0	0	0	96	0	0	0	0	0
PM In	359	0	0	0	0	0	0	0	0	0	0	108	0
PM Out	211	0	0	0	0	0	0	63	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 24 Bradley Rd at McCall Blvd

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											25%	
Y	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	627	0	0	0	0	0	0	0	0	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	488	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	0	0
PM In	832	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	0	0	0	0	0	0	0	0
PM In	262	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	0	44	0
AM Out	519	0	0	0	0	0	0	0	130	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	0	146	0
PM Out	342	0	0	0	0	0	0	0	86	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 25 I-215 SB Ramps at McCall Blvd

N

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM In	0	0	0	169	0	37	0	0	0	0	39	0	
AM Out	0	0	0	0	0	0	136	141	174	0	0	0	
AM Tot	0	0	0	169	0	37	136	141	174	39	0	0	
PM In	0	0	0	312	0	124	0	0	0	130	0	0	
PM Out	0	0	0	0	0	0	90	94	185	0	0	0	
PM Tot	0	0	0	312	0	124	90	94	185	130	0	0	

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	0	0	0	0	0	0	0	0
PM In	115	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In				15%								
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%
AM Out										10%		
PM In	0%	0%	0%	15%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	0	109	0	0	0	0	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	153	0	0	0
PM In	1,799	0	0	0	270	0	0	0	0	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	123	0	0	0

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In						15%					15%	
N	0%	0%	0%	0%	0%	0%	0%	15%	15%	0%	0%	0%
AM Out								15%	15%			
PM In	0%	0%	0%	0%	0%	15%	0%	0%	0%	0%	15%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	15%	15%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	0	0	0	0	0	16	0	0	0	0	16	0
AM Out	319	0	0	0	0	0	0	48	48	0	0	0	0
PM In	359	0	0	0	0	0	54	0	0	0	0	54	0
PM Out	211	0	0	0	0	0	0	32	32	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 25 I-215 SB Ramps at McCall Blvd

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	627	0	0	0	0	0	0	0	0	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	488	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In				5%								
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%
AM Out										5%		
PM In	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	0	60	0	0	0	0	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	21	0	0
PM In	832	0	0	0	42	0	0	0	0	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	62	0	0

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	0	0	0	0	0	0	0	0
PM In	262	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In						12%					13%	
N	0%	0%	0%	0%	0%	0%	0%	17%	18%	0%	0%	0%
AM Out								17%	18%			
PM In	0%	0%	0%	0%	0%	12%	0%	0%	0%	0%	13%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	17%	18%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	21	0	0	0	0	23	0
AM Out	519	0	0	0	0	0	0	88	93	0	0	0	0
PM In	582	0	0	0	0	0	70	0	0	0	0	76	0
PM Out	342	0	0	0	0	0	0	58	62	0	0	0	0

Enter only in blue cells Yellow cells calculate

Int. #: 26 I-215 NB Ramps at McCall Blvd

N

TOTAL CUMULATIVE PROJECTS TRAFFIC												
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	39	0	133	0	0	0	0	169	0	0	0	0
AM Out	0	0	0	0	0	0	136	0	0	0	174	250
AM Tot	39	0	133	0	0	0	136	169	0	0	174	250
PM In	130	0	222	0	0	0	0	312	0	0	0	0
PM Out	0	0	0	0	0	0	90	0	0	0	185	247
PM Tot	130	0	222	0	0	0	90	312	0	0	185	247

Zone # 1 1

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	301	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	90	0	0	0	0	0	0	0	0	0	0	0	0
PM In	115	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	299	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 2 11, 17, 18, 19, 20, 23, 24, 32, 41, 43, 47

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In			10%					15%				
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	15%
AM Out										10%	15%	
PM In	0%	0%	10%	0%	0%	0%	0%	15%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	15%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	726	0	0	73	0	0	0	0	109	0	0	0	0
AM Out	1,529	0	0	0	0	0	0	0	0	0	153	229	
PM In	1,799	0	0	180	0	0	0	0	270	0	0	0	0
PM Out	1,231	0	0	0	0	0	0	0	0	0	123	185	

Zone # 3 21, 22, 25

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	15%											
N	0%	0%	0%	0%	0%	0%	15%	0%	0%	0%	0%	0%
AM Out							15%					
PM In	15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	15%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	107	16	0	0	0	0	0	0	0	0	0	0	0
AM Out	319	0	0	0	0	0	0	48	0	0	0	0	0
PM In	359	54	0	0	0	0	0	0	0	0	0	0	0
PM Out	211	0	0	0	0	0	0	32	0	0	0	0	0

Zone # 4 6, 7, 42, 44, 45, 46

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	389	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	804	0	0	0	0	0	0	0	0	0	0	0	0
PM In	857	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	593	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 5 2, 8, 26, 34, 35, 38

Int. #: 26 I-215 NB Ramps at McCall Blvd

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	302	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	627	0	0	0	0	0	0	0	0	0	0	0	0
PM In	685	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	488	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In			5%					5%				
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%
AM Out										5%	5%	
PM In	0%	0%	5%	0%	0%	0%	0%	5%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,191	0	0	60	0	0	0	0	60	0	0	0	0
AM Out	423	0	0	0	0	0	0	0	0	0	0	21	21
PM In	832	0	0	42	0	0	0	0	42	0	0	0	0
PM Out	1,247	0	0	0	0	0	0	0	0	0	0	62	62

Zone # 7 '9, 14, 15, 27, 39

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	142	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	226	0	0	0	0	0	0	0	0	0	0	0	0
PM In	262	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	176	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	104	0	0	0	0	0	0	0	0	0	0	0	0
PM In	166	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	187	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	13%											
N	0%	0%	0%	0%	0%	0%	17%	0%	0%	0%	0%	0%
AM Out							17%					
PM In	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	17%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	23	0	0	0	0	0	0	0	0	0	0	0
AM Out	519	0	0	0	0	0	0	88	0	0	0	0	0
PM In	582	76	0	0	0	0	0	0	0	0	0	0	0
PM Out	342	0	0	0	0	0	0	58	0	0	0	0	0

APPENDIX E

**TRAFFIC SIGNAL WARRANT
ANALYSIS WORKSHEETS**

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Wheat NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Existing Plus Project
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	1,498	85	Y			Y	Y	Y	Y			Y	Y	Y	Y	
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,352	371	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	2,850	456	2	1	1	2	2	2	2	1	1	2	2	2	2	1
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Wheat NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Opening Year 2024 Cumulative Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	1,767	15	Y			Y			Y			Y				
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,799	55	Y			Y			Y			Y				
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	3,566	70	2	0	0	2	0	0	2	0	0	2	0	0	0	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Wheat NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Opening Year 2024 Cumulative Plus Project Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	2,066	100	Y			Y	Y	Y	Y			Y	Y	Y	Y	Y
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	2,019	426	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	4,085	526	2	1	1	2	2	2	2	1	1	2	2	2	2	2
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Byers NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Existing Plus Project
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	1,722	41	Y			Y			Y			Y				
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,756	164	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	3,478	205	2	1	1	2	1	1	2	1	1	2	1	1	1	1
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Byers NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Opening Year 2024 Cumulative Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	1,864	95	Y			Y	Y	Y	Y			Y	Y	Y	Y	
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,894	73	Y			Y			Y			Y	Y	Y		
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	3,758	168	2	0	0	2	1	1	2	0	0	2	2	2	1	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Byers NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Opening Year 2024 Cumulative Plus Project Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	2,374	130	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	2,509	230	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	4,883	360	2	1	1	2	2	2	2	2	2	2	2	2	2	2
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Evans Road NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Existing Plus Project Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	1,885	2	Y			Y			Y			Y				
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	2,027	2	Y			Y			Y			Y				
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	3,912	4	2	0	0	2	0	0	2	0	0	2	0	0	0	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Evans Road NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Opening Year 2024 Cumulative Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	2,720	213	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	2,903	332	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	5,623	545	2	2	2	2	2	2	2	2	2	2	2	2	2	
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Evans Road NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Opening Year 2024 Cumulative Plus Project Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	3,201	213	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	3,567	332	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	6,768	545	2	2	2	2	2	2	2	2	2	2	2	2	2	
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Sherman Road NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Existing plus Project Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			500	150		750	75		400	120		600	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	741	218	Y	Y	Y		Y		Y	Y	Y	Y	Y	Y		
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	609	203	Y	Y	Y		Y		Y	Y	Y	Y	Y	Y		
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	1,350	421	2	2	2	0	2	0	2	2	2	2	2	2	1	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Sherman Road NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Opening Year 2024 Cumulative Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			500	150		750	75		400	120		600	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	1,539	253	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,546	224	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	3,085	477	2	2	2	2	2	2	2	2	2	2	2	2	2	2
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Sherman Road NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Opening Year 2024 Cumulative Plus Project Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			500	150		750	75		400	120		600	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	1,561	263	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,596	230	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	3,157	493	2	2	2	2	2	2	2	2	2	2	2	2	2	2
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Murrieta Road NB SB # OF APPROACH LANES:

MINOR STREET: McLaughlin Road EB WB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Existing Plus Project
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			500	150		750	75		400	120		600	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	733	36	Y					Y				Y				
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	925	125	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y		
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	1,658	161	2	0	0	1	1	1	2	1	1	2	1	1	1	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Murrieta Road NB SB # OF APPROACH LANES:

MINOR STREET: McLaughlin Road EB WB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Opening Year 2024 Cumulative Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			500	150		750	75		400	120		600	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	980	62	Y			Y			Y			Y	Y	Y		
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,369	78	Y			Y	Y	Y	Y			Y	Y	Y		
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	2,349	140	2	0	0	2	1	1	2	0	0	2	2	2	0	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Murrieta Road NB SB # OF APPROACH LANES:

MINOR STREET: McLaughlin Road EB WB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Opening Year 2024 Cumulative Plus Project Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			500	150		750	75		400	120		600	60			
06:00 AM TO 07:00 AM	0	0				Y			Y			Y	Y	Y		
07:00 AM TO 08:00 AM	1,046	62	Y			Y			Y			Y	Y	Y		
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,459	78	Y			Y	Y	Y	Y			Y	Y	Y		
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	2,505	140	2	0	0	2	1	1	2	0	0	2	2	2	0	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Murrieta Road NB SB # OF APPROACH LANES:

MINOR STREET: Rouse Road EB WB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Existing plus Project Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour	
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET			
THRESHOLD VALUES			600	150		900	75		480	120		720	60				
06:00 AM TO 07:00 AM	0	0															
07:00 AM TO 08:00 AM	458	58															
08:00 AM TO 09:00 AM	0	0															
09:00 AM TO 10:00 AM	0	0															
10:00 AM TO 11:00 AM	0	0															
11:00 AM TO 12:00 PM	0	0															
12:00 PM TO 01:00 PM	0	0															
01:00 PM TO 02:00 PM	0	0															
02:00 PM TO 03:00 PM	0	0															
03:00 PM TO 04:00 PM	0	0															
04:00 PM TO 05:00 PM	726	78	Y			Y			Y			Y	Y	Y			
05:00 PM TO 06:00 PM	0	0															
06:00 PM TO 07:00 PM	0	0															
07:00 PM TO 08:00 PM	0	0															
08:00 PM TO 09:00 PM	0	0															
09:00 PM TO 10:00 PM	0	0															
	1,184	136	1	0	0	0	1	0	0	1	0	0	1	1	1	0	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED	
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED	

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Murrieta Road NB SB # OF APPROACH LANES:

MINOR STREET: Rouse Road EB WB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Opening Year 2024 Cumulative Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	741	352	Y	Y	Y		Y		Y	Y	Y	Y	Y	Y	Y	
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,285	225	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	2,026	577	2	2	2	1	2	1	2	2	2	2	2	2	2	1
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Murrieta Road NB SB # OF APPROACH LANES:

MINOR STREET: Rouse Road EB WB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Opening Year 2024 Cumulative Plus Project Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	803	352	Y	Y	Y		Y		Y	Y	Y	Y	Y	Y		
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,380	225	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	2,183	577	2	2	2	1	2	1	2	2	2	2	2	2	1	
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Murrieta Road NB SB # OF APPROACH LANES:

MINOR STREET: Chambers Avenue EB WB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Existing Plus Project
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			600	200		900	100		480	160		720	80			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	755	135	Y				Y		Y			Y	Y	Y		
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	952	101	Y			Y	Y	Y	Y			Y	Y	Y		
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	1,707	236	2	0	0	1	2	1	2	0	0	2	2	2	0	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Murrieta Road NB SB # OF APPROACH LANES:

MINOR STREET: Chambers Avenue EB WB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Opening Year 2024 Cumulative Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			600	200		900	100		480	160		720	80			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	959	210	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,286	113	Y			Y	Y	Y	Y			Y	Y	Y		
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	2,245	323	2	1	1	2	2	2	2	1	1	2	2	2	1	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Murrieta Road NB SB # OF APPROACH LANES:

MINOR STREET: Chambers Avenue EB WB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

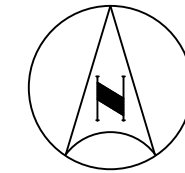
COMMENTS: Opening Year 2024 Cumulative Plus Project Volumes
0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

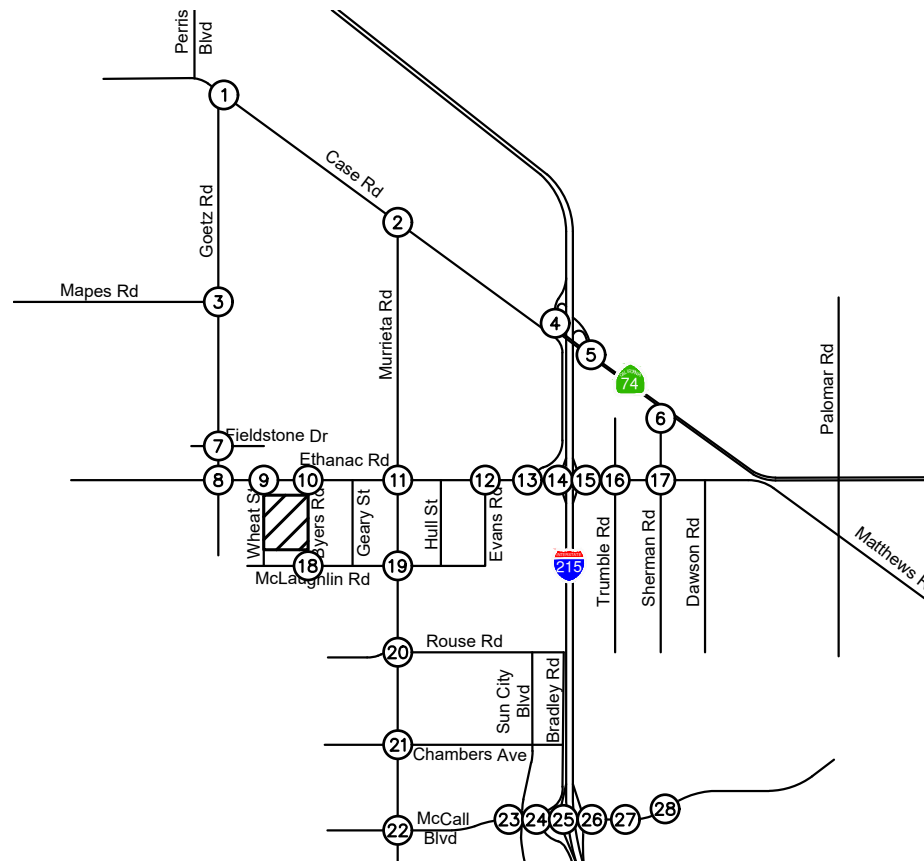
	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES			600	200		900	100		480	160		720	80			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	1,010	215	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,370	116	Y			Y	Y	Y	Y			Y	Y	Y	Y	
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	2,380	331	2	1	1	2	2	2	2	1	1	2	2	2	2	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

APPENDIX F

PROJECT TRIP DISTRIBUTION

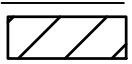



NOT TO SCALE



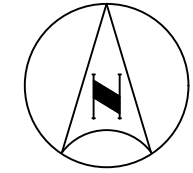
1. Goetz Rd at Case Rd	2. Murrieta Rd at Case Rd	3. Goetz Rd at Mapes Rd	4. I-215 SB Ramps/ SR-74 at Bonnie Dr	5. I-215 NB Ramps at SR-74	6. SR-74 at Sherman Rd	7. Goetz Rd at Fieldstone Dr	8. Goetz Rd at Ethanac Rd
	← 4%(0%)	← 6%(0%)	← 4%(0%)	← 0%(3%) ← 5%(0%)	← 5%(0%)	← 9%(0%)	← 9%(0%) ← 0%(9%) ← 0%(1%) ← 0%(3%)
6%(0%) → 0%(6%) →		3%(0%) → 0%(3%) → 0%(6%) →	5%(0%) →		0%(3%) → 2%(0%) → 0%(2%) →	0%(9%) →	1%(0%) → 3%(0%) →
9. Wheat St at Ethanac Rd	10. Byers Rd at Ethanac Rd	11. Murrieta Rd at Ethanac Rd	12. Evans Rd at Ethanac Rd	13. Barnett Rd/Case Rd at Ethanac Rd	14. I-215 SB Ramps at Ethanac Rd		
← 0%(4%) ← 45%(0%)	← 45%(0%) ← 36%(0%)	← 4%(0%) ← 72%(0%)	← 72%(0%)	← 72%(0%)	← 37%(0%) ← 36%(0%)		
1%(0%) → 12%(0%) → 0%(9%) → 0%(60%) →	0%(60%) → 1%(0%) → 0%(4%) → 0%(25%) →	0%(75%) → 0%(11%) → 6%(0%) →	0%(75%) →	0%(75%) →	0%(46%) → 0%(29%) →		

LEGEND:

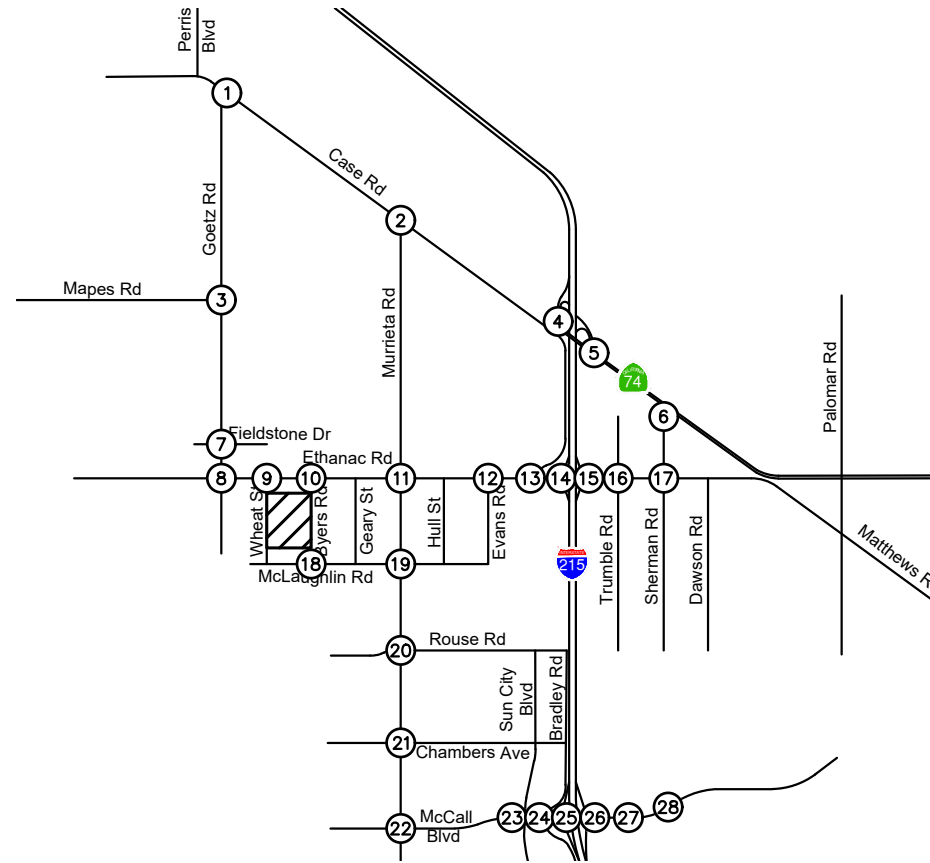
-  = Project Site
-  = Study Intersection
- xx%(yy%) = Inbound (Outbound) Passenger Car Distribution

APPENDIX F-1
PROJECT PASSENGER CAR TRAFFIC DISTRIBUTION



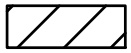



NOT TO SCALE



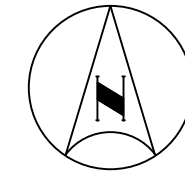
15. I-215 NB Ramps at Ethanac Rd	16. Trumble Rd at Ethanac Rd	17. Sherman Rd at Ethanac Rd	18. Byers Rd at McLaughlin Rd	19. Murrieta Rd at McLaughlin Rd	20. Murrieta Rd at Rouse Rd	21. Murrieta Rd at Chambers Ave	22. Murrieta Rd at McCall Blvd
←6%(0%)	←6%(0%)	2%(0%) ←3%(0%)	0%(2%) ←6%(0%)	0%(11%)	0%(11%) 0%(1%) ←1%(0%)	0%(1%) 0%(10%) 0%(1%) ←1%(0%)	0%(3%) 0%(7%) ←5%(0%)
0%(38%) 0%(8%) 30%(0%)	0%(8%)	0%(2%) 0%(5%) 0%(1%) 1%(0%)		0%(2%) 6%(0%) 6%(0%)	10%(0%)	1%(0%) 8%(0%)	3%(0%)
23. Sun City Blvd at McCall Blvd	24. Bradley Rd at McCall Blvd	25. I-215 SB Ramps at McCall Blvd	26. I-215 NB Ramps at McCall Blvd	27. Encanto Dr at McCall Blvd	28. Sherman Rd at McCall Blvd		
←5%(0%)	←5%(0%)	0%(6%) ←5%(0%)	6%(0%) ←4%(0%)	←6%(0%)	1%(0%) ←5%(0%)		
0%(7%)	0%(7%)	0%(4%) 0%(3%)	0%(10%) 1%(0%)	0%(6%) 0%(4%) 4%(0%)	0%(1%) 0%(5%)		

LEGEND:

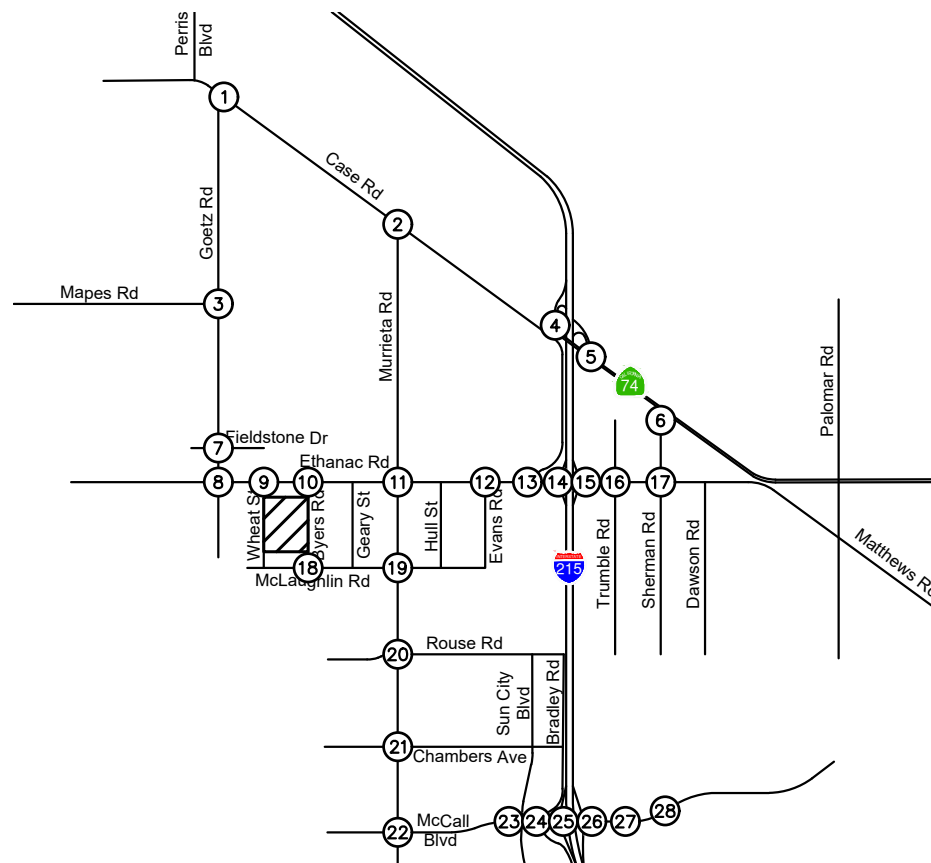
-  = Project Site
-  = Study Intersection
- xx%(yy%) = Inbound (Outbound) Passenger Car Distribution

APPENDIX F-2
PROJECT PASSENGER CAR TRAFFIC DISTRIBUTION



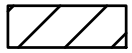



NOT TO SCALE

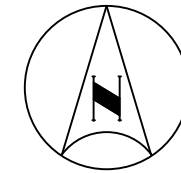


1. Goetz Rd at Case Rd	2. Murrieta Rd at Case Rd	3. Goetz Rd at Mapes Rd	4. I-215 SB Ramps/ SR-74 at Bonnie Dr	5. I-215 NB Ramps at SR-74	6. SR-74 at Sherman Rd	7. Goetz Rd at Fieldstone Dr	8. Goetz Rd at Ethanac Rd
9. Wheat St at Ethanac Rd	10. Byers Rd at Ethanac Rd	11. Murrieta Rd at Ethanac Rd	12. Evans Rd at Ethanac Rd	13. Barnett Rd/Case Rd at Ethanac Rd	14. I-215 SB Ramps at Ethanac Rd		
← 42%(0%)	← 42%(0%) ← 58%(0%)	← 100%(0%)	← 100%(0%)	← 100%(0%)	← 100%(0%)	↙ 60%(0%)	← 40%(0%)
0%(70%) ↗	0%(70%) → 0%(30%) ↗	0%(100%) →	0%(100%) →	0%(100%) →	0%(100%) →	0%(60%) → 0%(40%) ↘	

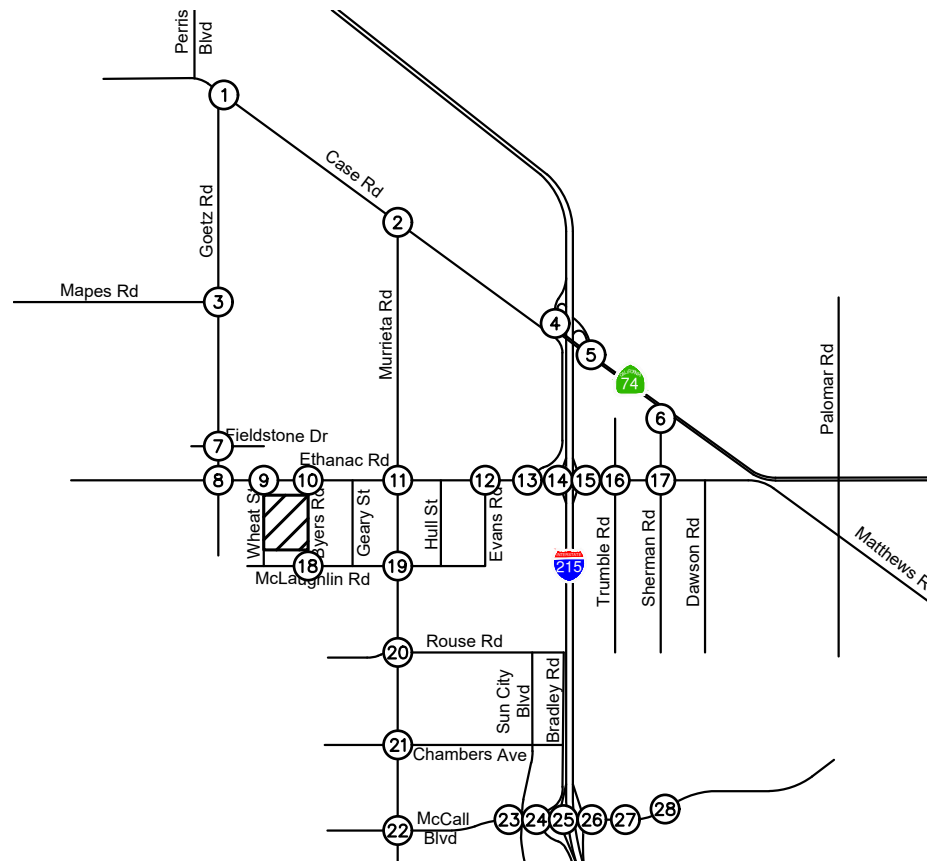
LEGEND:

-  = Project Site
-  = Study Intersection
- xx%(yy%) = Inbound (Outbound) Truck Distribution

APPENDIX F-3
PROJECT TRUCK TRAFFIC DISTRIBUTION



NOT TO SCALE

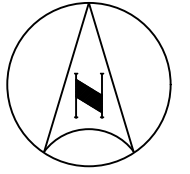


15. I-215 NB Ramps at Ethanac Rd	16. Trumble Rd at Ethanac Rd	17. Sherman Rd at Ethanac Rd	18. Byers Rd at McLaughlin Rd	19. Murrieta Rd at McLaughlin Rd	20. Murrieta Rd at Rouse Rd	21. Murrieta Rd at Chambers Ave	22. Murrieta Rd at McCall Blvd
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">0%(60%) →</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 20px; margin-right: 10px;"></div> <div style="margin-right: 10px;">← 40%(0%)</div> </div>							
23. Sun City Blvd at McCall Blvd	24. Bradley Rd at McCall Blvd	25. I-215 SB Ramps at McCall Blvd	26. I-215 NB Ramps at McCall Blvd	27. Encanto Dr at McCall Blvd	28. Sherman Rd at McCall Blvd		

LEGEND:

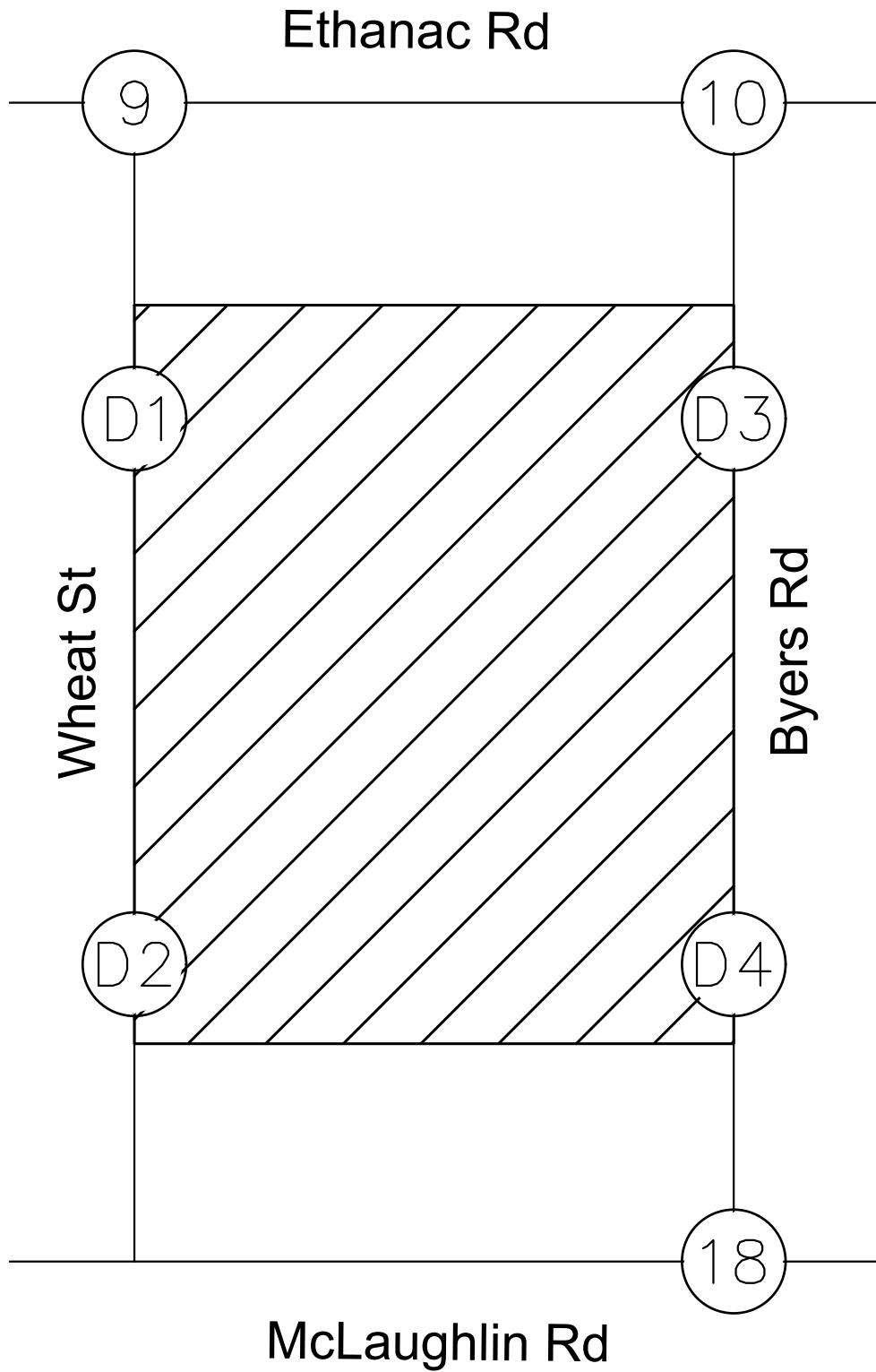
- = Project Site
- = Study Intersection
- xx%(yy%) = Inbound (Outbound) Truck Distribution

**APPENDIX F-4
PROJECT TRUCK TRAFFIC DISTRIBUTION**



NOT TO SCALE

9. Wheat St at Ethanac Rd	
	← 0%(4%) ↘ 45%(0%)
→ 1%(0%) ↘ 12%(0%)	↗ 0%(9%) ↖ 0%(60%)
D1. Wheat St at CADO North Driveway	
↖ 27%(0%) ↘ 30%(0%)	↗ 0%(34%)
	→ 0%(35%)
D2. Wheat St at CADO South Driveway	
↖ 27%(0%)	↗ 0%(35%)

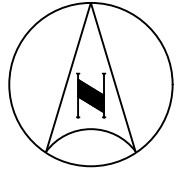


10. Byers Rd at Ethanac Rd	
	← 45%(0%) ↘ 36%(0%)
→ 0%(60%) ↘ 1%(0%)	↗ 0%(4%) ↖ 0%(25%)
D3. Byers Rd at CADO North Driveway	
↖ 20%(0%) ↘ 17%(0%)	
→ 0%(14%) ↘ 0%(1%)	↗ 3%(0%) ↖ 0%(15%)
D4. Byers Rd at CADO South Driveway	
↖ 17%(0%) ↘ 0%(1%)	
→ 0%(15%) ↘ 0%(1%)	↗ 3%(0%) ↖ 3%(0%)
18. Byers Rd at McLaughlin Rd	
	↖ 0%(2%) ↗ 6%(0%)

LEGEND:

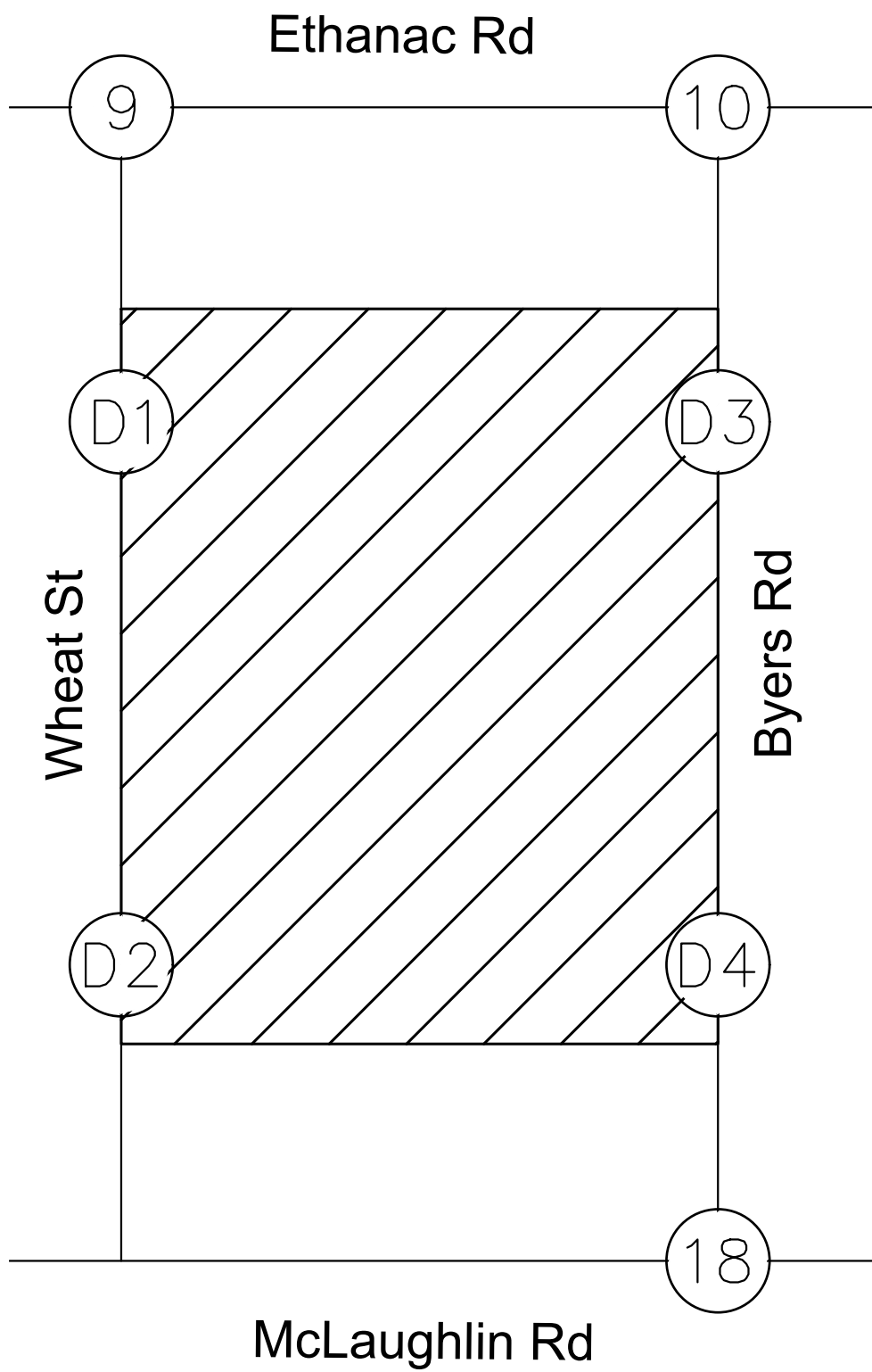
- = Project Site
- = Study Intersection
- xx%(yy%) = Inbound (Outbound) Passenger Car Distribution

APPENDIX F-5
DRIVEWAY PASSENGER CAR TRIP DISTRIBUTION





NOT TO SCALE

9. Wheat St at Ethanac Rd	
	← 42%(0%)
	↑ 0%(70%)
D1. Wheat St at CADO North Driveway	
← 21%(0%)	↑ 0%(35%)
← 21%(0%)	↑ 0%(35%)
	→ 0%(35%)
D2. Wheat St at CADO South Driveway	
← 21%(0%)	↑ 0%(35%)



10. Byers Rd at Ethanac Rd	
	← 42%(0%)
	← 58%(0%)
0%(70%) →	↑ 0%(30%)
	↑ 0%(30%)
D3. Byers Rd at CADO North Driveway	
↓ 29%(0%)	
↓ 29%(0%)	
0%(15%) →	↑ 0%(15%)
	↑ 0%(15%)
D4. Byers Rd at CADO South Driveway	
↓ 29%(0%)	
0%(15%) →	
18. Byers Rd at McLaughlin Rd	

LEGEND:

-  = Project Site
-  = Study Intersection
- xx%(yy%) = Inbound (Outbound) Truck Distribution

APPENDIX F-6
DRIVEWAY TRUCK TRIP DISTRIBUTION

APPENDIX G

TUMF REGIONAL PROGRAM



TRANSPORTATION UNIFORM MITIGATION FEE
NEXUS STUDY
2016 UPDATE

FINAL REPORT

Prepared for the Western Riverside Council of Governments

In Cooperation with

The City of Banning
The City of Beaumont
The City of Calimesa
The City of Canyon Lake
The City of Corona
The City of Eastvale
The City of Hemet
The City of Jurupa Valley
The City of Lake Elsinore
The City of Menifee
The City of Moreno Valley
The City of Murrieta
The City of Norco
The City of Perris
The City of Riverside
The City of San Jacinto
The City of Temecula
The City of Wildomar
The County of Riverside
Eastern Municipal Water District
March Joint Powers Authority
Morongo Band of Mission Indians
Riverside County Superintendent of Schools
Riverside Transit Agency
Western Municipal Water District

Prepared by WSP

As adopted by the WRCOG Executive Committee, July 10, 2017



Table 4.4 - TUMF Network Cost Estimates

AREA	PLAN DIS	CITY	STREETNAME	SEGMENTFROM	SEGMENTO	MILES	TOTAL COST	MAXIMUM TUMF SHARE
Central	Menifee	Ethanac	Goetz	Murrieta		0.99	\$0	\$0
Central	Menifee	Ethanac	Murrieta	I-215		0.90	\$0	\$0
Central	Menifee	Ethanac	I-215	interchange		0.00	\$17,897,000	\$15,766,000
Central	Menifee	Ethanac	Sherman	Matthews		0.61	\$1,617,000	\$1,617,000
Central	Menifee	Ethanac	BNSF San Jacinto Branch	railroad crossing		0.00	\$36,980,000	\$33,018,000
Central	Menifee	Menifee	SR-74 (Pinacate)	Simpson		2.49	\$0	\$0
Central	Menifee	Menifee	Salt Creek	bridge		0.00	\$0	\$0
Central	Menifee	Menifee	Simpson	Aldergate		0.64	\$0	\$0
Central	Menifee	Menifee	Aldergate	Newport		0.98	\$0	\$0
Central	Menifee	Menifee	Newport	Holland		1.07	\$0	\$0
Central	Menifee	Menifee	Holland	Garbani		1.03	\$0	\$0
Central	Menifee	Menifee	Garbani	Scott		1.00	\$2,635,000	\$2,635,000
Central	Menifee	Menifee/Whitewood	Scott	Murrieta City Limit		0.53	\$0	\$0
Central	Menifee	Newport	Goetz	Murrieta		1.81	\$0	\$0
Central	Menifee	Newport	Murrieta	I-215		2.05	\$5,405,000	\$5,405,000
Central	Menifee	Newport	I-215	Menifee		0.95	\$0	\$0
Central	Menifee	Newport	Menifee	Lindenberger		0.77	\$0	\$0
Central	Menifee	Newport	Lindenberger	SR-79 (Winchester)		3.58	\$0	\$0
Central	Menifee	Scott	I-215	Briggs		2.04	\$0	\$0
Central	Menifee	Scott	I-215	interchange		0.00	\$37,060,000	\$37,060,000
Central	Menifee	Scott	Sunset	Murrieta		1.01	\$2,654,000	\$2,654,000
Central	Menifee	Scott	Murrieta	I-215		1.94	\$10,254,000	\$10,254,000
Central	Menifee	SR-74	Matthews	Briggs		1.89	\$4,994,000	\$4,994,000
Central	Moreno Valley	Alessandro	I-215	Perris		3.52	\$6,394,000	\$6,394,000
Central	Moreno Valley	Alessandro	Perris	Nason		2.00	\$22,632,000	\$22,632,000
Central	Moreno Valley	Alessandro	Nason	Moreno Beach		0.99	\$6,922,000	\$6,922,000
Central	Moreno Valley	Alessandro	Moreno Beach	Gilman Springs		4.13	\$10,902,000	\$10,902,000
Central	Moreno Valley	Gilman Springs	SR-60	Alessandro		1.67	\$4,411,000	\$3,724,000
Central	Moreno Valley	Gilman Springs	SR-60	interchange		0.00	\$17,897,000	\$17,897,000
Central	Moreno Valley	Perris	Reche Vista	Ironwood		2.09	\$0	\$0
Central	Moreno Valley	Perris	Ironwood	Sunnymead		0.52	\$0	\$0
Central	Moreno Valley	Perris	SR-60	interchange		0.00	\$17,897,000	\$0
Central	Moreno Valley	Perris	Sunnymead	Cactus		2.00	\$0	\$0
Central	Moreno Valley	Perris	Cactus	Harley Knox		3.50	\$0	\$0
Central	Moreno Valley	Reche Vista	Moreno Valley City Limit	Heacock		0.44	\$3,310,000	\$1,705,000
Central	Perris	11th/Case	Perris	Goetz		0.30	\$2,100,000	\$2,100,000
Central	Perris	Case	Goetz	I-215		2.36	\$16,486,000	\$13,538,000
Central	Perris	Case	San Jacinto River	bridge		0.00	\$1,126,000	\$495,000
Central	Perris	Ethanac	Keystone	Goetz		2.24	\$7,327,000	\$7,327,000
Central	Perris	Ethanac	San Jacinto River	bridge		0.00	\$7,378,000	\$7,378,000
Central	Perris	Ethanac	I-215	Sherman		0.35	\$2,435,000	\$1,945,000
Central	Perris	Goetz	Case	Ethanac		2.00	\$5,267,000	\$2,506,000
Central	Perris	Goetz	San Jacinto River	bridge		0.00	\$3,688,000	\$1,925,000
Central	Perris	Mid-County (Placentia)	I-215	Perris		0.87	\$13,127,000	\$12,627,000
Central	Perris	Mid-County (Placentia)	I-215	interchange		0.00	\$37,060,000	\$12,354,000
Central	Perris	Mid-County	Perris	Evans		1.57	\$32,902,000	\$32,902,000
Central	Perris	Mid-County	Perris Valley Storm Channel	bridge		0.00	\$8,299,000	\$8,299,000
Central	Perris	Perris	Harley Knox	Ramona		1.00	\$0	\$0
Central	Perris	Perris	Ramona	Citrus		2.49	\$6,578,000	\$6,578,000
Central	Perris	Perris	Citrus	Nuevo		0.50	\$0	\$0
Central	Perris	Perris	Nuevo	11th		1.75	\$12,206,000	\$9,034,000
Central	Perris	Perris	I-215 overcrossing	bridge		0.00	\$2,767,000	\$1,356,000
Central	Perris	Ramona	I-215	Perris		1.47	\$2,769,000	\$2,769,000
Central	Perris	Ramona	I-215	interchange		0.00	\$17,897,000	\$5,965,000
Central	Perris	Ramona	Perris	Evans		1.00	\$0	\$0
Central	Perris	Ramona	Evans	Mid-County (2,800 ft E of Rider)		2.62	\$0	\$0
Central	Perris	SR-74 (4th)	Ellis	I-215		2.29	\$0	\$0
Central	Unincorporated	Ethanac	SR-74	Keystone		1.07	\$5,646,000	\$5,646,000
Central	Unincorporated	Gilman Springs	Alessandro	Bridge		4.98	\$15,815,000	\$8,105,000
Central	Unincorporated	Menifee	Nuevo	SR-74 (Pinacate)		4.07	\$10,737,000	\$10,737,000
Central	Unincorporated	Mid-County	Evans	Ramona (2,800 ft E of Rider)		0.77	\$8,587,000	\$8,587,000
Central	Unincorporated	Mid-County (Ramona)	Ramona (2,800 ft E of Rider)	Pico Avenue		0.44	\$1,161,000	\$1,161,000
Central	Unincorporated	Mid-County (Ramona)	Pico Avenue	Bridge		5.95	\$31,413,000	\$25,287,000
Central	Unincorporated	Mid-County (Ramona)	San Jacinto River	bridge		0.00	\$23,978,000	\$15,835,000
Central	Unincorporated	Reche Canyon	San Bernardino County	Reche Vista		3.35	\$12,457,000	\$9,429,000
Central	Unincorporated	Reche Vista	Reche Canyon	Moreno Valley City Limit		1.22	\$9,180,000	\$4,729,000
Central	Unincorporated	Scott	Briggs	SR-79 (Winchester)		3.04	\$16,042,000	\$0
Central	Unincorporated	SR-74	Ethanac	Ellis		2.68	\$0	\$0
Northwest	Corona	Cajalco	I-15	Temescal Canyon		0.66	\$2,306,000	\$2,306,000
Northwest	Corona	Cajalco	I-15	interchange		0.00	\$72,546,000	\$44,251,000
Northwest	Corona	Foothill	Paseo Grande	Lincoln		2.60	\$19,330,000	\$7,282,000
Northwest	Corona	Foothill	Wardlow Wash	bridge		0.00	\$5,534,000	\$0
Northwest	Corona	Foothill	Lincoln	California		2.81	\$0	\$0
Northwest	Corona	Foothill	California	I-15		0.89	\$6,207,000	\$4,304,000
Northwest	Corona	Green River	SR-91	Dominguez Ranch		0.52	\$3,624,000	\$1,000
Northwest	Corona	Green River	Dominguez Ranch	Palisades		0.56	\$4,214,000	\$1,639,000
Northwest	Corona	Green River	Palisades	Paseo Grande		2.01	\$0	\$0
Northwest	Eastvale	Schleisman	San Bernardino County	600' e/o Cucamonga Creek		0.65	\$2,271,000	\$2,271,000
Northwest	Eastvale	Schleisman	Cucamonga Creek	bridge		0.00	\$923,000	\$923,000
Northwest	Eastvale	Schleisman	600' e/o Cucamonga Creek	Harrison		0.87	\$0	\$0
Northwest	Eastvale	Schleisman	Harrison	Sumner		0.50	\$0	\$0
Northwest	Eastvale	Schleisman	Sumner	Scholar		0.50	\$3,493,000	\$3,493,000
Northwest	Eastvale	Schleisman	Scholar	A Street		0.31	\$0	\$0
Northwest	Eastvale	Schleisman	A Street	Hammer		0.27	\$0	\$0
Northwest	Jurupa Valley	Van Buren	SR-60	Bellegrave		1.43	\$9,976,000	\$3,628,000
Northwest	Jurupa Valley	Van Buren	Bellegrave	Santa Ana River		3.60	\$25,115,000	\$7,444,000

DRAFT Preliminary Engineering Study Report for
Ethanac Road Gap Closure Project



Prepared for:
County of Riverside
Department of Transportation



3525 14th Street
Riverside, CA 92501

Prepared by:



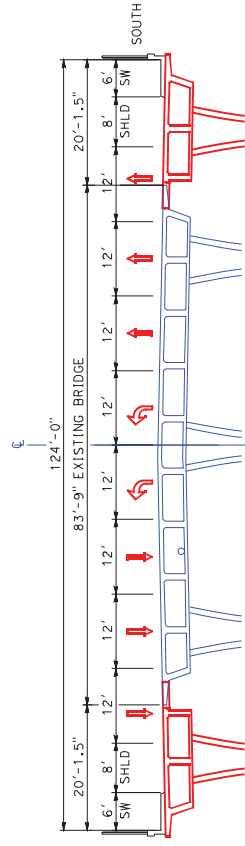
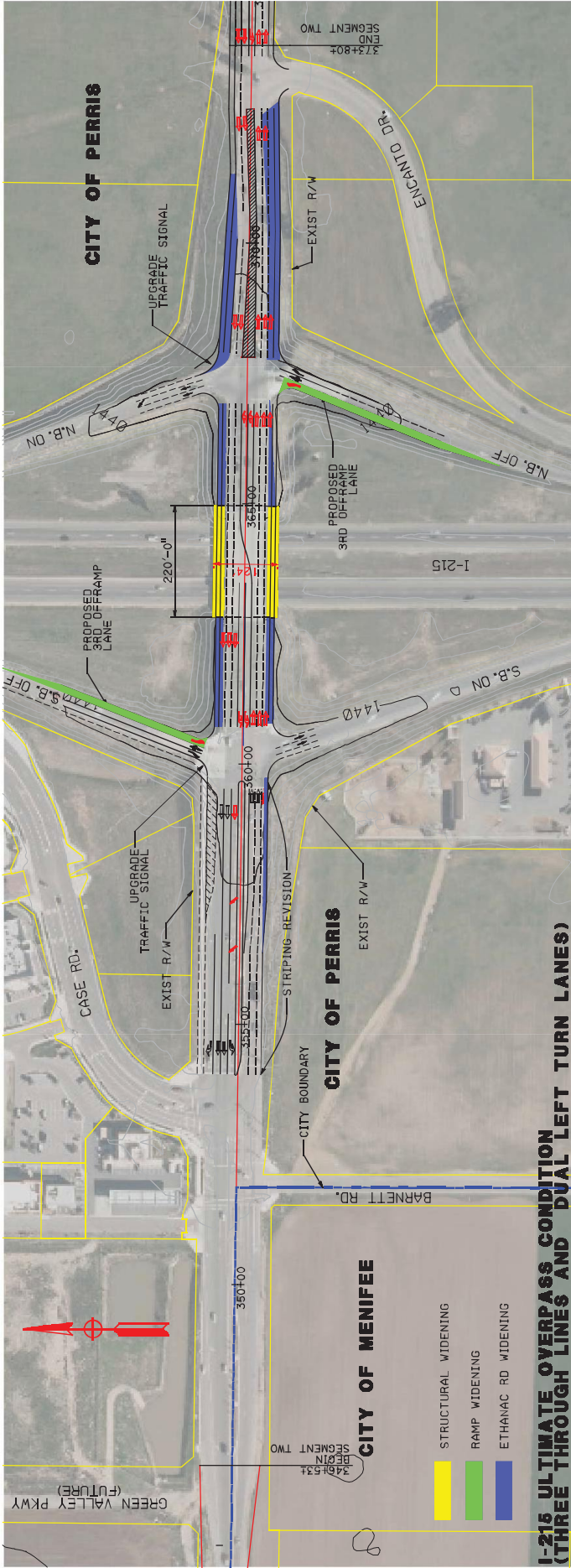
CNS Engineers, Inc.
10370 Hemet Street, Suite 230
Riverside, CA 92503

August 2014
Revised January 2016

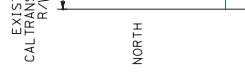


Attachment 2

SEGMENT TWO - Preliminary Roadway Layouts



ETHANAC DRIVE AT I-215 WITH DUAL LEFT TURN ALTERNATIVE



ETHANAC DRIVE FROM NORTHBOUND I-215 RAMP TO ENCANTO DR TO SUPPORT DUAL LEFT TURN RAMP AT THE INTERCHANGE

CNS ENGINEERS, INC.
 APPROVED BY: [Signature]
 PREPARED BY: 10370 JEWETT ST., 514 230 RIVERSIDE, CA 92503
 DATE: _____

PLAN VIEW AND SECTIONS
 SEGMENT TWO
ETHANAC ROAD GAP CLOSURE PROJECT
 ALTERNATIVE 2A - ULTIMATE INTERCHANGE

PLANNING STUDY

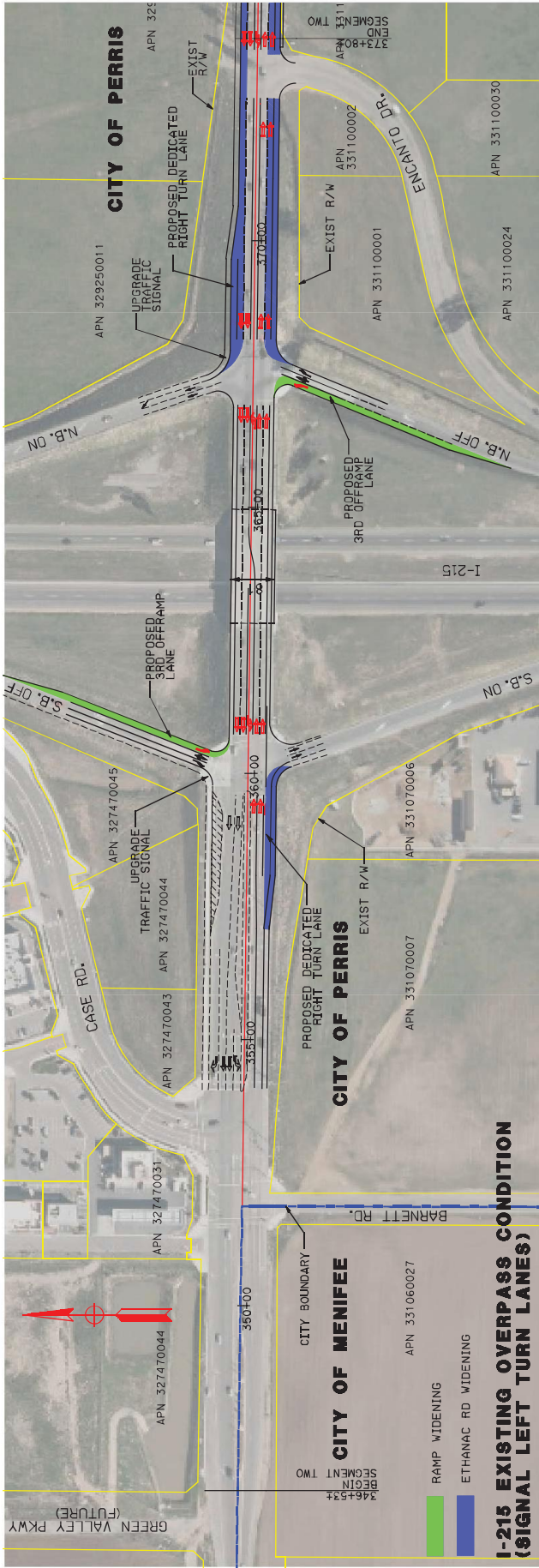
DATE: _____
 PROJECT: _____
 SHEET 1 OF 2

USERNAME: [] BUSER [] DON FILE [] REQUEST []
 COUNTY FILE No. []
 NO XX-XXXX

RELATIVE BORDER SCALE 1" = 15' IN FEET

0 100 200 300

DATE: _____
 PROJECT: _____
 SHEET 1 OF 2



CITY OF MENIFEE
 REGIONAL SEGMENT TWO
 APN 331060027

CITY OF PERRIS
 APN 331070007

I-215 EXISTING OVERPASS CONDITION (SIGNAL LEFT TURN LANES)

CITY OF MENIFEE
 APN 327470044
 APN 327470031
 APN 327470043
 APN 327470044
 APN 327470045

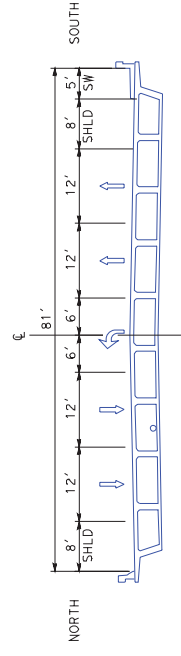
CITY OF PERRIS
 APN 331070006
 APN 331100002
 APN 331100001
 APN 331100024
 APN 331100030

CITY OF PERRIS
 APN 329250011
 APN 329250011

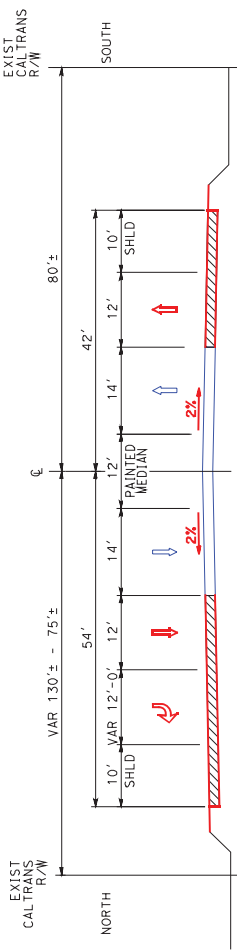
CITY OF PERRIS
 APN 331100002
 APN 331100001
 APN 331100024
 APN 331100030

CITY OF PERRIS
 APN 329250011
 APN 329250011

CITY OF PERRIS
 APN 329250011
 APN 329250011



ETHANAC ROAD OVER I-215
 FROM SOUTHBOUND RAMP TO NORTHBOUND RAMP
 TO SUPPORT SINGLE LEFT TURN LANES
 CITY OF PERRIS
 (EXISTING CONDITION)



ETHANAC ROAD FROM NORTHBOUND RAMP TO
 ENCANTO DRIVE TO SUPPORT SINGLE LEFT TURN LANES
 AT THE INTERCHANGE
 CITY OF PERRIS

	APPROVED BY: PREPARED BY: DATE:	CNS ENGINEERS, INC. 10270 JEMEF ST. S14-230 RIVERSIDE, CA 92503	PLAN VIEW AND SECTIONS SEGMENT TWO ETHANAC ROAD GAP CLOSURE PROJECT ALTERNATIVE 2B - EXISTING OVERPASS	SHEET No. SHEET 2 OF 2
	USERNAME => BUSER DON FILE => REQUEST	COUNTY FILE No.	MO XX-XXXX	PROJECT NUMBER

PLANNING STUDY

