

APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT

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Project Scoping Form

This scoping form shall be submitted to the City of San Jacinto to assist in identifying infrastructure improvements that may be required to support traffic from the proposed project.

Project Identification:

Case Number:	
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	Lyon Avenue Residential (TTM No. 38468)
Project Address:	West of Lyon Avenue and north of Cottonwood Avenue
Project Opening Year:	2026
Project Description:	153 single family detached residential dwelling units

	Consultant:	Developer:
Name:	Urban Crossroads, Inc. - Charlene So	3rd Avenue Storage, LLC - Jordan Bursch
Address:	1133 Camelback St, #8329 Newport Beach, CA 92658	32823 Temecula Pkwy. Temecula, CA 92592
Telephone:	949-861-0177	951-491-6018
Fax/Email:	cso@urbanxroads.com	Jordan@cormanleigh.com

Trip Generation Information:

Trip Generation Data Source: ITE Trip Generation Manual (11th Edition, 2021)

Current General Plan Land Use:
LDR - Low Density Residential

Proposed General Plan Land Use:
LDR - Low Density Residential

Current Zoning:
RL - Rural Living

Proposed Zoning:
RL - Rural Living



	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips				28	79	107
PM Trips				91	53	144

Trip Internalization: Yes No (_____% Trip Discount)

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

Potential Screening Checks

Is your project screened from specific analyses (see Page 8 of the guidelines related to LOS assessment and Page 9 related to VMT).

Is the project screened from LOS assessment? Yes No

LOS screening justification (see Page 8 of the guidelines): _____

Is the project screened from VMT assessment? Yes No

VMT screening justification (see Page 9 of the guidelines): The Project meets the low VMT Area screening criteria. The Project was found in RIVCOM TAZ 2156. The Project TAZ generates 23.6 VMT per service population and the City's threshold is 34.5 VMT per service population.



Level of Service Scoping

- Proposed Trip Distribution (Attach Graphic for Detailed Distribution):

North	South	East	West
35 %	25 %	15 %	25 %

- Attach list of Approved and Pending Projects that need to be considered (provided by the lead agency and adjacent agencies)
- Attach list of study intersections/roadway segments
- Attach site plan **See Attached**
- Note other specific items to be addressed:
 - Site access
 - On-site circulation
 - Parking
 - Consistency with Plans supporting Bikes/Peds/Transit
 - Other _____
- Date of Traffic Counts New traffic counts after 8/28/23 - will include 7-9 AM, 1:30-3:30 PM, 4-6 PM
- Attach proposed analysis scenarios (years plus proposed forecasting approach)
- Attach proposed phasing approach (if the project is phased)

VMT Scoping

For projects that are not screened, identify the following:

- Travel Demand Forecasting Model Used N/A
- Attach WRCOG Screening VMT Assessment output or describe why it is not appropriate for use
- Attach proposed Model Land Use Inputs and Assumed Conversion Factors (attach)



N Lyon Ave & Cottonwood Ave, X

Show search results for N Lyon Ave &...

Complete #1-4, Then Click "Run"

VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*

OD VMT Per Service Population

#3. Select the Baseline Year. The year available for analysis are from 2018 to 2045.*

2022

#4. Select the Threshold (% reduction from baseline year). Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*

Below County Baseline (0%)

Run

Help



(1 of 3)

OBJECTID	1
Assessor Parcel Number (APN)	436280006
Traffic Analysis Zone (TAZ)	2156
Community Region	SAN JACINTO
Inside a Transit Priority Area (TPA)	No
TAZ VMT	23.6
Jurisdiction VMT	34.5
% Difference	-31.64%
VMT Metric	OD VMT Per Service Population
Threshold	34.5

[Zoom to](#)



DATE: August 10, 2023
TO: Robert Flores, City of San Jacinto
FROM: Charlene So, Urban Crossroads
JOB NO: 15026-05 TA Scope

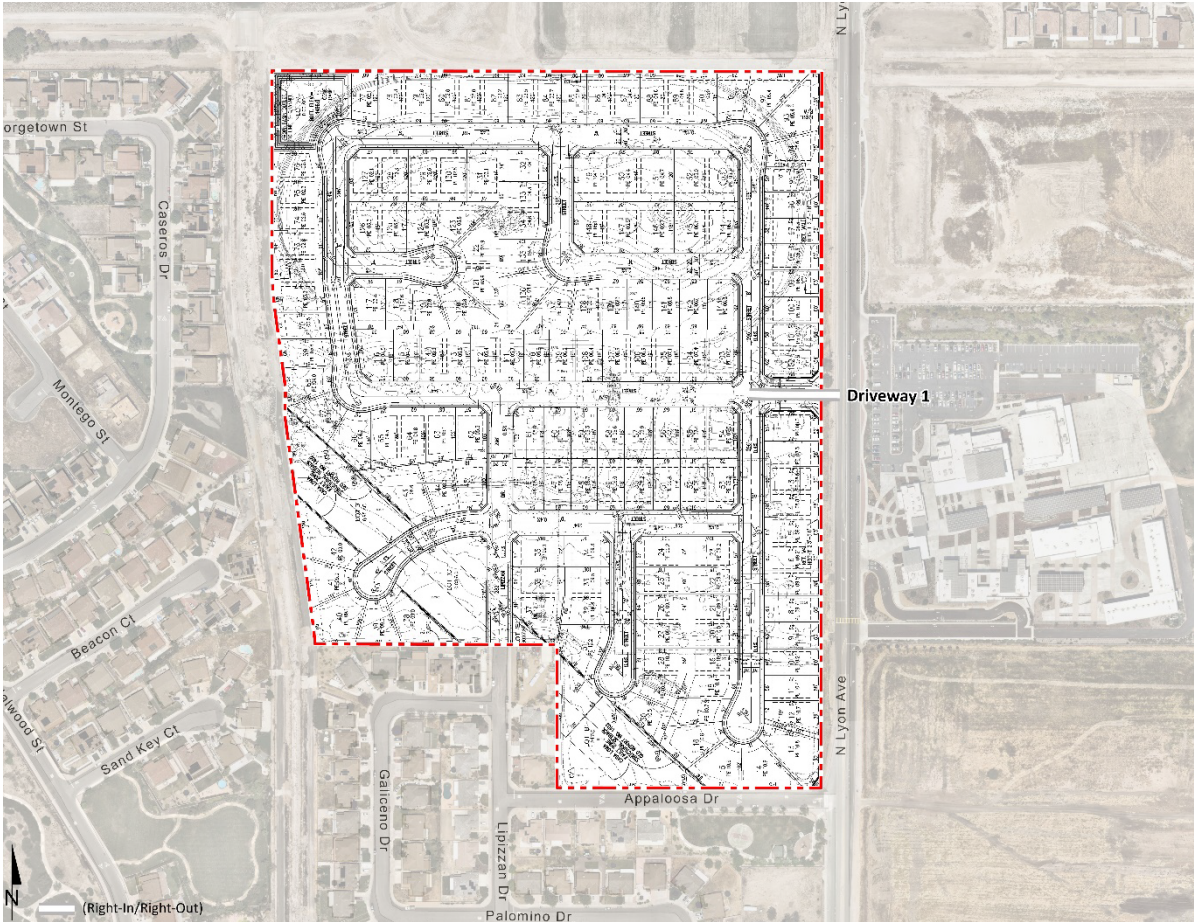
**LYON AVENUE RESIDENTIAL (TENTATIVE TRACT MAP NO. 38468)
(P22-088) TRAFFIC STUDY SCOPING AGREEMENT (REVISED)**

Urban Crossroads, Inc. is pleased to submit the following Traffic Study Scoping Agreement for the proposed Lyon Avenue Residential (TTM No. 38468) development (**Project**), which is located on the west side of Lyon Avenue and north of Cottonwood Avenue in the City of San Jacinto (see Exhibit 1). This letter describes the proposed Project trip generation, trip distribution, and analysis methodology, which have been used to establish the draft proposed Project study area and analysis locations.

PROPOSED PROJECT

The Project is anticipated to have an Opening Year of 2026. The Project consists of the development of 153 single family residential dwelling units. A preliminary site plan for the proposed Project is shown on Exhibit 1. Access to the Project site will be accommodated via Lipizzan Drive to the south to Cottonwood Avenue and a right-in/right-out access only on Lyon Avenue (Driveway 1). There is an existing raised median on Lyon Avenue with wrought iron fencing to restrict the access at Driveway 1.

EXHIBIT 1: PRELIMINARY SITE PLAN



TRIP GENERATION

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) for the Single Family Detached Residential Land Use category (ITE Land Use Code 210) was used to calculate the trip generation.

TABLE 1: TRIP GENERATION RATES

Land Use ¹	ITE Code	Units ²	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single Family Detached Residential	210	DU	0.18	0.52	0.70	0.59	0.35	0.94	9.43

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

² DU = dwelling units

The trip generation summary illustrating daily, and peak hour trip generation estimates for the proposed Project are shown on Table 2. The proposed Project is anticipated to generate 1,444 two-way trip-ends per day with 107 AM peak hour trips and 144 PM peak hour trips (see Table 2).

TABLE 2: PROJECT TRIP GENERATION SUMMARY

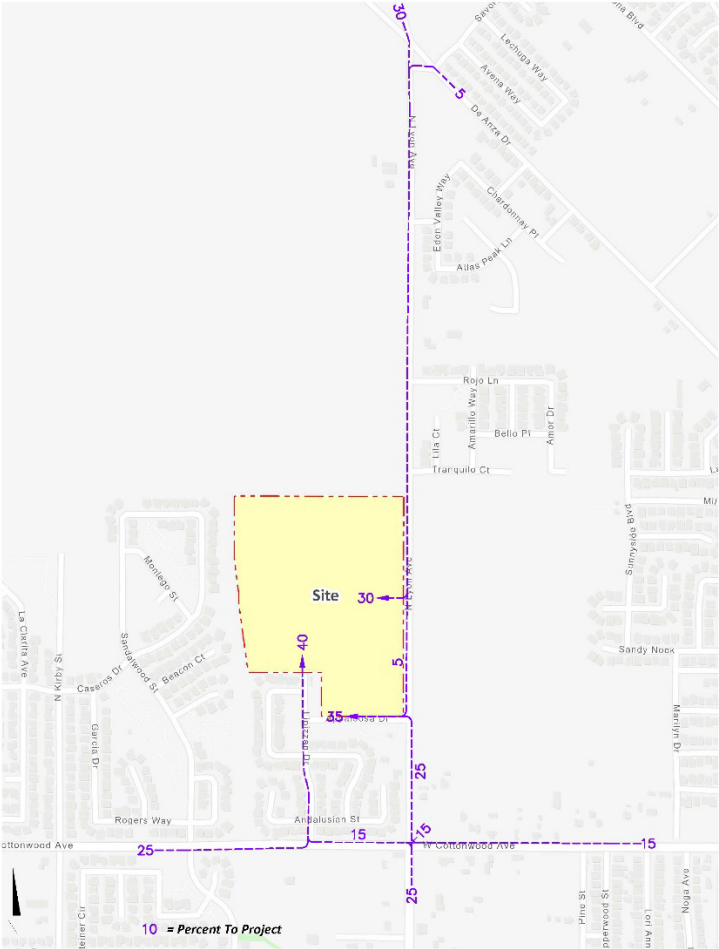
Land Use	Quantity Units ¹	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Lyon Avenue Project (TTM No. 38468)	153 DU	28	79	107	91	53	144	1,444

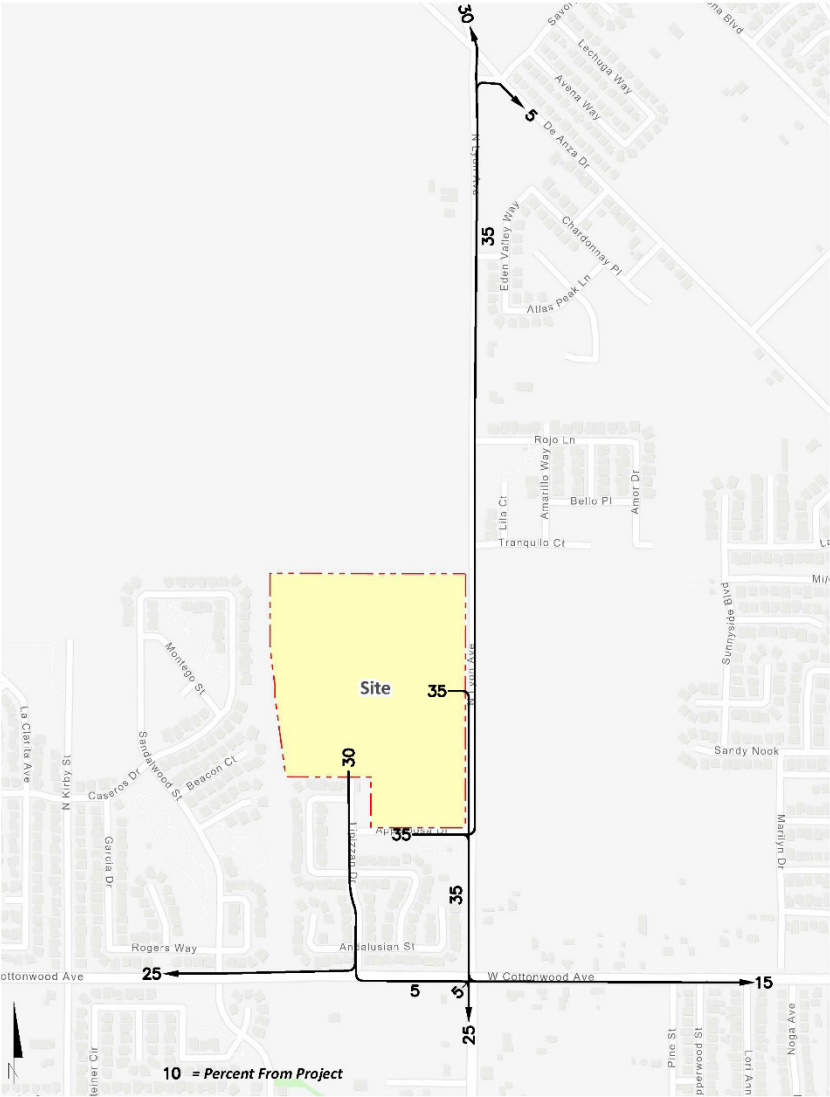
¹ DU = dwelling units

TRIP DISTRIBUTION

The Project trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. Exhibit 2 shows the Project trip distribution patterns.

EXHIBIT 2: PROJECT TRIP DISTRIBUTION





ANALYSIS SCENARIOS

Consistent with the City's Guidelines, intersection analysis will be provided for the following analysis scenarios:

- 1. Existing (2023) Conditions
- 2. Existing plus Ambient Growth (EA) (2026) Conditions – we can include approved projects as provided by City staff to this analysis scenario
- 3. Existing plus Ambient Growth plus Project (EAP) (2026) Conditions
- 4. Existing plus Ambient Growth plus Cumulative (EAC) (2026) Conditions
- 5. Existing plus Ambient Growth plus Project plus Cumulative (EAPC) (2026) Conditions

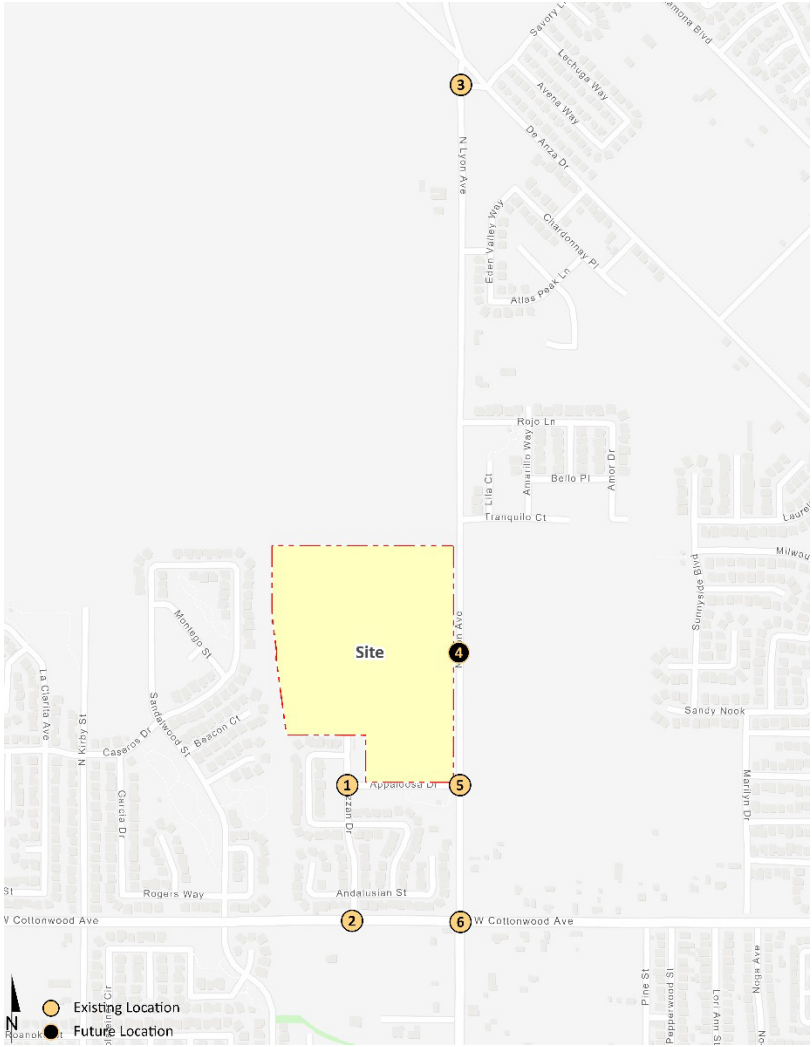
All study area intersections will be evaluated using the Highway Capacity Manual (HCM) 6th Edition analysis methodology.

STUDY AREA INTERSECTIONS

Based on the Project’s anticipated travel patterns and trip generation characteristics, the following study area intersection locations shown on Exhibit 3 and listed below were selected for analysis:

ID	Intersection	Jursidiction
1	Lipizzan Dr. & Appaloosa Dr.	City of San Jacinto
2	Lipizzan Dr. & Cottonwood Av.	City of San Jacinto
3	Lyon Av. & De Anza Dr.	City of San Jacinto
4	Lyon Av. & Driveway 1	City of San Jacinto
5	Lyon Av. & Appaloosa Dr.	City of San Jacinto
6	Lyon Av. & Cottonwood Av.	City of San Jacinto

EXHIBIT 3: STUDY AREA



EXISTING COUNT DATA

New traffic counts will be conducted the week of August 28, 2023 which is the first full week of school (schools start on August 23, 2023), when local schools were in session and operating on a typical bell schedules. No volume adjustments other than those needed for volume balancing between closely spaced intersections (to ensure no loss of vehicles). New traffic counts will be conducted between the typical 7-9 AM and 4-6 PM peak hours in addition to mid-day counts between 1:30-3:30 PM to capture school release times (for the Monte Vista Middle School). Traffic associated with the morning school drop-off will coincide with the morning peak hours of 7-9 AM.

AMBIENT GROWTH

Consistent with other studies performed in the area, an ambient growth rate of 2.0% per year is proposed for the study area intersections to approximate background traffic growth not identified by nearby cumulative development projects. The rate will be compounded over a 3-year period (i.e., $1.02^{3\text{years}} = 1.0612$ or 6.12% for 2026).

CUMULATIVE PROJECTS

The City has provided a list of cumulative projects for consideration in the Traffic Study. The list will be reviewed and projects that are anticipated to contribute traffic to the study area intersections will be included.

SPECIAL ISSUES

The following special issues will also be addressed:

- VMT analysis will be evaluated in a separate document.
- Provide a queuing analysis for the project driveways.

SIGNAL TIMING

It is requested that the City provide any signal timing that should be considered for signalized study area intersections within the City.

If you have any questions or comments, I can be reached at cso@urbanxroads.com.

APPENDIX 1.2: SITE ADJACENT QUEUES

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Intersection: 4: Lyon Av. & Driveway 1

Movement	EB
Directions Served	R
Maximum Queue (ft)	43
Average Queue (ft)	16
95th Queue (ft)	38
Link Distance (ft)	1102
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

Intersection: 4: Lyon Av. & Driveway 1

Movement	EB
Directions Served	R
Maximum Queue (ft)	29
Average Queue (ft)	14
95th Queue (ft)	35
Link Distance (ft)	1102
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

Intersection: 4: Lyon Av. & Driveway 1

Movement	EB
Directions Served	R
Maximum Queue (ft)	25
Average Queue (ft)	11
95th Queue (ft)	31
Link Distance (ft)	1102
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

APPENDIX 3.1: TRAFFIC COUNTS

APPENDIX 3.1: TRAFFIC COUNTS

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City of San Jacinto
 N/S: Lipizzan Drive
 E/W: Appaloosa Drive
 Weather: Clear

File Name : 01_SJC_Lip_Appa AM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 1

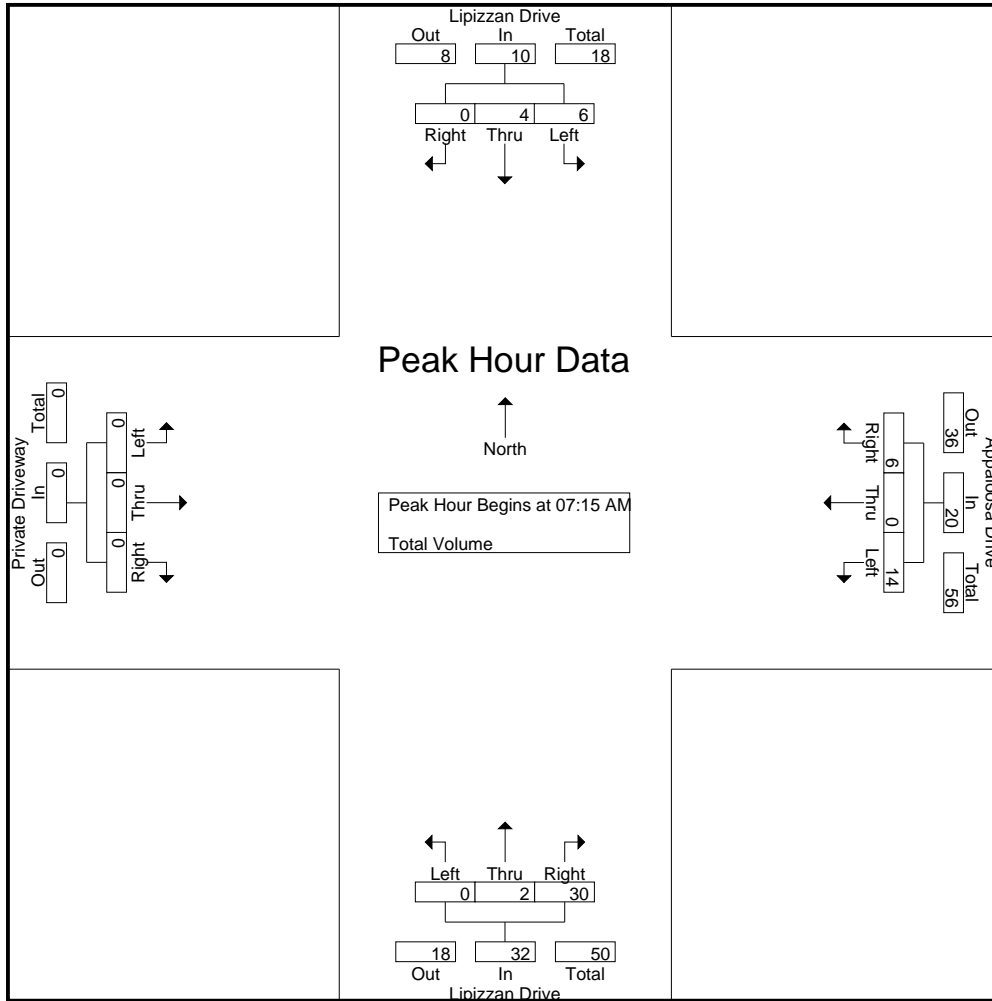
Groups Printed- Total Volume

Start Time	Lipizzan Drive Southbound				Appaloosa Drive Westbound				Lipizzan Drive Northbound				Private Driveway 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	0	2	2	0	0	2	0	1	4	5	0	0	0	0	9
07:15 AM	1	2	0	3	1	0	2	3	0	0	3	3	0	0	0	0	9
07:30 AM	1	2	0	3	5	0	0	5	0	1	10	11	0	0	0	0	19
07:45 AM	4	0	0	4	4	0	0	4	0	0	10	10	0	0	0	0	18
Total	7	5	0	12	12	0	2	14	0	2	27	29	0	0	0	0	55
08:00 AM	0	0	0	0	4	0	4	8	0	1	7	8	0	0	0	0	16
08:15 AM	2	0	0	2	0	0	0	0	0	0	6	6	0	0	0	0	8
08:30 AM	0	1	0	1	1	0	1	2	0	1	0	1	0	0	0	0	4
08:45 AM	0	0	0	0	2	0	0	2	0	1	1	2	0	0	0	0	4
Total	2	1	0	3	7	0	5	12	0	3	14	17	0	0	0	0	32
Grand Total	9	6	0	15	19	0	7	26	0	5	41	46	0	0	0	0	87
Apprch %	60	40	0		73.1	0	26.9		0	10.9	89.1		0	0	0		
Total %	10.3	6.9	0	17.2	21.8	0	8	29.9	0	5.7	47.1	52.9	0	0	0	0	

Start Time	Lipizzan Drive Southbound				Appaloosa Drive Westbound				Lipizzan Drive Northbound				Private Driveway 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	2	0	3	1	0	2	3	0	0	3	3	0	0	0	0	9
07:30 AM	1	2	0	3	5	0	0	5	0	1	10	11	0	0	0	0	19
07:45 AM	4	0	0	4	4	0	0	4	0	0	10	10	0	0	0	0	18
08:00 AM	0	0	0	0	4	0	4	8	0	1	7	8	0	0	0	0	16
Total Volume	6	4	0	10	14	0	6	20	0	2	30	32	0	0	0	0	62
% App. Total	60	40	0		70	0	30		0	6.2	93.8		0	0	0		
PHF	.375	.500	.000	.625	.700	.000	.375	.625	.000	.500	.750	.727	.000	.000	.000	.000	.816

City of San Jacinto
 N/S: Lipizzan Drive
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File Name : 01_SJC_Lip_Appa AM
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 Start Date : 8/30/2023
 Page No : 2



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

	07:00 AM				07:15 AM				07:30 AM				07:00 AM			
+0 mins.	1	1	0	2	1	0	2	3	0	1	10	11	0	0	0	0
+15 mins.	1	2	0	3	5	0	0	5	0	0	10	10	0	0	0	0
+30 mins.	1	2	0	3	4	0	0	4	0	1	7	8	0	0	0	0
+45 mins.	4	0	0	4	4	0	4	8	0	0	6	6	0	0	0	0
Total Volume	7	5	0	12	14	0	6	20	0	2	33	35	0	0	0	0
% App. Total	58.3	41.7	0		70	0	30		0	5.7	94.3		0	0	0	
PHF	.438	.625	.000	.750	.700	.000	.375	.625	.000	.500	.825	.795	.000	.000	.000	.000

City of San Jacinto
 N/S: Lipizzan Drive
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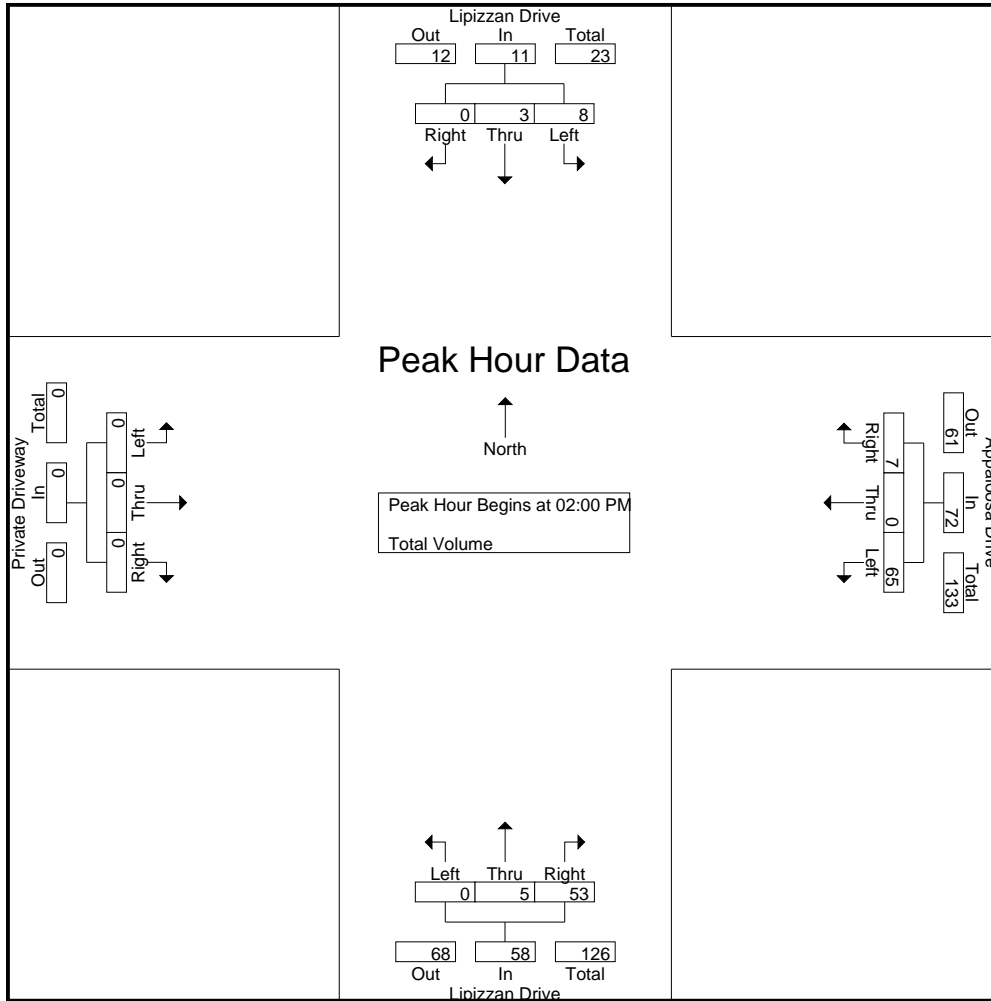
Groups Printed- Total Volume

Start Time	Lipizzan Drive Southbound				Appaloosa Drive Westbound				Lipizzan Drive Northbound				Private Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
01:30 PM	2	1	0	3	1	0	0	1	0	0	3	3	0	0	0	0	7
01:45 PM	0	3	0	3	2	0	1	3	0	0	3	3	0	0	0	0	9
Total	2	4	0	6	3	0	1	4	0	0	6	6	0	0	0	0	16
02:00 PM	1	0	0	1	3	0	0	3	0	2	7	9	0	0	0	0	13
02:15 PM	3	1	0	4	6	0	2	8	0	0	24	24	0	0	0	0	36
02:30 PM	2	2	0	4	47	0	4	51	0	3	19	22	0	0	0	0	77
02:45 PM	2	0	0	2	9	0	1	10	0	0	3	3	0	0	0	0	15
Total	8	3	0	11	65	0	7	72	0	5	53	58	0	0	0	0	141
03:00 PM	2	1	0	3	2	0	0	2	0	0	2	2	0	0	0	0	7
03:15 PM	2	0	0	2	4	0	0	4	0	0	2	2	0	0	0	0	8
Grand Total	14	8	0	22	74	0	8	82	0	5	63	68	0	0	0	0	172
Apprch %	63.6	36.4	0		90.2	0	9.8		0	7.4	92.6		0	0	0		
Total %	8.1	4.7	0	12.8	43	0	4.7	47.7	0	2.9	36.6	39.5	0	0	0	0	

Start Time	Lipizzan Drive Southbound				Appaloosa Drive Westbound				Lipizzan Drive Northbound				Private Driveway 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 01:30 PM to 03:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:00 PM																	
02:00 PM	1	0	0	1	3	0	0	3	0	2	7	9	0	0	0	0	13
02:15 PM	3	1	0	4	6	0	2	8	0	0	24	24	0	0	0	0	36
02:30 PM	2	2	0	4	47	0	4	51	0	3	19	22	0	0	0	0	77
02:45 PM	2	0	0	2	9	0	1	10	0	0	3	3	0	0	0	0	15
Total Volume	8	3	0	11	65	0	7	72	0	5	53	58	0	0	0	0	141
% App. Total	72.7	27.3	0		90.3	0	9.7		0	8.6	91.4		0	0	0		
PHF	.667	.375	.000	.688	.346	.000	.438	.353	.000	.417	.552	.604	.000	.000	.000	.000	.458

City of San Jacinto
 N/S: Lipizzan Drive
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File Name : 01_SJC_Lip_Appa MD
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 2



Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	02:15 PM				02:00 PM				01:45 PM				01:30 PM			
+0 mins.	3	1	0	4	3	0	0	3	0	0	3	3	0	0	0	0
+15 mins.	2	2	0	4	6	0	2	8	0	2	7	9	0	0	0	0
+30 mins.	2	0	0	2	47	0	4	51	0	0	24	24	0	0	0	0
+45 mins.	2	1	0	3	9	0	1	10	0	3	19	22	0	0	0	0
Total Volume	9	4	0	13	65	0	7	72	0	5	53	58	0	0	0	0
% App. Total	69.2	30.8	0		90.3	0	9.7		0	8.6	91.4		0	0	0	
PHF	.750	.500	.000	.813	.346	.000	.438	.353	.000	.417	.552	.604	.000	.000	.000	.000

City of San Jacinto
 N/S: Lipizzan Drive
 E/W: Appaloosa Drive
 Weather: Clear

File Name : 01_SJC_Lip_Appa PM
 Site Code : 05123790
 Start Date : 8/30/2023
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Groups Printed- Total Volume

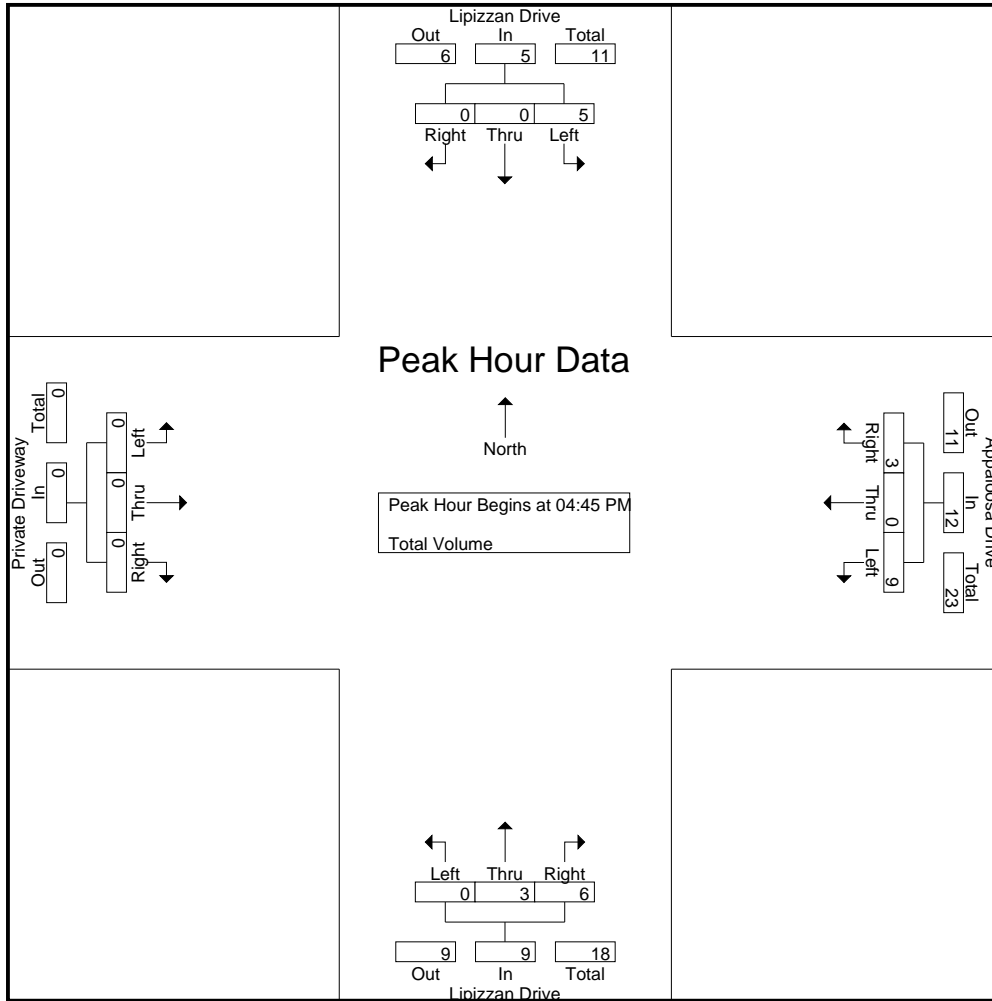
Start Time	Lipizzan Drive Southbound				Appaloosa Drive Westbound				Lipizzan Drive Northbound				Private Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	1	1	0	2	2	0	2	4	0	0	2	2	0	0	0	0	8
04:15 PM	0	0	0	0	2	0	1	3	0	2	1	3	0	0	0	0	6
04:30 PM	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
04:45 PM	2	0	0	2	2	0	0	2	0	1	2	3	0	0	0	0	7
Total	3	1	0	4	7	0	3	10	0	3	6	9	0	0	0	0	23
05:00 PM	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	2
05:15 PM	3	0	0	3	3	0	3	6	0	1	2	3	0	0	0	0	12
05:30 PM	0	0	0	0	3	0	0	3	0	0	2	2	0	0	0	0	5
05:45 PM	0	0	0	0	2	0	1	3	0	0	1	1	0	0	0	0	4
Total	3	0	0	3	9	0	4	13	0	2	5	7	0	0	0	0	23
Grand Total	6	1	0	7	16	0	7	23	0	5	11	16	0	0	0	0	46
Apprch %	85.7	14.3	0		69.6	0	30.4		0	31.2	68.8		0	0	0		
Total %	13	2.2	0	15.2	34.8	0	15.2	50	0	10.9	23.9	34.8	0	0	0	0	

Start Time	Lipizzan Drive Southbound				Appaloosa Drive Westbound				Lipizzan Drive Northbound				Private Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	2	0	0	2	2	0	0	2	0	1	2	3	0	0	0	0	7
05:00 PM	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	2
05:15 PM	3	0	0	3	3	0	3	6	0	1	2	3	0	0	0	0	12
05:30 PM	0	0	0	0	3	0	0	3	0	0	2	2	0	0	0	0	5
Total Volume	5	0	0	5	9	0	3	12	0	3	6	9	0	0	0	0	26
% App. Total	100	0	0		75	0	25		0	33.3	66.7		0	0	0		
PHF	.417	.000	.000	.417	.750	.000	.250	.500	.000	.750	.750	.750	.000	.000	.000	.000	.542

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

City of San Jacinto
 N/S: Lipizzan Drive
 E/W: Appaloosa Drive
 Weather: Clear

File Name : 01_SJC_Lip_Appa PM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 2



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

	04:30 PM				05:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	1	0	0	1	0	0	2	2	0	0	0	0
+15 mins.	2	0	0	2	3	0	3	6	0	2	1	3	0	0	0	0
+30 mins.	0	0	0	0	3	0	0	3	0	0	1	1	0	0	0	0
+45 mins.	3	0	0	3	2	0	1	3	0	1	2	3	0	0	0	0
Total Volume	5	0	0	5	9	0	4	13	0	3	6	9	0	0	0	0
% App. Total	100	0	0		69.2	0	30.8		0	33.3	66.7		0	0	0	
PHF	.417	.000	.000	.417	.750	.000	.333	.542	.000	.375	.750	.750	.000	.000	.000	.000

Location: San Jacinto
 N/S: Lipizzan Drive
 E/W: Appaloosa Drive



Date: 8/30/2023
 Day: Wednesday

PEDESTRIANS

	North Leg Lipizzan Drive	East Leg Appaloosa Drive	South Leg Lipizzan Drive	West Leg Private Driveway	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	1	0	0	1
7:15 AM	1	0	0	0	1
7:30 AM	1	0	0	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	2	1	0	0	3

	North Leg Lipizzan Drive	East Leg Appaloosa Drive	South Leg Lipizzan Drive	West Leg Private Driveway	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
1:30 PM	0	0	0	0	0
1:45 PM	0	0	0	0	0
2:00 PM	0	0	0	0	0
2:15 PM	0	0	0	0	0
2:30 PM	0	1	0	0	1
2:45 PM	0	0	0	0	0
3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1

	North Leg Lipizzan Drive	East Leg Appaloosa Drive	South Leg Lipizzan Drive	West Leg Private Driveway	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: San Jacinto
 N/S: Lipizzan Drive
 E/W: Appaloosa Drive



Date: 8/30/2023
 Day: Wednesday

BICYCLES

	Southbound Lipizzan Drive			Westbound Appaloosa Drive			Northbound Lipizzan Drive			Eastbound Private Driveway			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	3	0	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	3	0	0	0	3

	Southbound Lipizzan Drive			Westbound Appaloosa Drive			Northbound Lipizzan Drive			Eastbound Private Driveway			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	3	0	0	0	0	0	0	0	0	3
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	3	0	0	0	0	0	0	0	0	3

	Southbound Lipizzan Drive			Westbound Appaloosa Drive			Northbound Lipizzan Drive			Eastbound Private Driveway			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

City of San Jacinto
 N/S: Lipizzan Drive
 E/W: Cottonwood Avenue
 Weather: Clear

File Name : 02_SJC_Lip_Cot AM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 1

Groups Printed- Total Volume

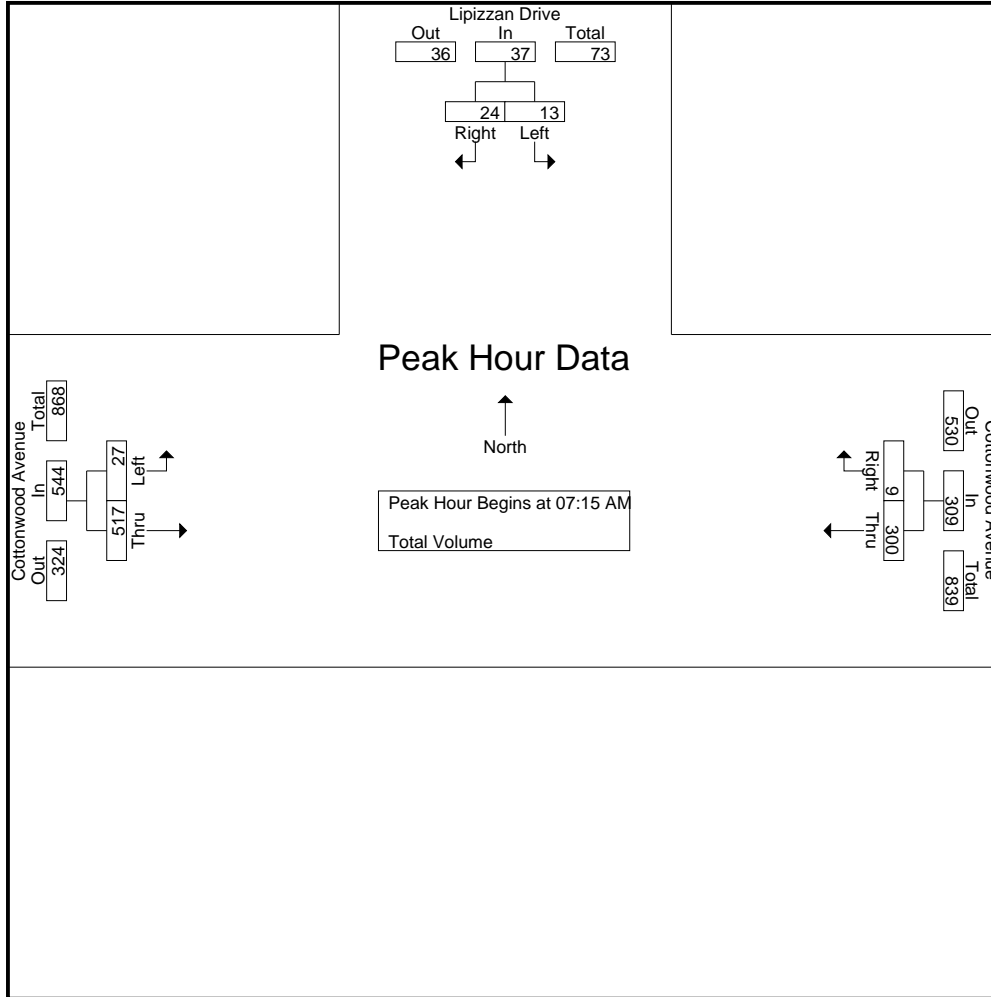
Start Time	Lipizzan Drive Southbound			Cottonwood Avenue Westbound			Cottonwood Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	3	15	18	63	1	64	7	67	74	156
07:15 AM	3	8	11	54	4	58	8	117	125	194
07:30 AM	2	10	12	60	1	61	11	131	142	215
07:45 AM	6	1	7	96	2	98	4	144	148	253
Total	14	34	48	273	8	281	30	459	489	818
08:00 AM	2	5	7	90	2	92	4	125	129	228
08:15 AM	4	3	7	97	3	100	0	87	87	194
08:30 AM	3	4	7	100	5	105	1	51	52	164
08:45 AM	3	0	3	41	2	43	3	57	60	106
Total	12	12	24	328	12	340	8	320	328	692
Grand Total	26	46	72	601	20	621	38	779	817	1510
Apprch %	36.1	63.9		96.8	3.2		4.7	95.3		
Total %	1.7	3	4.8	39.8	1.3	41.1	2.5	51.6	54.1	

Start Time	Lipizzan Drive Southbound			Cottonwood Avenue Westbound			Cottonwood Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:15 AM	3	8	11	54	4	58	8	117	125	194
07:30 AM	2	10	12	60	1	61	11	131	142	215
07:45 AM	6	1	7	96	2	98	4	144	148	253
08:00 AM	2	5	7	90	2	92	4	125	129	228
Total Volume	13	24	37	300	9	309	27	517	544	890
% App. Total	35.1	64.9		97.1	2.9		5	95		
PHF	.542	.600	.771	.781	.563	.788	.614	.898	.919	.879

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 San Jacinto
 N/S: Lipizzan Drive
 E/W: Cottonwood Avenue
 Weather: Clear

File Name : 02_SJC_Lip_Cot AM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 2



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

	07:00 AM			07:45 AM			07:15 AM		
+0 mins.	3	15	18	96	2	98	8	117	125
+15 mins.	3	8	11	90	2	92	11	131	142
+30 mins.	2	10	12	97	3	100	4	144	148
+45 mins.	6	1	7	100	5	105	4	125	129
Total Volume	14	34	48	383	12	395	27	517	544
% App. Total	29.2	70.8		97	3		5	95	
PHF	.583	.567	.667	.958	.600	.940	.614	.898	.919

City of San Jacinto
 N/S: Lipizzan Drive
 E/W: Cottonwood Avenue
 Weather: Clear

File Name : 02_SJC_Lip_Cot MD
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 1

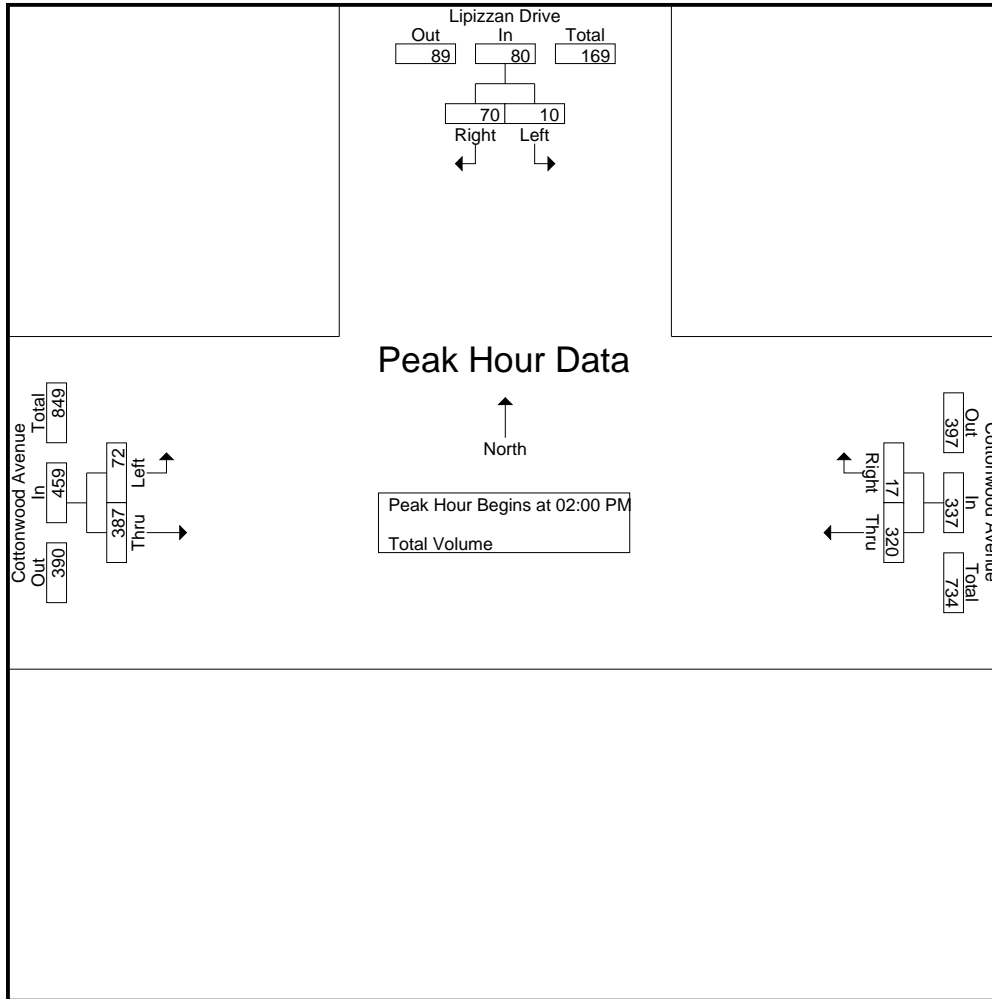
Groups Printed- Total Volume

Start Time	Lipizzan Drive Southbound			Cottonwood Avenue Westbound			Cottonwood Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
01:30 PM	3	2	5	58	0	58	1	59	60	123
01:45 PM	2	5	7	58	1	59	2	65	67	133
Total	5	7	12	116	1	117	3	124	127	256
02:00 PM	3	7	10	62	5	67	14	107	121	198
02:15 PM	0	9	9	68	8	76	25	102	127	212
02:30 PM	6	46	52	110	1	111	28	92	120	283
02:45 PM	1	8	9	80	3	83	5	86	91	183
Total	10	70	80	320	17	337	72	387	459	876
03:00 PM	6	4	10	79	1	80	3	90	93	183
03:15 PM	1	3	4	70	3	73	1	95	96	173
Grand Total	22	84	106	585	22	607	79	696	775	1488
Apprch %	20.8	79.2		96.4	3.6		10.2	89.8		
Total %	1.5	5.6	7.1	39.3	1.5	40.8	5.3	46.8	52.1	

Start Time	Lipizzan Drive Southbound			Cottonwood Avenue Westbound			Cottonwood Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:00 PM										
02:00 PM	3	7	10	62	5	67	14	107	121	198
02:15 PM	0	9	9	68	8	76	25	102	127	212
02:30 PM	6	46	52	110	1	111	28	92	120	283
02:45 PM	1	8	9	80	3	83	5	86	91	183
Total Volume	10	70	80	320	17	337	72	387	459	876
% App. Total	12.5	87.5		95	5		15.7	84.3		
PHF	.417	.380	.385	.727	.531	.759	.643	.904	.904	.774

City of San Jacinto
 N/S: Lipizzan Drive
 E/W: Cottonwood Avenue
 Weather: Clear

File Name : 02_SJC_Lip_Cot MD
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 2



Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	02:00 PM			02:15 PM			02:00 PM		
+0 mins.	3	7	10	68	8	76	14	107	121
+15 mins.	0	9	9	110	1	111	25	102	127
+30 mins.	6	46	52	80	3	83	28	92	120
+45 mins.	1	8	9	79	1	80	5	86	91
Total Volume	10	70	80	337	13	350	72	387	459
% App. Total	12.5	87.5		96.3	3.7		15.7	84.3	
PHF	.417	.380	.385	.766	.406	.788	.643	.904	.904

City of San Jacinto
 N/S: Lipizzan Drive
 E/W: Cottonwood Avenue
 Weather: Clear

File Name : 02_SJC_Lip_Cot PM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 1

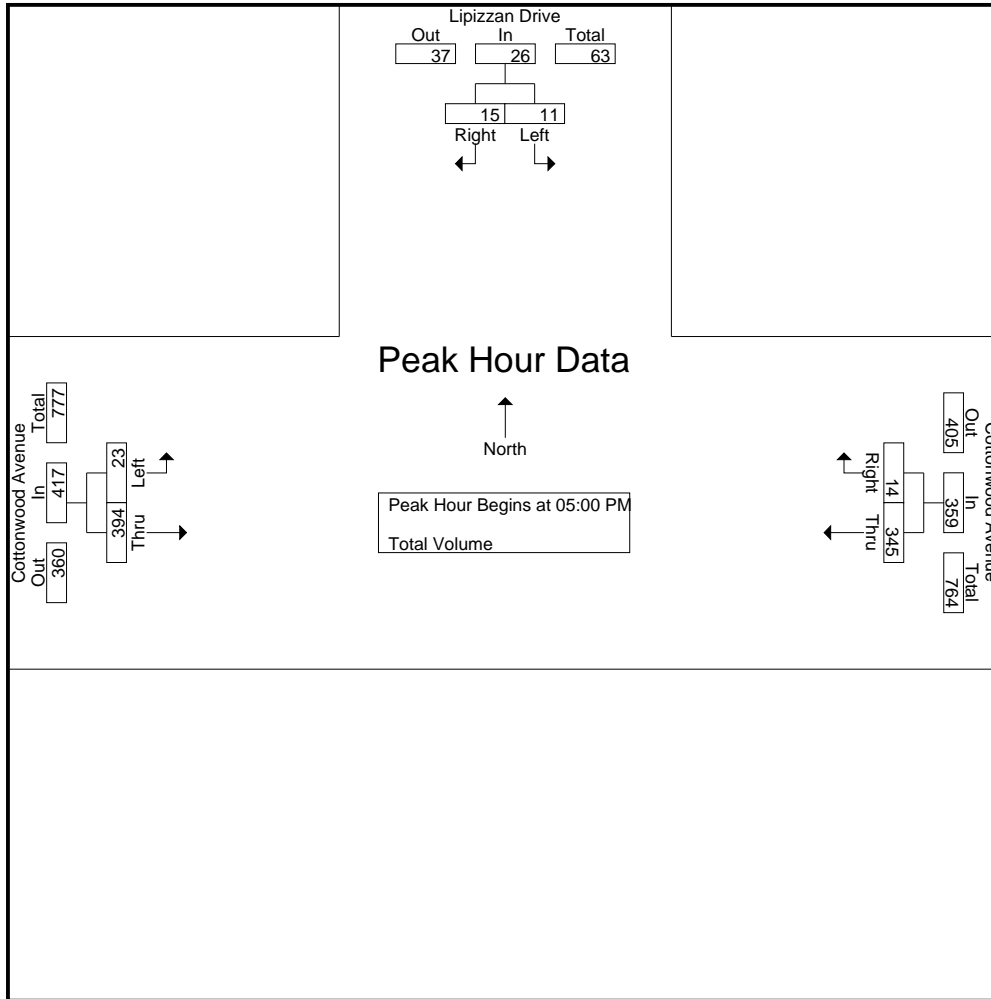
Groups Printed- Total Volume

Start Time	Lipizzan Drive Southbound			Cottonwood Avenue Westbound			Cottonwood Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	3	7	10	127	7	134	4	92	96	240
04:15 PM	1	3	4	67	1	68	5	90	95	167
04:30 PM	2	0	2	83	5	88	3	86	89	179
04:45 PM	1	2	3	73	4	77	5	77	82	162
Total	7	12	19	350	17	367	17	345	362	748
05:00 PM	2	2	4	89	2	91	5	88	93	188
05:15 PM	4	4	8	76	10	86	6	105	111	205
05:30 PM	5	3	8	83	1	84	5	102	107	199
05:45 PM	0	6	6	97	1	98	7	99	106	210
Total	11	15	26	345	14	359	23	394	417	802
Grand Total	18	27	45	695	31	726	40	739	779	1550
Apprch %	40	60		95.7	4.3		5.1	94.9		
Total %	1.2	1.7	2.9	44.8	2	46.8	2.6	47.7	50.3	

Start Time	Lipizzan Drive Southbound			Cottonwood Avenue Westbound			Cottonwood Avenue 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 05:00 PM										
05:00 PM	2	2	4	89	2	91	5	88	93	188
05:15 PM	4	4	8	76	10	86	6	105	111	205
05:30 PM	5	3	8	83	1	84	5	102	107	199
05:45 PM	0	6	6	97	1	98	7	99	106	210
Total Volume	11	15	26	345	14	359	23	394	417	802
% App. Total	42.3	57.7		96.1	3.9		5.5	94.5		
PHF	.550	.625	.813	.889	.350	.916	.821	.938	.939	.955

City of San Jacinto
 N/S: Lipizzan Drive
 E/W: Cottonwood Avenue
 Weather: Clear

File Name : 02_SJC_Lip_Cot PM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 2



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

	05:00 PM			04:00 PM			05:00 PM		
+0 mins.	2	2	4	127	7	134	5	88	93
+15 mins.	4	4	8	67	1	68	6	105	111
+30 mins.	5	3	8	83	5	88	5	102	107
+45 mins.	0	6	6	73	4	77	7	99	106
Total Volume	11	15	26	350	17	367	23	394	417
% App. Total	42.3	57.7		95.4	4.6		5.5	94.5	
PHF	.550	.625	.813	.689	.607	.685	.821	.938	.939

Location: San Jacinto
 N/S: Lipizzan Drive
 E/W: Cottonwood Avenue



Date: 8/30/2023
 Day: Wednesday

PEDESTRIANS

	North Leg Lipizzan Drive	East Leg Cottonwood Avenue	South Leg Lipizzan Drive	West Leg Cottonwood Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	2	0	0	0	2
7:15 AM	0	0	0	0	0
7:30 AM	1	0	0	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	3	0	0	0	3

	North Leg Lipizzan Drive	East Leg Cottonwood Avenue	South Leg Lipizzan Drive	West Leg Cottonwood Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
1:30 PM	0	0	0	0	0
1:45 PM	0	0	0	0	0
2:00 PM	0	0	0	0	0
2:15 PM	0	0	0	0	0
2:30 PM	2	0	0	0	2
2:45 PM	3	0	0	0	3
3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0
TOTAL VOLUMES:	5	0	0	0	5

	North Leg Lipizzan Drive	East Leg Cottonwood Avenue	South Leg Lipizzan Drive	West Leg Cottonwood Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: San Jacinto
 N/S: Lipizzan Drive
 E/W: Cottonwood Avenue



Date: 8/30/2023
 Day: Wednesday

BICYCLES

	Southbound Lipizzan Drive			Westbound Cottonwood Avenue			Northbound Lipizzan Drive			Eastbound Cottonwood Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	1	0	0	0	0	0	0	3	3	0	7

	Southbound Lipizzan Drive			Westbound Cottonwood Avenue			Northbound Lipizzan Drive			Eastbound Cottonwood Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	2	0	0	2	0	0	0	0	0	0	4
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	2	0	0	2	0	0	0	0	0	0	4

	Southbound Lipizzan Drive			Westbound Cottonwood Avenue			Northbound Lipizzan Drive			Eastbound Cottonwood Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	1	0	0	0	0	0	0	1

City of San Jacinto
 N/S: Lyon Avenue
 E/W: De Anza Drive
 Weather: Clear

File Name : 03_SJC_Lyon_De Anza AM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 1

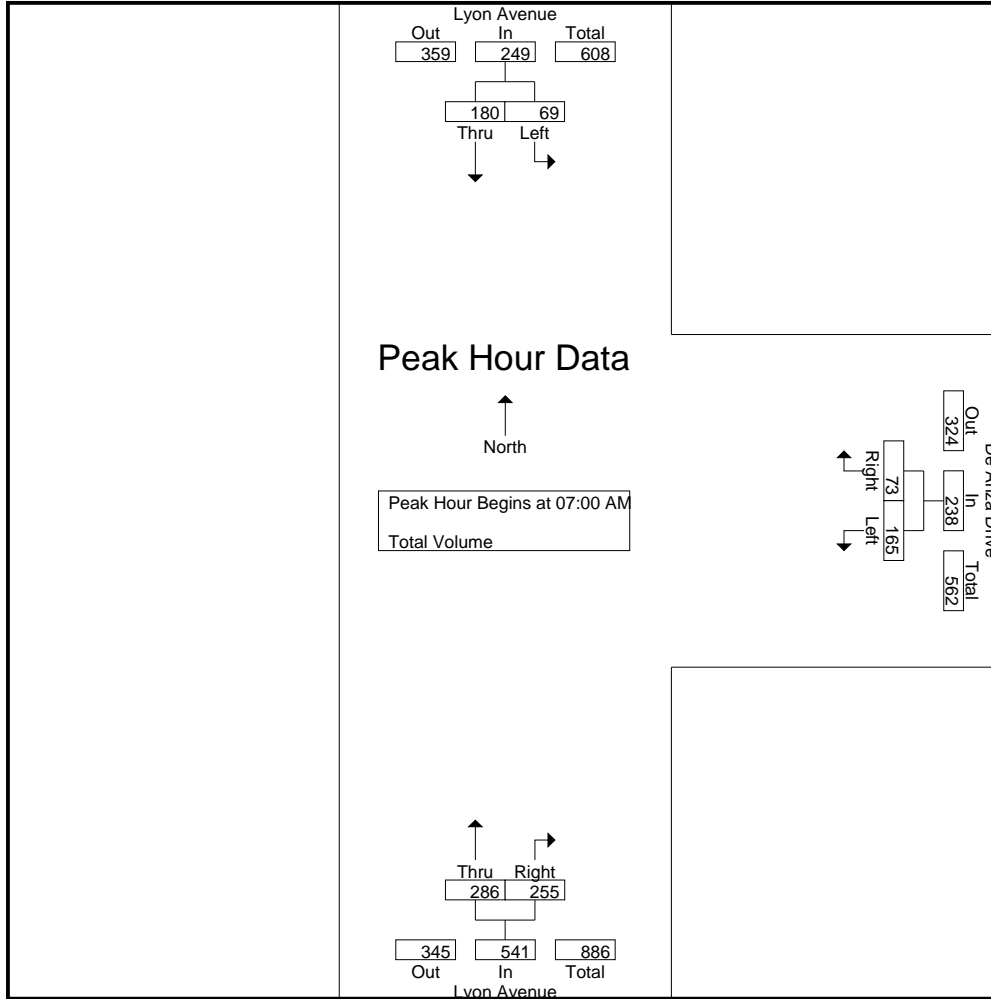
Groups Printed- Total Volume

Start Time	Lyon Avenue Southbound			De Anza Drive Westbound			Lyon Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	24	19	43	19	18	37	70	27	97	177
07:15 AM	23	57	80	47	18	65	65	48	113	258
07:30 AM	14	51	65	65	23	88	76	71	147	300
07:45 AM	8	53	61	34	14	48	75	109	184	293
Total	69	180	249	165	73	238	286	255	541	1028
08:00 AM	4	42	46	15	9	24	65	40	105	175
08:15 AM	5	42	47	19	10	29	30	25	55	131
08:30 AM	3	39	42	17	8	25	35	8	43	110
08:45 AM	1	35	36	8	5	13	35	3	38	87
Total	13	158	171	59	32	91	165	76	241	503
Grand Total	82	338	420	224	105	329	451	331	782	1531
Apprch %	19.5	80.5		68.1	31.9		57.7	42.3		
Total %	5.4	22.1	27.4	14.6	6.9	21.5	29.5	21.6	51.1	

Start Time	Lyon Avenue Southbound			De Anza Drive Westbound			Lyon Avenue Northbound			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	24	19	43	19	18	37	70	27	97	177
07:15 AM	23	57	80	47	18	65	65	48	113	258
07:30 AM	14	51	65	65	23	88	76	71	147	300
07:45 AM	8	53	61	34	14	48	75	109	184	293
Total Volume	69	180	249	165	73	238	286	255	541	1028
% App. Total	27.7	72.3		69.3	30.7		52.9	47.1		
PHF	.719	.789	.778	.635	.793	.676	.941	.585	.735	.857

City of San Jacinto
 N/S: Lyon Avenue
 E/W: De Anza Drive
 Weather: Clear

File Name : 03_SJC_Lyon_De Anza AM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 2



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

	07:15 AM			07:00 AM			07:15 AM		
+0 mins.	23	57	80	19	18	37	65	48	113
+15 mins.	14	51	65	47	18	65	76	71	147
+30 mins.	8	53	61	65	23	88	75	109	184
+45 mins.	4	42	46	34	14	48	65	40	105
Total Volume	49	203	252	165	73	238	281	268	549
% App. Total	19.4	80.6		69.3	30.7		51.2	48.8	
PHF	.533	.890	.788	.635	.793	.676	.924	.615	.746

City of San Jacinto
 N/S: Lyon Avenue
 E/W: De Anza Drive
 Weather: Clear

File Name : 03_SJC_Lyon_De Anza MD
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 1

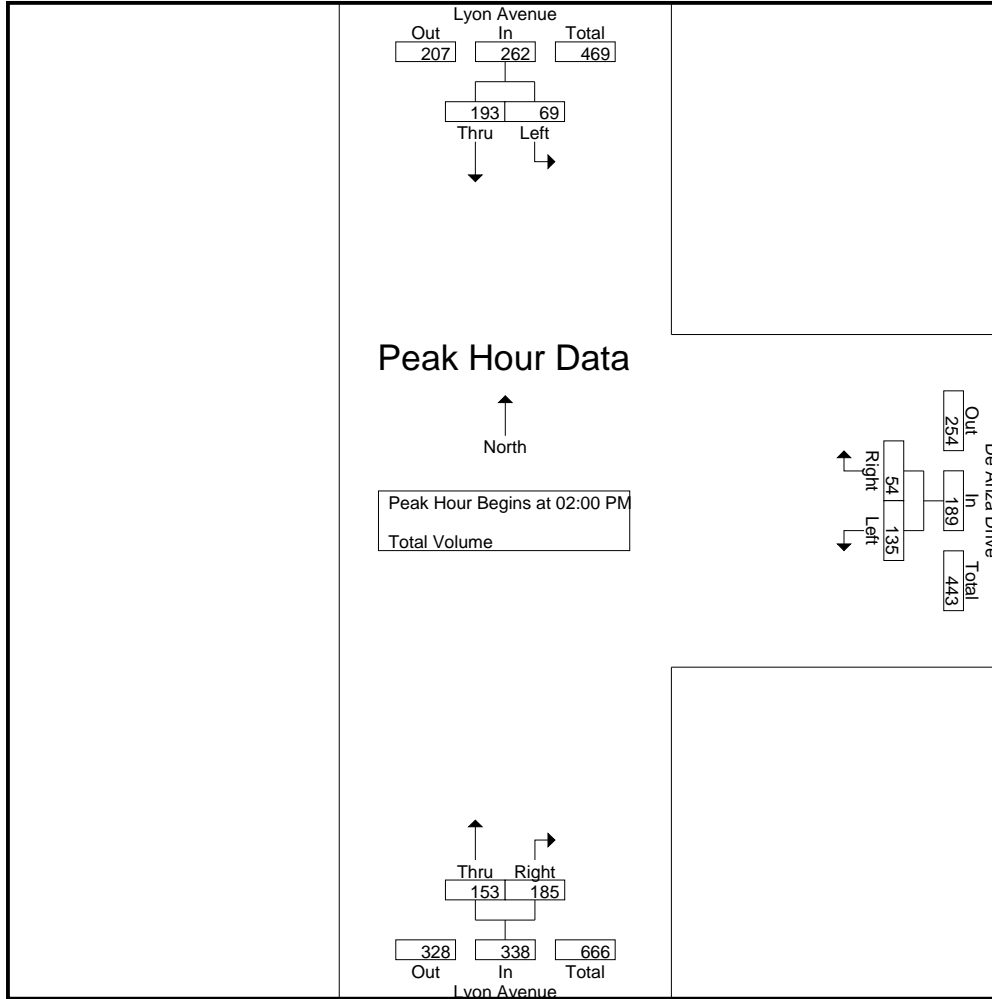
Groups Printed- Total Volume

Start Time	Lyon Avenue Southbound			De Anza Drive Westbound			Lyon Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
01:30 PM	15	33	48	11	14	25	29	15	44	117
01:45 PM	16	43	59	13	9	22	29	24	53	134
Total	31	76	107	24	23	47	58	39	97	251
02:00 PM	26	59	85	45	21	66	21	14	35	186
02:15 PM	9	55	64	33	8	41	24	29	53	158
02:30 PM	18	45	63	35	10	45	68	107	175	283
02:45 PM	16	34	50	22	15	37	40	35	75	162
Total	69	193	262	135	54	189	153	185	338	789
03:00 PM	17	52	69	5	7	12	43	19	62	143
03:15 PM	16	46	62	5	12	17	38	15	53	132
Grand Total	133	367	500	169	96	265	292	258	550	1315
Apprch %	26.6	73.4		63.8	36.2		53.1	46.9		
Total %	10.1	27.9	38	12.9	7.3	20.2	22.2	19.6	41.8	

Start Time	Lyon Avenue Southbound			De Anza Drive Westbound			Lyon Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:00 PM										
02:00 PM	26	59	85	45	21	66	21	14	35	186
02:15 PM	9	55	64	33	8	41	24	29	53	158
02:30 PM	18	45	63	35	10	45	68	107	175	283
02:45 PM	16	34	50	22	15	37	40	35	75	162
Total Volume	69	193	262	135	54	189	153	185	338	789
% App. Total	26.3	73.7		71.4	28.6		45.3	54.7		
PHF	.663	.818	.771	.750	.643	.716	.563	.432	.483	.697

City of San Jacinto
 N/S: Lyon Avenue
 E/W: De Anza Drive
 Weather: Clear

File Name : 03_SJC_Lyon_De Anza MD
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 2



Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	01:45 PM			02:00 PM			02:15 PM		
+0 mins.	16	43	59	45	21	66	24	29	53
+15 mins.	26	59	85	33	8	41	68	107	175
+30 mins.	9	55	64	35	10	45	40	35	75
+45 mins.	18	45	63	22	15	37	43	19	62
Total Volume	69	202	271	135	54	189	175	190	365
% App. Total	25.5	74.5		71.4	28.6		47.9	52.1	
PHF	.663	.856	.797	.750	.643	.716	.643	.444	.521

City of San Jacinto
 N/S: Lyon Avenue
 E/W: De Anza Drive
 Weather: Clear

File Name : 03_SJC_Lyon_De Anza PM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 1

Groups Printed- Total Volume

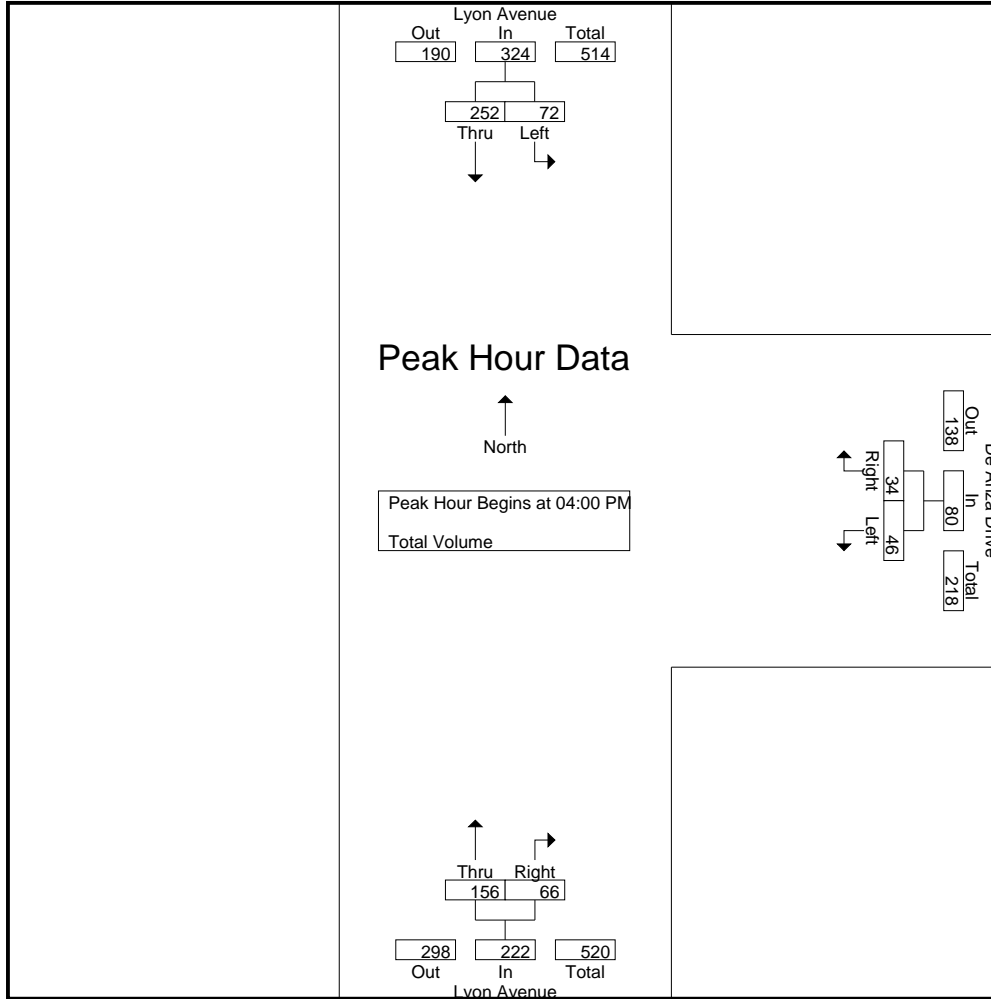
Start Time	Lyon Avenue Southbound			De Anza Drive Westbound			Lyon Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	24	69	93	18	10	28	42	10	52	173
04:15 PM	11	68	79	5	7	12	44	24	68	159
04:30 PM	15	62	77	11	9	20	29	17	46	143
04:45 PM	22	53	75	12	8	20	41	15	56	151
Total	72	252	324	46	34	80	156	66	222	626
05:00 PM	20	65	85	6	7	13	44	16	60	158
05:15 PM	17	48	65	10	6	16	47	20	67	148
05:30 PM	22	53	75	8	12	20	38	13	51	146
05:45 PM	10	53	63	13	10	23	37	12	49	135
Total	69	219	288	37	35	72	166	61	227	587
Grand Total	141	471	612	83	69	152	322	127	449	1213
Apprch %	23	77		54.6	45.4		71.7	28.3		
Total %	11.6	38.8	50.5	6.8	5.7	12.5	26.5	10.5	37	

Start Time	Lyon Avenue Southbound			De Anza Drive Westbound			Lyon Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	24	69	93	18	10	28	42	10	52	173
04:15 PM	11	68	79	5	7	12	44	24	68	159
04:30 PM	15	62	77	11	9	20	29	17	46	143
04:45 PM	22	53	75	12	8	20	41	15	56	151
Total Volume	72	252	324	46	34	80	156	66	222	626
% App. Total	22.2	77.8		57.5	42.5		70.3	29.7		
PHF	.750	.913	.871	.639	.850	.714	.886	.688	.816	.905

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 San Jacinto
 N/S: Lyon Avenue
 E/W: De Anza Drive
 Weather: Clear

File Name : 03_SJC_Lyon_De Anza PM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 2



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

	04:00 PM			04:00 PM			04:45 PM		
+0 mins.	24	69	93	18	10	28	41	15	56
+15 mins.	11	68	79	5	7	12	44	16	60
+30 mins.	15	62	77	11	9	20	47	20	67
+45 mins.	22	53	75	12	8	20	38	13	51
Total Volume	72	252	324	46	34	80	170	64	234
% App. Total	22.2	77.8		57.5	42.5		72.6	27.4	
PHF	.750	.913	.871	.639	.850	.714	.904	.800	.873

Location: San Jacinto
 N/S: Lyon Avenue
 E/W: De Anza Drive



Date: 8/30/2023
 Day: Wednesday

PEDESTRIANS

	North Leg Lyon Avenue	East Leg De Anza Drive	South Leg Lyon Avenue	West Leg De Anza Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	1	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	1

	North Leg Lyon Avenue	East Leg De Anza Drive	South Leg Lyon Avenue	West Leg De Anza Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
1:30 PM	0	0	0	0	0
1:45 PM	0	0	0	0	0
2:00 PM	0	0	0	0	0
2:15 PM	0	0	0	0	0
2:30 PM	0	3	0	0	3
2:45 PM	0	1	0	0	1
3:00 PM	1	1	1	0	3
3:15 PM	0	0	0	0	0
TOTAL VOLUMES:	1	5	1	0	7

	North Leg Lyon Avenue	East Leg De Anza Drive	South Leg Lyon Avenue	West Leg De Anza Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	0	0	0	1
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	1

Location: San Jacinto
 N/S: Lyon Avenue
 E/W: De Anza Drive



Date: 8/30/2023
 Day: Wednesday

BICYCLES

	Southbound Lyon Avenue			Westbound De Anza Drive			Northbound Lyon Avenue			Eastbound De Anza Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Lyon Avenue			Westbound De Anza Drive			Northbound Lyon Avenue			Eastbound De Anza Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Lyon Avenue			Westbound De Anza Drive			Northbound Lyon Avenue			Eastbound De Anza Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	1	0	0	0	0	0	0	1

City of San Jacinto
 N/S: Lyon Avenue
 E/W: Appaloosa Drive
 Weather: Clear

File Name : 05_SJC_Lyon_Appa AM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 1

Groups Printed- Total Volume

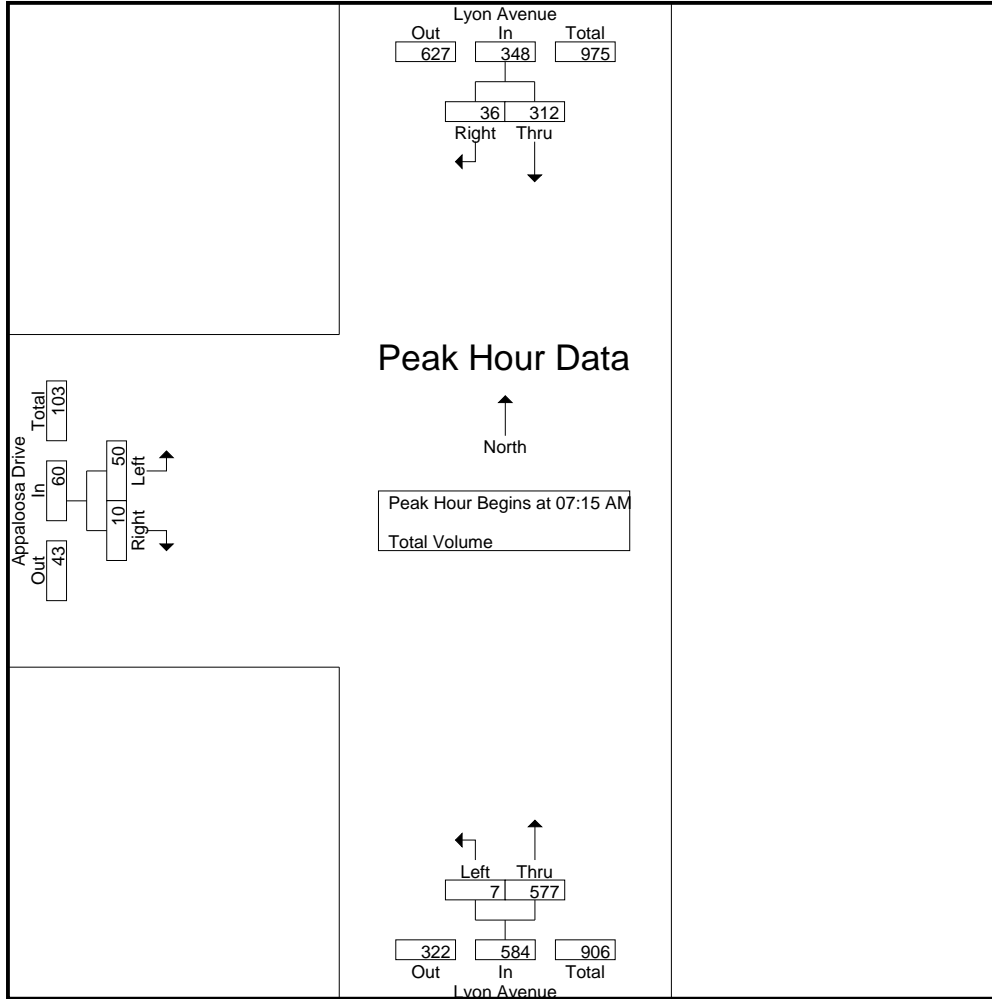
Start Time	Lyon Avenue Southbound			Lyon Avenue Northbound			Appaloosa Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	33	1	34	0	104	104	4	1	5	143
07:15 AM	69	4	73	2	138	140	7	1	8	221
07:30 AM	76	16	92	2	181	183	18	3	21	296
07:45 AM	100	8	108	2	188	190	16	6	22	320
Total	278	29	307	6	611	617	45	11	56	980
08:00 AM	67	8	75	1	70	71	9	0	9	155
08:15 AM	65	0	65	1	43	44	6	3	9	118
08:30 AM	53	1	54	1	44	45	0	0	0	99
08:45 AM	44	2	46	0	37	37	2	2	4	87
Total	229	11	240	3	194	197	17	5	22	459
Grand Total	507	40	547	9	805	814	62	16	78	1439
Apprch %	92.7	7.3		1.1	98.9		79.5	20.5		
Total %	35.2	2.8	38	0.6	55.9	56.6	4.3	1.1	5.4	

Start Time	Lyon Avenue Southbound			Lyon Avenue Northbound			Appaloosa Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:15 AM	69	4	73	2	138	140	7	1	8	221
07:30 AM	76	16	92	2	181	183	18	3	21	296
07:45 AM	100	8	108	2	188	190	16	6	22	320
08:00 AM	67	8	75	1	70	71	9	0	9	155
Total Volume	312	36	348	7	577	584	50	10	60	992
% App. Total	89.7	10.3		1.2	98.8		83.3	16.7		
PHF	.780	.563	.806	.875	.767	.768	.694	.417	.682	.775

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 San Jacinto
 N/S: Lyon Avenue
 E/W: Appaloosa Drive
 Weather: Clear

File Name : 05_SJC_Lyon_Appa AM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 2



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

	07:15 AM			07:00 AM			07:30 AM		
+0 mins.	69	4	73	0	104	104	18	3	21
+15 mins.	76	16	92	2	138	140	16	6	22
+30 mins.	100	8	108	2	181	183	9	0	9
+45 mins.	67	8	75	2	188	190	6	3	9
Total Volume	312	36	348	6	611	617	49	12	61
% App. Total	89.7	10.3		1	99		80.3	19.7	
PHF	.780	.563	.806	.750	.813	.812	.681	.500	.693

City of San Jacinto
 N/S: Lyon Avenue
 E/W: Appaloosa Drive
 Weather: Clear

File Name : 05_SJC_Lyon_Appa MD
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 1

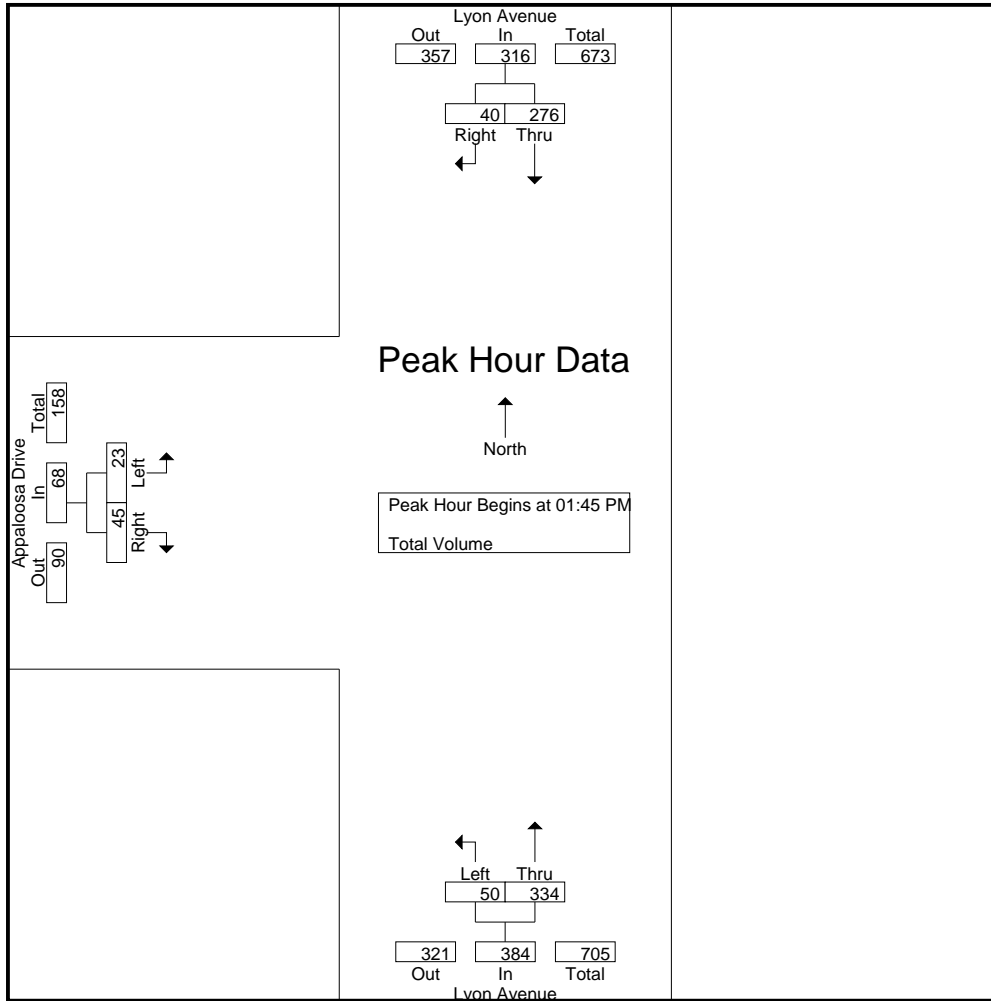
Groups Printed- Total Volume

Start Time	Lyon Avenue Southbound			Lyon Avenue Northbound			Appaloosa Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
01:30 PM	36	1	37	0	42	42	2	3	5	84
01:45 PM	45	4	49	6	67	73	2	1	3	125
Total	81	5	86	6	109	115	4	4	8	209
02:00 PM	73	17	90	11	106	117	7	1	8	215
02:15 PM	55	12	67	7	64	71	6	10	16	154
02:30 PM	103	7	110	26	97	123	8	33	41	274
02:45 PM	61	5	66	7	44	51	3	2	5	122
Total	292	41	333	51	311	362	24	46	70	765
03:00 PM	55	0	55	3	45	48	4	4	8	111
03:15 PM	58	3	61	0	47	47	2	2	4	112
Grand Total	486	49	535	60	512	572	34	56	90	1197
Apprch %	90.8	9.2		10.5	89.5		37.8	62.2		
Total %	40.6	4.1	44.7	5	42.8	47.8	2.8	4.7	7.5	

Start Time	Lyon Avenue Southbound			Lyon Avenue Northbound			Appaloosa Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 01:45 PM										
01:45 PM	45	4	49	6	67	73	2	1	3	125
02:00 PM	73	17	90	11	106	117	7	1	8	215
02:15 PM	55	12	67	7	64	71	6	10	16	154
02:30 PM	103	7	110	26	97	123	8	33	41	274
Total Volume	276	40	316	50	334	384	23	45	68	768
% App. Total	87.3	12.7		13	87		33.8	66.2		
PHF	.670	.588	.718	.481	.788	.780	.719	.341	.415	.701

City of San Jacinto
 N/S: Lyon Avenue
 E/W: Appaloosa Drive
 Weather: Clear

File Name : 05_SJC_Lyon_Appa MD
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 2



Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	02:00 PM			01:45 PM			02:00 PM		
+0 mins.	73	17	90	6	67	73	7	1	8
+15 mins.	55	12	67	11	106	117	6	10	16
+30 mins.	103	7	110	7	64	71	8	33	41
+45 mins.	61	5	66	26	97	123	3	2	5
Total Volume	292	41	333	50	334	384	24	46	70
% App. Total	87.7	12.3		13	87		34.3	65.7	
PHF	.709	.603	.757	.481	.788	.780	.750	.348	.427

City of San Jacinto
 N/S: Lyon Avenue
 E/W: Appaloosa Drive
 Weather: Clear

File Name : 05_SJC_Lyon_Appa PM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 1

Groups Printed- Total Volume

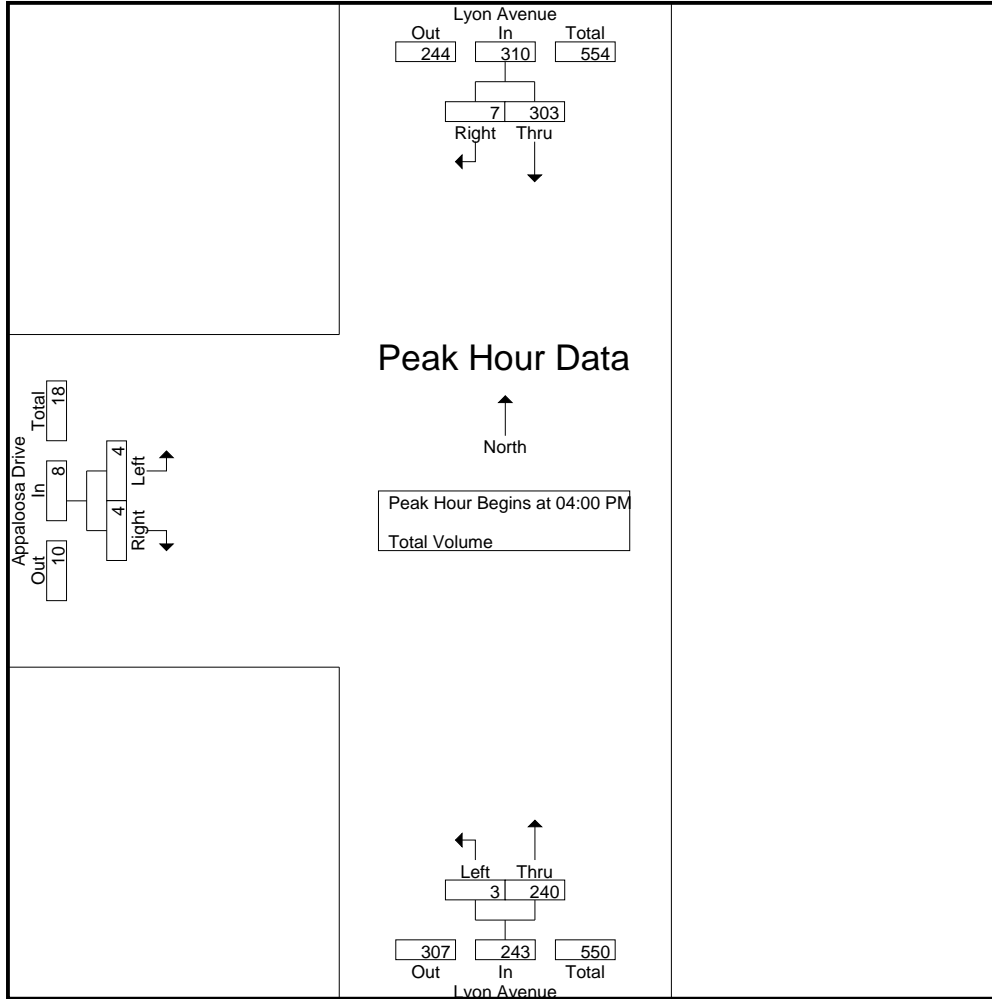
Start Time	Lyon Avenue Southbound			Lyon Avenue Northbound			Appaloosa Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	84	2	86	1	60	61	1	0	1	148
04:15 PM	85	2	87	1	78	79	1	2	3	169
04:30 PM	78	1	79	0	47	47	0	0	0	126
04:45 PM	56	2	58	1	55	56	2	2	4	118
Total	303	7	310	3	240	243	4	4	8	561
05:00 PM	68	1	69	0	65	65	0	0	0	134
05:15 PM	55	5	60	3	64	67	0	3	3	130
05:30 PM	58	4	62	1	56	57	0	3	3	122
05:45 PM	60	3	63	1	48	49	1	0	1	113
Total	241	13	254	5	233	238	1	6	7	499
Grand Total	544	20	564	8	473	481	5	10	15	1060
Apprch %	96.5	3.5		1.7	98.3		33.3	66.7		
Total %	51.3	1.9	53.2	0.8	44.6	45.4	0.5	0.9	1.4	

Start Time	Lyon Avenue Southbound			Lyon Avenue Northbound			Appaloosa Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	84	2	86	1	60	61	1	0	1	148
04:15 PM	85	2	87	1	78	79	1	2	3	169
04:30 PM	78	1	79	0	47	47	0	0	0	126
04:45 PM	56	2	58	1	55	56	2	2	4	118
Total Volume	303	7	310	3	240	243	4	4	8	561
% App. Total	97.7	2.3		1.2	98.8		50	50		
PHF	.891	.875	.891	.750	.769	.769	.500	.500	.500	.830

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 San Jacinto
 N/S: Lyon Avenue
 E/W: Appaloosa Drive
 Weather: Clear

File Name : 05_SJC_Lyon_Appa PM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 2



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

	04:00 PM			04:15 PM			04:45 PM		
+0 mins.	84	2	86	1	78	79	2	2	4
+15 mins.	85	2	87	0	47	47	0	0	0
+30 mins.	78	1	79	1	55	56	0	3	3
+45 mins.	56	2	58	0	65	65	0	3	3
Total Volume	303	7	310	2	245	247	2	8	10
% App. Total	97.7	2.3		0.8	99.2		20	80	
PHF	.891	.875	.891	.500	.785	.782	.250	.667	.625

Location: San Jacinto
 N/S: Lyon Avenue
 E/W: Appaloosa Drive



Date: 8/30/2023
 Day: Wednesday

PEDESTRIANS

	North Leg Lyon Avenue	East Leg Appaloosa Drive	South Leg Lyon Avenue	West Leg Appaloosa Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	1	1
7:15 AM	0	0	0	1	1
7:30 AM	0	0	0	2	2
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	4	4

	North Leg Lyon Avenue	East Leg Appaloosa Drive	South Leg Lyon Avenue	West Leg Appaloosa Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
1:30 PM	0	0	0	0	0
1:45 PM	0	0	0	0	0
2:00 PM	0	0	0	0	0
2:15 PM	0	0	0	15	15
2:30 PM	1	0	0	101	102
2:45 PM	0	0	0	1	1
3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	117	118

	North Leg Lyon Avenue	East Leg Appaloosa Drive	South Leg Lyon Avenue	West Leg Appaloosa Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	2	2
4:30 PM	0	0	0	1	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	3	3

Location: San Jacinto
 N/S: Lyon Avenue
 E/W: Appaloosa Drive



Date: 8/30/2023
 Day: Wednesday

BICYCLES

	Southbound Lyon Avenue			Westbound Appaloosa Drive			Northbound Lyon Avenue			Eastbound Appaloosa Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	1	0	0	0	0	0	3	0	0	0	0	4
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
7:45 AM	0	2	0	0	0	0	1	6	0	0	0	1	10
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	3	0	0	0	0	1	12	0	0	0	1	17

	Southbound Lyon Avenue			Westbound Appaloosa Drive			Northbound Lyon Avenue			Eastbound Appaloosa Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
2:30 PM	0	6	1	0	0	0	0	0	0	0	0	0	7
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	9	1	0	0	0	0	0	0	0	0	0	10

	Southbound Lyon Avenue			Westbound Appaloosa Drive			Northbound Lyon Avenue			Eastbound Appaloosa Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

City of San Jacinto
 N/S: Lyon Avenue
 E/W: Cottonwood Avenue
 Weather: Clear

File Name : 06_SJC_Lyon_Cot AM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 1

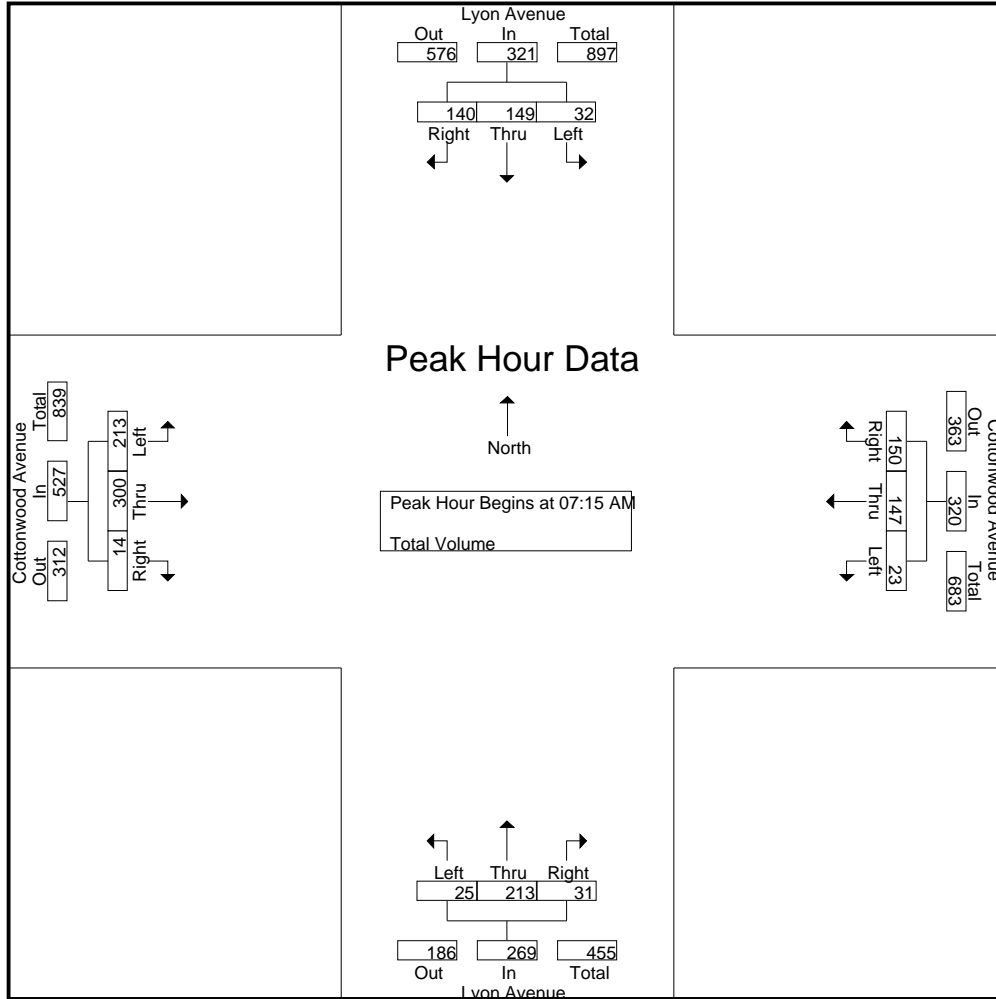
Groups Printed- Total Volume

Start Time	Lyon Avenue Southbound				Cottonwood Avenue Westbound				Lyon Avenue Northbound				Cottonwood 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	6	9	18	33	5	35	21	61	10	64	6	80	22	44	5	71	245
07:15 AM	8	37	21	66	6	28	41	75	10	59	7	76	40	70	5	115	332
07:30 AM	9	44	32	85	2	26	46	74	5	58	11	74	79	57	1	137	370
07:45 AM	8	40	56	104	4	35	52	91	6	60	8	74	70	73	4	147	416
Total	31	130	127	288	17	124	160	301	31	241	32	304	211	244	15	470	1363
08:00 AM	7	28	31	66	11	58	11	80	4	36	5	45	24	100	4	128	319
08:15 AM	3	35	31	69	13	72	5	90	2	23	10	35	16	74	5	95	289
08:30 AM	2	34	19	55	7	79	4	90	1	30	5	36	7	39	6	52	233
08:45 AM	6	30	10	46	4	28	3	35	7	26	6	39	9	43	6	58	178
Total	18	127	91	236	35	237	23	295	14	115	26	155	56	256	21	333	1019
Grand Total	49	257	218	524	52	361	183	596	45	356	58	459	267	500	36	803	2382
Apprch %	9.4	49	41.6		8.7	60.6	30.7		9.8	77.6	12.6		33.3	62.3	4.5		
Total %	2.1	10.8	9.2	22	2.2	15.2	7.7	25	1.9	14.9	2.4	19.3	11.2	21	1.5	33.7	

Start Time	Lyon Avenue Southbound				Cottonwood Avenue Westbound				Lyon Avenue Northbound				Cottonwood Avenue 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	8	37	21	66	6	28	41	75	10	59	7	76	40	70	5	115	332
07:30 AM	9	44	32	85	2	26	46	74	5	58	11	74	79	57	1	137	370
07:45 AM	8	40	56	104	4	35	52	91	6	60	8	74	70	73	4	147	416
08:00 AM	7	28	31	66	11	58	11	80	4	36	5	45	24	100	4	128	319
Total Volume	32	149	140	321	23	147	150	320	25	213	31	269	213	300	14	527	1437
% App. Total	10	46.4	43.6		7.2	45.9	46.9		9.3	79.2	11.5		40.4	56.9	2.7		
PHF	.889	.847	.625	.772	.523	.634	.721	.879	.625	.888	.705	.885	.674	.750	.700	.896	.864

City of San Jacinto
 N/S: Lyon Avenue
 E/W: Cottonwood Avenue
 Weather: Clear

File Name : 06_SJC_Lyon_Cot AM
 Site Code : 05123790
 Start Date : 8/30/2023
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:45 AM				07:00 AM				07:15 AM			
+0 mins.	9	44	32	85	4	35	52	91	10	64	6	80	40	70	5	115
+15 mins.	8	40	56	104	11	58	11	80	10	59	7	76	79	57	1	137
+30 mins.	7	28	31	66	13	72	5	90	5	58	11	74	70	73	4	147
+45 mins.	3	35	31	69	7	79	4	90	6	60	8	74	24	100	4	128
Total Volume	27	147	150	324	35	244	72	351	31	241	32	304	213	300	14	527
% App. Total	8.3	45.4	46.3		10	69.5	20.5		10.2	79.3	10.5		40.4	56.9	2.7	
PHF	.750	.835	.670	.779	.673	.772	.346	.964	.775	.941	.727	.950	.674	.750	.700	.896

City of San Jacinto
 N/S: Lyon Avenue
 E/W: Cottonwood Avenue
 Weather: Clear

File Name : 06_SJC_Lyon_Cot MD
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 1

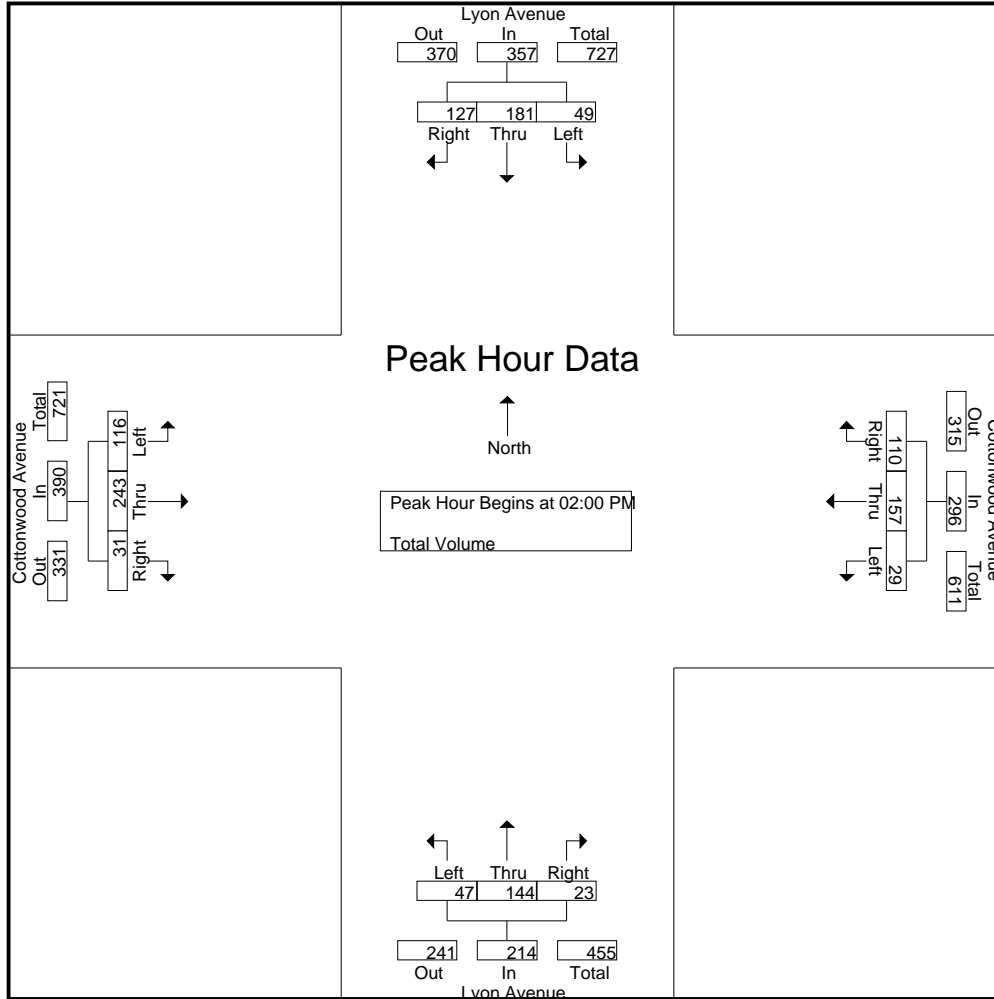
Groups Printed- Total Volume

Start Time	Lyon Avenue Southbound				Cottonwood Avenue Westbound				Lyon Avenue Northbound				Cottonwood Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
01:30 PM	3	27	9	39	1	37	4	42	12	28	1	41	11	47	7	65	187
01:45 PM	2	29	13	44	3	42	17	62	6	41	7	54	14	45	9	68	228
Total	5	56	22	83	4	79	21	104	18	69	8	95	25	92	16	133	415
02:00 PM	4	41	15	60	7	38	48	93	12	30	4	46	44	52	8	104	303
02:15 PM	6	36	23	65	5	42	33	80	14	40	7	61	32	61	6	99	305
02:30 PM	34	57	66	157	8	29	23	60	14	42	7	63	29	63	15	107	387
02:45 PM	5	47	23	75	9	48	6	63	7	32	5	44	11	67	2	80	262
Total	49	181	127	357	29	157	110	296	47	144	23	214	116	243	31	390	1257
03:00 PM	8	37	16	61	9	60	7	76	4	34	14	52	9	81	8	98	287
03:15 PM	2	49	9	60	4	52	6	62	11	28	9	48	16	75	2	93	263
Grand Total	64	323	174	561	46	348	144	538	80	275	54	409	166	491	57	714	2222
Apprch %	11.4	57.6	31		8.6	64.7	26.8		19.6	67.2	13.2		23.2	68.8	8		
Total %	2.9	14.5	7.8	25.2	2.1	15.7	6.5	24.2	3.6	12.4	2.4	18.4	7.5	22.1	2.6	32.1	

Start Time	Lyon Avenue Southbound				Cottonwood Avenue Westbound				Lyon Avenue Northbound				Cottonwood Avenue 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 01:30 PM to 03:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:00 PM																	
02:00 PM	4	41	15	60	7	38	48	93	12	30	4	46	44	52	8	104	303
02:15 PM	6	36	23	65	5	42	33	80	14	40	7	61	32	61	6	99	305
02:30 PM	34	57	66	157	8	29	23	60	14	42	7	63	29	63	15	107	387
02:45 PM	5	47	23	75	9	48	6	63	7	32	5	44	11	67	2	80	262
Total Volume	49	181	127	357	29	157	110	296	47	144	23	214	116	243	31	390	1257
% App. Total	13.7	50.7	35.6		9.8	53	37.2		22	67.3	10.7		29.7	62.3	7.9		
PHF	.360	.794	.481	.568	.806	.818	.573	.796	.839	.857	.821	.849	.659	.907	.517	.911	.812

City of San Jacinto
 N/S: Lyon Avenue
 E/W: Cottonwood Avenue
 Weather: Clear

File Name : 06_SJC_Lyon_Cot MD
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 2



Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	02:15 PM				02:00 PM				01:45 PM				02:00 PM			
+0 mins.	6	36	23	65	7	38	48	93	6	41	7	54	44	52	8	104
+15 mins.	34	57	66	157	5	42	33	80	12	30	4	46	32	61	6	99
+30 mins.	5	47	23	75	8	29	23	60	14	40	7	61	29	63	15	107
+45 mins.	8	37	16	61	9	48	6	63	14	42	7	63	11	67	2	80
Total Volume	53	177	128	358	29	157	110	296	46	153	25	224	116	243	31	390
% App. Total	14.8	49.4	35.8		9.8	53	37.2		20.5	68.3	11.2		29.7	62.3	7.9	
PHF	.390	.776	.485	.570	.806	.818	.573	.796	.821	.911	.893	.889	.659	.907	.517	.911

City of San Jacinto
 N/S: Lyon Avenue
 E/W: Cottonwood Avenue
 Weather: Clear

File Name : 06_SJC_Lyon_Cot PM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 1

Groups Printed- Total Volume

Start Time	Lyon Avenue Southbound				Cottonwood Avenue Westbound				Lyon Avenue Northbound				Cottonwood 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	3	57	25	85	14	95	8	117	10	31	8	49	22	64	6	92	343
04:15 PM	7	57	24	88	4	46	8	58	4	48	5	57	22	64	10	96	299
04:30 PM	8	56	17	81	7	59	7	73	12	31	3	46	11	67	11	89	289
04:45 PM	7	43	12	62	5	54	3	62	13	35	7	55	15	55	8	78	257
Total	25	213	78	316	30	254	26	310	39	145	23	207	70	250	35	355	1188
05:00 PM	7	47	13	67	4	72	6	82	7	46	7	60	14	68	12	94	303
05:15 PM	5	46	9	60	6	60	9	75	16	39	7	62	18	79	9	106	303
05:30 PM	7	37	18	62	6	60	4	70	7	38	7	52	14	80	10	104	288
05:45 PM	4	33	23	60	8	71	3	82	6	25	10	41	18	78	3	99	282
Total	23	163	63	249	24	263	22	309	36	148	31	215	64	305	34	403	1176
Grand Total	48	376	141	565	54	517	48	619	75	293	54	422	134	555	69	758	2364
Apprch %	8.5	66.5	25		8.7	83.5	7.8		17.8	69.4	12.8		17.7	73.2	9.1		
Total %	2	15.9	6	23.9	2.3	21.9	2	26.2	3.2	12.4	2.3	17.9	5.7	23.5	2.9	32.1	

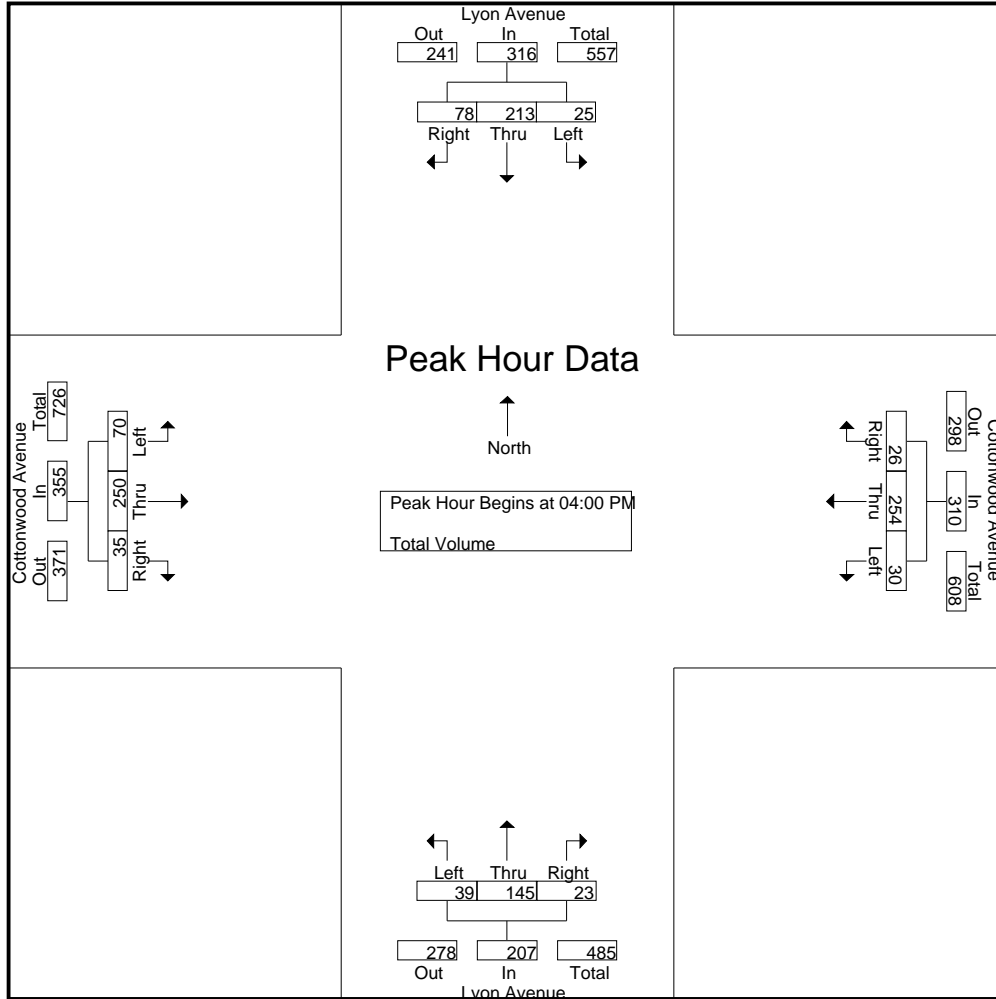
Start Time	Lyon Avenue Southbound				Cottonwood Avenue Westbound				Lyon Avenue Northbound				Cottonwood Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	3	57	25	85	14	95	8	117	10	31	8	49	22	64	6	92	343
04:15 PM	7	57	24	88	4	46	8	58	4	48	5	57	22	64	10	96	299
04:30 PM	8	56	17	81	7	59	7	73	12	31	3	46	11	67	11	89	289
04:45 PM	7	43	12	62	5	54	3	62	13	35	7	55	15	55	8	78	257
Total Volume	25	213	78	316	30	254	26	310	39	145	23	207	70	250	35	355	1188
% App. Total	7.9	67.4	24.7		9.7	81.9	8.4		18.8	70	11.1		19.7	70.4	9.9		
PHF	.781	.934	.780	.898	.536	.668	.813	.662	.750	.755	.719	.908	.795	.933	.795	.924	.866

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 San Jacinto
 N/S: Lyon Avenue
 E/W: Cottonwood Avenue
 Weather: Clear

File Name : 06_SJC_Lyon_Cot PM
 Site Code : 05123790
 Start Date : 8/30/2023
 Page No : 2



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

	04:00 PM				04:00 PM				04:45 PM				05:00 PM			
+0 mins.	3	57	25	85	14	95	8	117	13	35	7	55	14	68	12	94
+15 mins.	7	57	24	88	4	46	8	58	7	46	7	60	18	79	9	106
+30 mins.	8	56	17	81	7	59	7	73	16	39	7	62	14	80	10	104
+45 mins.	7	43	12	62	5	54	3	62	7	38	7	52	18	78	3	99
Total Volume	25	213	78	316	30	254	26	310	43	158	28	229	64	305	34	403
% App. Total	7.9	67.4	24.7		9.7	81.9	8.4		18.8	69	12.2		15.9	75.7	8.4	
PHF	.781	.934	.780	.898	.536	.668	.813	.662	.672	.859	1.000	.923	.889	.953	.708	.950

Location: San Jacinto
 N/S: Lyon Avenue
 E/W: Cottonwood Avenue



Date: 8/30/2023
 Day: Wednesday

PEDESTRIANS

	North Leg Lyon Avenue	East Leg Cottonwood Avenue	South Leg Lyon Avenue	West Leg Cottonwood Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	1	0	0	1
7:15 AM	1	5	2	0	8
7:30 AM	2	14	7	0	23
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	3	20	9	0	32

	North Leg Lyon Avenue	East Leg Cottonwood Avenue	South Leg Lyon Avenue	West Leg Cottonwood Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
1:30 PM	0	0	0	0	0
1:45 PM	0	0	0	0	0
2:00 PM	0	0	0	0	0
2:15 PM	0	0	0	0	0
2:30 PM	2	27	6	0	35
2:45 PM	0	0	0	0	0
3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0
TOTAL VOLUMES:	2	27	6	0	35

	North Leg Lyon Avenue	East Leg Cottonwood Avenue	South Leg Lyon Avenue	West Leg Cottonwood Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	1	0	0	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	1	0	0	2

Location: San Jacinto
 N/S: Lyon Avenue
 E/W: Cottonwood Avenue



Date: 8/30/2023
 Day: Wednesday

BICYCLES

	Southbound Lyon Avenue			Westbound Cottonwood Avenue			Northbound Lyon Avenue			Eastbound Cottonwood Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	1	0	0	0	0	3	0	0	0	0	1	0	5
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	0	5	0	0	0	2	1	0	9

	Southbound Lyon Avenue			Westbound Cottonwood Avenue			Northbound Lyon Avenue			Eastbound Cottonwood Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	3	0	2	0	0	0	0	0	0	0	0	0	5
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	3	0	2	0	0	0	0	0	0	0	0	0	5

	Southbound Lyon Avenue			Westbound Cottonwood Avenue			Northbound Lyon Avenue			Eastbound Cottonwood Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	0	0	1

Counts Unlimited, Inc.

City of San Jacinto
 Cottonwood Avenue
 B/ Lipizzan Drive - Lyon Avenue
 24 Hour Directional Volume Count

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

SJC002
 Site Code: 051-23790

Start Time	8/30/23 Wed	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		14	55			9	62				
12:15		8	63			8	40				
12:30		7	57			8	58				
12:45		8	63	37	238	3	67	28	227	65	465
01:00		5	61			6	50				
01:15		4	72			1	65				
01:30		2	65			3	57				
01:45		2	68	13	266	4	61	14	233	27	499
02:00		2	107			4	64				
02:15		4	99			5	78				
02:30		2	108			2	115				
02:45		2	82	10	396	10	81	21	338	31	734
03:00		2	101			9	82				
03:15		1	93			9	72				
03:30		3	122			6	91				
03:45		5	88	11	404	4	130	28	375	39	779
04:00		7	92			12	131				
04:15		9	100			14	73				
04:30		4	89			22	87				
04:45		16	77	36	358	26	81	74	372	110	730
05:00		8	94			27	91				
05:15		10	108			32	85				
05:30		9	106			33	85				
05:45		29	99	56	407	38	100	130	361	186	768
06:00		26	86			35	64				
06:15		34	87			28	61				
06:30		39	71			55	65				
06:45		56	78	155	322	51	58	169	248	324	570
07:00		72	68			62	54				
07:15		115	82			60	46				
07:30		138	58			61	63				
07:45		149	65	474	273	97	49	280	212	754	485
08:00		133	77			93	75				
08:15		98	51			105	56				
08:30		52	69			100	50				
08:45		58	52	341	249	45	40	343	221	684	470
09:00		33	50			55	51				
09:15		43	46			49	39				
09:30		48	33			53	46				
09:45		45	24	169	153	65	23	222	159	391	312
10:00		40	29			55	30				
10:15		45	20			56	18				
10:30		56	23			46	18				
10:45		53	14	194	86	40	16	197	82	391	168
11:00		52	20			41	13				
11:15		59	15			58	10				
11:30		65	14			53	11				
11:45		54	15	230	64	60	8	212	42	442	106
Total		1726	3216	1726	3216	1718	2870	1718	2870	3444	6086
Combined Total		4942		4942		4588		4588		9530	
AM Peak	-	07:15	-	-	-	07:45	-	-	-	-	-
Vol.	-	535	-	-	-	395	-	-	-	-	-
P.H.F.	-	0.898	-	-	-	0.940	-	-	-	-	-
PM Peak	-	-	05:00	-	-	-	03:30	-	-	-	-
Vol.	-	-	407	-	-	-	425	-	-	-	-
P.H.F.	-	-	0.834	-	-	-	0.811	-	-	-	-
Percentage		34.9%	65.1%			37.4%	62.6%				
ADT/AADT		ADT 9,530	AADT 9,530								

Counts Unlimited, Inc.

City of San Jacinto
 Lyon Avenue
 N/ Appaloosa Drive
 24 Hour Directional Volume Count

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

SJC001
 Site Code: 051-23790

Start Time	8/30/23 Wed	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		3	45			5	39				
12:15		4	39			4	39				
12:30		5	38			6	33				
12:45		4	47	16	169	6	34	21	145	37	314
01:00		5	45			10	44				
01:15		5	56			4	43				
01:30		2	44			3	38				
01:45		1	66	13	211	1	49	18	174	31	385
02:00		1	102			8	87				
02:15		6	73			1	69				
02:30		3	112			5	105				
02:45		1	48	11	335	1	72	15	333	26	668
03:00		6	53			7	58				
03:15		6	52			5	62				
03:30		6	63			1	68				
03:45		6	70	24	238	3	111	16	299	40	537
04:00		17	61			7	86				
04:15		19	78			3	88				
04:30		12	47			10	79				
04:45		17	57	65	243	9	61	29	314	94	557
05:00		28	65			24	69				
05:15		35	63			15	60				
05:30		45	56			14	63				
05:45		31	49	139	233	20	63	73	255	212	488
06:00		41	44			19	64				
06:15		55	57			28	47				
06:30		60	33			27	42				
06:45		64	38	220	172	35	40	109	193	329	365
07:00		108	36			34	32				
07:15		142	26			74	37				
07:30		189	30			92	44				
07:45		203	42	642	134	108	35	308	148	950	282
08:00		81	24			75	37				
08:15		50	22			65	35				
08:30		45	35			55	40				
08:45		39	25	215	106	48	20	243	132	458	238
09:00		37	25			39	24				
09:15		35	30			38	31				
09:30		44	14			35	19				
09:45		47	11	163	80	48	19	160	93	323	173
10:00		35	12			26	15				
10:15		36	5			38	16				
10:30		30	15			31	14				
10:45		29	7	130	39	27	12	122	57	252	96
11:00		39	7			34	14				
11:15		49	14			40	11				
11:30		40	5			38	15				
11:45		49	5	177	31	50	10	162	50	339	81
Total		1815	1991	1815	1991	1276	2193	1276	2193	3091	4184
Combined Total		3806		3806		3469		3469		7275	
AM Peak	-	07:00	-	-	-	07:15	-	-	-	-	-
Vol.	-	642	-	-	-	349	-	-	-	-	-
P.H.F.	-	0.791	-	-	-	0.808	-	-	-	-	-
PM Peak	-	-	01:45	-	-	-	03:45	-	-	-	-
Vol.	-	-	353	-	-	-	364	-	-	-	-
P.H.F.	-	-	0.788	-	-	-	0.820	-	-	-	-
Percentage		47.7%	52.3%			36.8%	63.2%				
ADT/AADT		ADT 7,275		AADT 7,275							

**APPENDIX 3.2: EXISTING (2023) CONDITIONS INTERSECTION
OPERATIONS ANALYSIS WORKSHEETS**

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Intersection						
Int Delay, s/veh	3.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	14	6	2	30	6	4
Future Vol, veh/h	14	6	2	30	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	7	2	37	7	5

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	40	21	0	0	39
Stage 1	21	-	-	-	-
Stage 2	19	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	972	1056	-	-	1571
Stage 1	1002	-	-	-	-
Stage 2	1004	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	968	1056	-	-	1571
Mov Cap-2 Maneuver	968	-	-	-	-
Stage 1	1002	-	-	-	-
Stage 2	1000	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	4.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	993	1571
HCM Lane V/C Ratio	-	-	0.025	0.005
HCM Control Delay (s)	-	-	8.7	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	27	517	303	9	13	24
Future Vol, veh/h	27	517	303	9	13	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	588	344	10	15	27

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	354	0	-	0	999 177
Stage 1	-	-	-	-	349 -
Stage 2	-	-	-	-	650 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	1203	-	-	-	255 836
Stage 1	-	-	-	-	686 -
Stage 2	-	-	-	-	519 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1203	-	-	-	248 836
Mov Cap-2 Maneuver	-	-	-	-	377 -
Stage 1	-	-	-	-	668 -
Stage 2	-	-	-	-	519 -

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1203	-	-	-	586
HCM Lane V/C Ratio	0.026	-	-	-	0.072
HCM Control Delay (s)	8.1	-	-	-	11.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Intersection Delay, s/veh	23.8
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	165	73	286	255	69	180
Future Vol, veh/h	165	73	286	255	69	180
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	192	85	333	297	80	209
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	13.3	33.1	13.8
HCM LOS	B	D	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	28%
Vol Thru, %	53%	0%	0%	72%
Vol Right, %	47%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	541	165	73	249
LT Vol	0	165	0	69
Through Vol	286	0	0	180
RT Vol	255	0	73	0
Lane Flow Rate	629	192	85	290
Geometry Grp	2	7	7	2
Degree of Util (X)	0.878	0.392	0.144	0.466
Departure Headway (Hd)	5.025	7.346	6.121	5.791
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	717	489	584	620
Service Time	3.071	5.103	3.878	3.847
HCM Lane V/C Ratio	0.877	0.393	0.146	0.468
HCM Control Delay	33.1	14.8	9.9	13.8
HCM Lane LOS	D	B	A	B
HCM 95th-tile Q	10.8	1.8	0.5	2.5

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	50	10	7	577	312	36
Future Vol, veh/h	50	10	7	577	312	36
Conflicting Peds, #/hr	0	1	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	64	13	9	740	400	46

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1183	226	448	0	-	0
Stage 1	425	-	-	-	-	-
Stage 2	758	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	195	778	1111	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	462	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	191	776	1109	-	-	-
Mov Cap-2 Maneuver	191	-	-	-	-	-
Stage 1	618	-	-	-	-	-
Stage 2	461	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.3	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1109	-	218	-	-
HCM Lane V/C Ratio	0.008	-	0.353	-	-
HCM Control Delay (s)	8.3	0	30.3	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0	-	1.5	-	-

Intersection	
Intersection Delay, s/veh	56.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	214	302	14	23	147	150	25	213	31	32	149	140
Future Vol, veh/h	214	302	14	23	147	150	25	213	31	32	149	140
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	249	351	16	27	171	174	29	248	36	37	173	163
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	57.1	90.5	58.4	18.7
HCM LOS	F	F	F	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	9%	100%	0%	7%	100%	0%	0%
Vol Thru, %	79%	0%	96%	46%	0%	100%	0%
Vol Right, %	12%	0%	4%	47%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	269	214	316	320	32	149	140
LT Vol	25	214	0	23	32	0	0
Through Vol	213	0	302	147	0	149	0
RT Vol	31	0	14	150	0	0	140
Lane Flow Rate	313	249	367	372	37	173	163
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	0.89	0.697	0.976	1.04	0.104	0.46	0.4
Departure Headway (Hd)	10.634	10.345	9.789	10.059	10.33	9.806	9.072
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	344	351	375	368	349	369	399
Service Time	8.334	8.045	7.489	7.665	8.03	7.506	6.772
HCM Lane V/C Ratio	0.91	0.709	0.979	1.011	0.106	0.469	0.409
HCM Control Delay	58.4	33.7	72.9	90.5	14.2	20.6	17.7
HCM Lane LOS	F	D	F	F	B	C	C
HCM 95th-tile Q	8.6	5	11.1	12.8	0.3	2.3	1.9

Intersection						
Int Delay, s/veh	5.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	7	5	53	8	3
Future Vol, veh/h	65	7	5	53	8	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	46	46	46	46	46	46
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	141	15	11	115	17	7

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	110	69	0	0	126
Stage 1	69	-	-	-	-
Stage 2	41	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	887	994	-	-	1460
Stage 1	954	-	-	-	-
Stage 2	981	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	876	994	-	-	1460
Mov Cap-2 Maneuver	876	-	-	-	-
Stage 1	954	-	-	-	-
Stage 2	969	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	5.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	886	1460
HCM Lane V/C Ratio	-	-	0.177	0.012
HCM Control Delay (s)	-	-	9.9	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑	↑↑		↘	
Traffic Vol, veh/h	72	387	320	17	10	70
Future Vol, veh/h	72	387	320	17	10	70
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	94	503	416	22	13	91

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	438	0	-	0	1118 219
Stage 1	-	-	-	-	427 -
Stage 2	-	-	-	-	691 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	1120	-	-	-	215 786
Stage 1	-	-	-	-	627 -
Stage 2	-	-	-	-	496 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1120	-	-	-	197 786
Mov Cap-2 Maneuver	-	-	-	-	332 -
Stage 1	-	-	-	-	574 -
Stage 2	-	-	-	-	496 -

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1120	-	-	-	671
HCM Lane V/C Ratio	0.083	-	-	-	0.155
HCM Control Delay (s)	8.5	-	-	-	11.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.5

Intersection	
Intersection Delay, s/veh	16.2
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	135	54	153	185	69	193
Future Vol, veh/h	135	54	153	185	69	193
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	193	77	219	264	99	276
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	13	18.2	16
HCM LOS	B	C	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	26%
Vol Thru, %	45%	0%	0%	74%
Vol Right, %	55%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	338	135	54	262
LT Vol	0	135	0	69
Through Vol	153	0	0	193
RT Vol	185	0	54	0
Lane Flow Rate	483	193	77	374
Geometry Grp	2	7	7	2
Degree of Util (X)	0.679	0.385	0.128	0.577
Departure Headway (Hd)	5.063	7.19	5.967	5.552
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	715	500	599	648
Service Time	3.106	4.941	3.718	3.599
HCM Lane V/C Ratio	0.676	0.386	0.129	0.577
HCM Control Delay	18.2	14.4	9.6	16
HCM Lane LOS	C	B	A	C
HCM 95th-tile Q	5.3	1.8	0.4	3.7

Intersection						
Int Delay, s/veh	2.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	23	45	50	334	276	40
Future Vol, veh/h	23	45	50	334	276	40
Conflicting Peds, #/hr	0	1	0	0	0	116
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	64	71	477	394	57

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1158	343	567	0	-	0
Stage 1	539	-	-	-	-	-
Stage 2	619	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	203	654	1003	-	-	-
Stage 1	550	-	-	-	-	-
Stage 2	536	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	144	581	892	-	-	-
Mov Cap-2 Maneuver	144	-	-	-	-	-
Stage 1	437	-	-	-	-	-
Stage 2	477	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.8	1.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	892	-	287	-	-
HCM Lane V/C Ratio	0.08	-	0.338	-	-
HCM Control Delay (s)	9.4	0	23.8	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.3	-	1.4	-	-

Intersection	
Intersection Delay, s/veh	44.7
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	118	247	32	29	160	110	48	144	23	49	181	129
Future Vol, veh/h	118	247	32	29	160	110	48	144	23	49	181	129
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	146	305	40	36	198	136	59	178	28	60	223	159
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	46.6	74.6	40.6	20
HCM LOS	E	F	E	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	22%	100%	0%	10%	100%	0%	0%
Vol Thru, %	67%	0%	89%	54%	0%	100%	0%
Vol Right, %	11%	0%	11%	37%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	215	118	279	299	49	181	129
LT Vol	48	118	0	29	49	0	0
Through Vol	144	0	247	160	0	181	0
RT Vol	23	0	32	110	0	0	129
Lane Flow Rate	265	146	344	369	60	223	159
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	0.768	0.409	0.91	0.985	0.165	0.576	0.378
Departure Headway (Hd)	10.41	10.117	9.512	9.606	9.805	9.283	8.552
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	348	355	382	377	366	389	420
Service Time	8.181	7.887	7.281	7.372	7.568	7.045	6.314
HCM Lane V/C Ratio	0.761	0.411	0.901	0.979	0.164	0.573	0.379
HCM Control Delay	40.6	19.8	57.9	74.6	14.5	24	16.5
HCM Lane LOS	E	C	F	F	B	C	C
HCM 95th-tile Q	6.1	1.9	9.4	11.4	0.6	3.5	1.7

Intersection						
Int Delay, s/veh	5.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	9	3	3	6	5	0
Future Vol, veh/h	9	3	3	6	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	6	6	11	9	0

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	30	12	0	0	17
Stage 1	12	-	-	-	-
Stage 2	18	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	984	1069	-	-	1600
Stage 1	1011	-	-	-	-
Stage 2	1005	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	978	1069	-	-	1600
Mov Cap-2 Maneuver	978	-	-	-	-
Stage 1	1011	-	-	-	-
Stage 2	999	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	7.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	999	1600
HCM Lane V/C Ratio	-	-	0.022	0.006
HCM Control Delay (s)	-	-	8.7	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	23	394	357	14	11	15
Future Vol, veh/h	23	394	357	14	11	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	415	376	15	12	16

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	391	0	-	0	847 196
Stage 1	-	-	-	-	384 -
Stage 2	-	-	-	-	463 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	1166	-	-	-	316 813
Stage 1	-	-	-	-	659 -
Stage 2	-	-	-	-	633 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1166	-	-	-	309 813
Mov Cap-2 Maneuver	-	-	-	-	433 -
Stage 1	-	-	-	-	645 -
Stage 2	-	-	-	-	633 -

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1166	-	-	-	593
HCM Lane V/C Ratio	0.021	-	-	-	0.046
HCM Control Delay (s)	8.2	-	-	-	11.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	34	156	66	72	252
Future Vol, veh/h	46	34	156	66	72	252
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	37	171	73	79	277
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	9.1	9.3	11.1
HCM LOS	A	A	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	22%
Vol Thru, %	70%	0%	0%	78%
Vol Right, %	30%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	222	46	34	324
LT Vol	0	46	0	72
Through Vol	156	0	0	252
RT Vol	66	0	34	0
Lane Flow Rate	244	51	37	356
Geometry Grp	2	7	7	2
Degree of Util (X)	0.297	0.089	0.053	0.444
Departure Headway (Hd)	4.39	6.351	5.137	4.486
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	817	563	694	805
Service Time	2.419	4.104	2.89	2.512
HCM Lane V/C Ratio	0.299	0.091	0.053	0.442
HCM Control Delay	9.3	9.7	8.2	11.1
HCM Lane LOS	A	A	A	B
HCM 95th-tile Q	1.2	0.3	0.2	2.3

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	4	4	3	240	303	7
Future Vol, veh/h	4	4	3	240	303	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	5	4	289	365	8

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	666	187	373	0	-	0
Stage 1	369	-	-	-	-	-
Stage 2	297	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	408	824	1184	-	-	-
Stage 1	670	-	-	-	-	-
Stage 2	753	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	406	824	1184	-	-	-
Mov Cap-2 Maneuver	406	-	-	-	-	-
Stage 1	667	-	-	-	-	-
Stage 2	753	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1184	-	544	-	-
HCM Lane V/C Ratio	0.003	-	0.018	-	-
HCM Control Delay (s)	8.1	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	39.6
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	80	285	40	30	254	26	39	145	23	25	213	78
Future Vol, veh/h	80	285	40	30	254	26	39	145	23	25	213	78
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	92	328	46	34	292	30	45	167	26	29	245	90
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	47.9	55.3	28.9	20.6
HCM LOS	E	F	D	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	19%	100%	0%	10%	100%	0%	0%
Vol Thru, %	70%	0%	88%	82%	0%	100%	0%
Vol Right, %	11%	0%	12%	8%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	207	80	325	310	25	213	78
LT Vol	39	80	0	30	25	0	0
Through Vol	145	0	285	254	0	213	0
RT Vol	23	0	40	26	0	0	78
Lane Flow Rate	238	92	374	356	29	245	90
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	0.647	0.241	0.916	0.905	0.075	0.604	0.203
Departure Headway (Hd)	9.791	9.44	8.832	9.142	9.401	8.881	8.153
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	369	382	411	399	382	406	441
Service Time	7.553	7.178	6.57	6.88	7.139	6.619	5.89
HCM Lane V/C Ratio	0.645	0.241	0.91	0.892	0.076	0.603	0.204
HCM Control Delay	28.9	15.2	56	55.3	12.9	24.3	13
HCM Lane LOS	D	C	F	F	B	C	B
HCM 95th-tile Q	4.3	0.9	9.9	9.4	0.2	3.8	0.8

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**APPENDIX 3.3: EXISTING (2023) CONDITIONS TRAFFIC SIGNAL
WARRANT ANALYSIS WORKSHEETS**

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2023) Conditions - Weekday MD Peak Hour**

Major Street Name = **Appaloosa Dr.**

Total of Both Approaches (VPH) = **72**

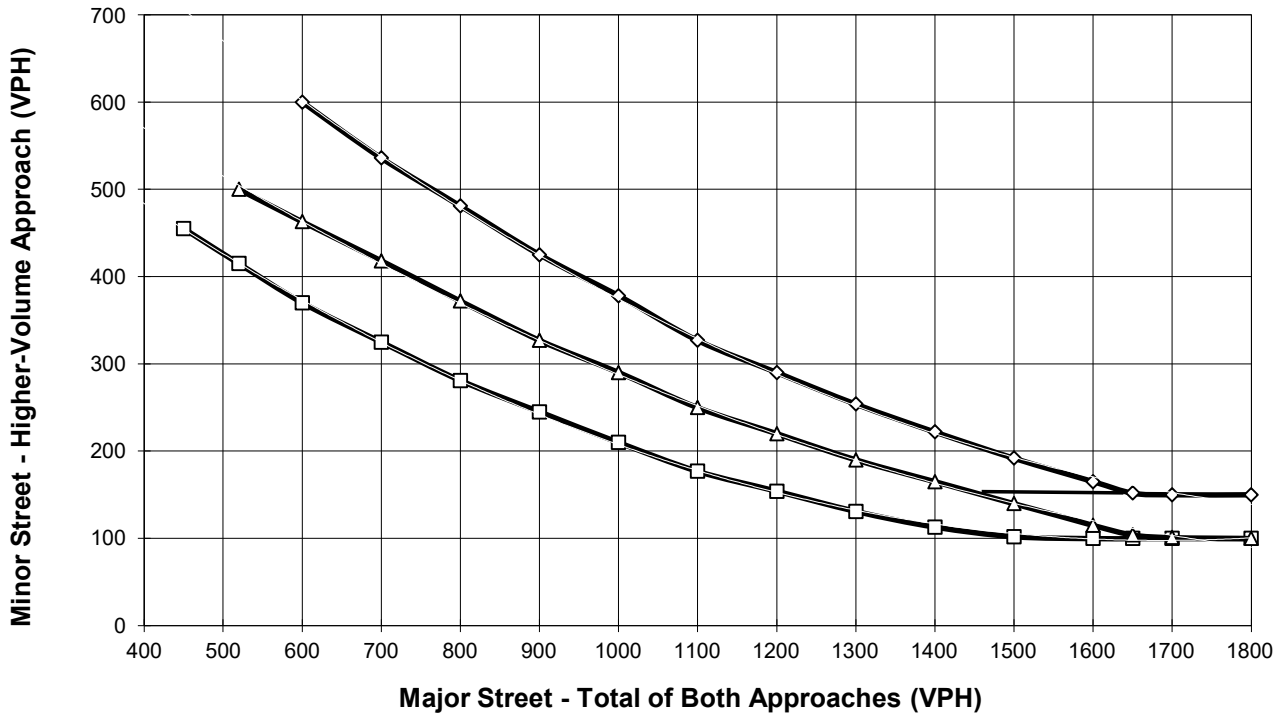
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Lipizzan Dr.**

High Volume Approach (VPH) = **58**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



- 1 Lane (Major) & 1 Lane (Minor)
- △— 2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)
- ◇— 2+ Lanes (Major) & 2+ Lanes (Minor)
- x— Major Street Approaches
- x— Minor Street Approaches

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



Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2023) Conditions - Weekday MD Peak Hour**

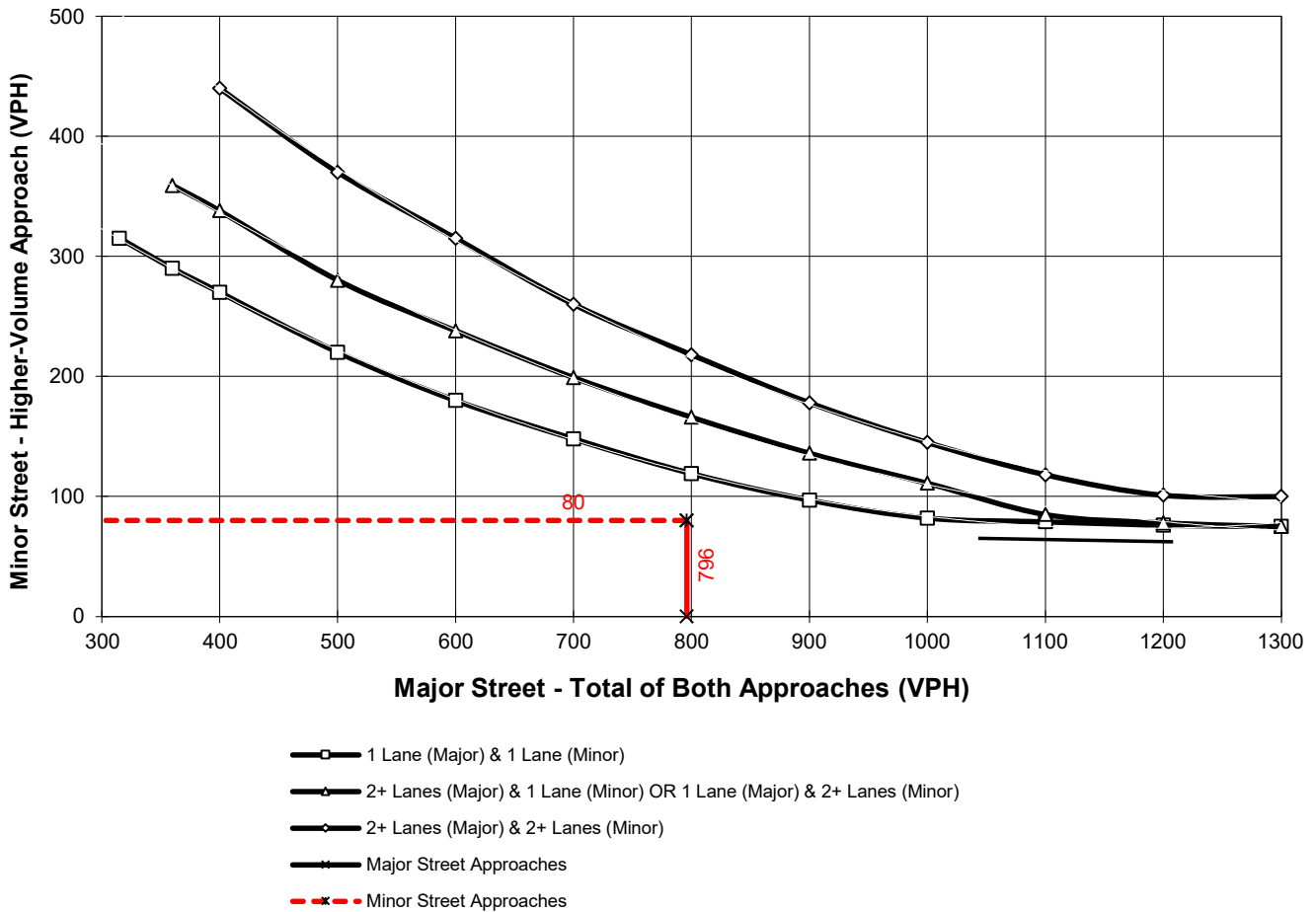
Major Street Name = **Cottonwood Av.**

Total of Both Approaches (VPH) = **796**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Lipizzan Dr.**

High Volume Approach (VPH) = **80**
 Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2023) Conditions - Weekday AM Peak Hour**

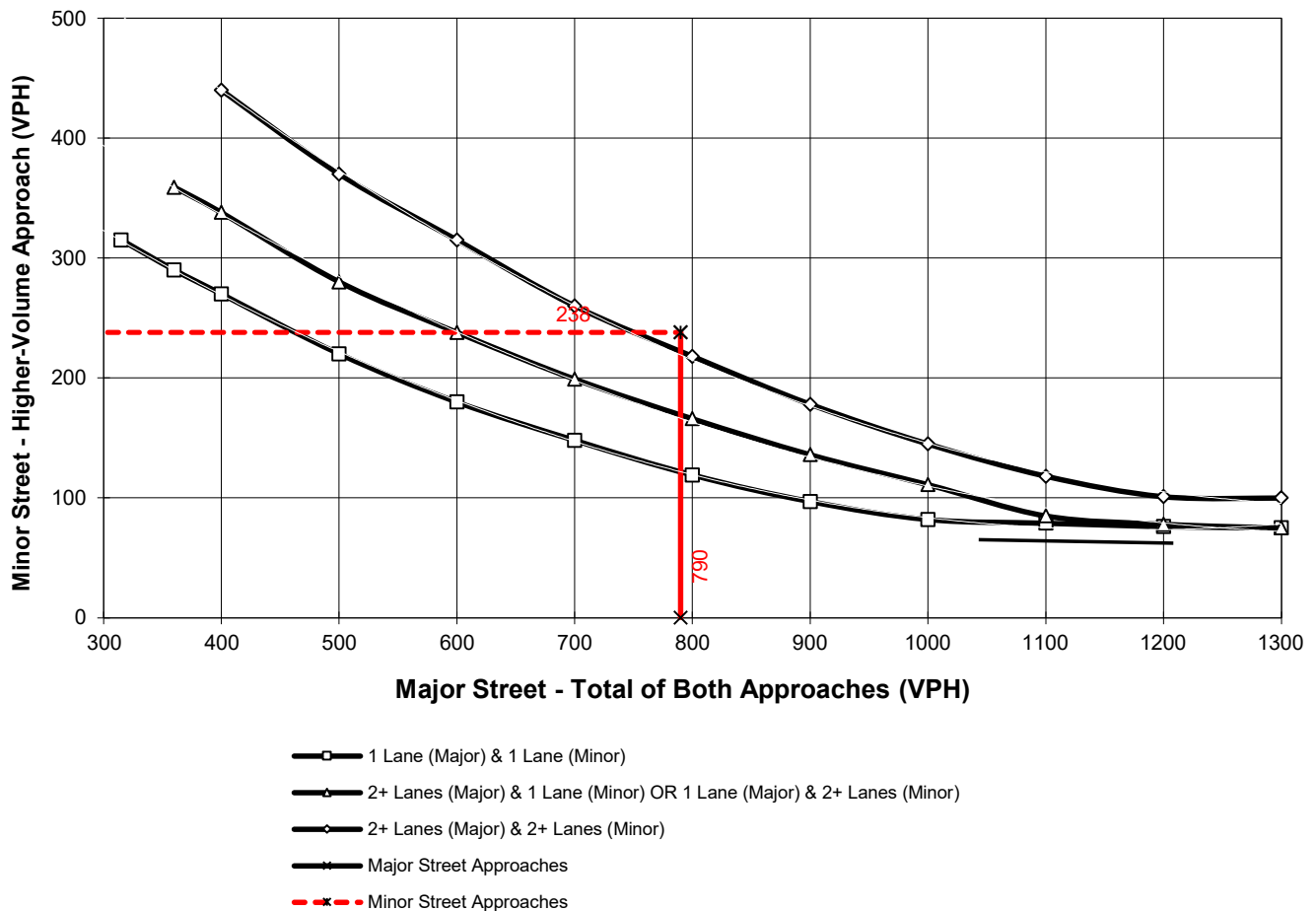
Major Street Name = **Lyon Av.**

Total of Both Approaches (VPH) = **790**
 Number of Approach Lanes Major Street = **1**

Minor Street Name = **De Anza Dr.**

High Volume Approach (VPH) = **238**
 Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2023) Conditions - Weekday MD Peak Hour**

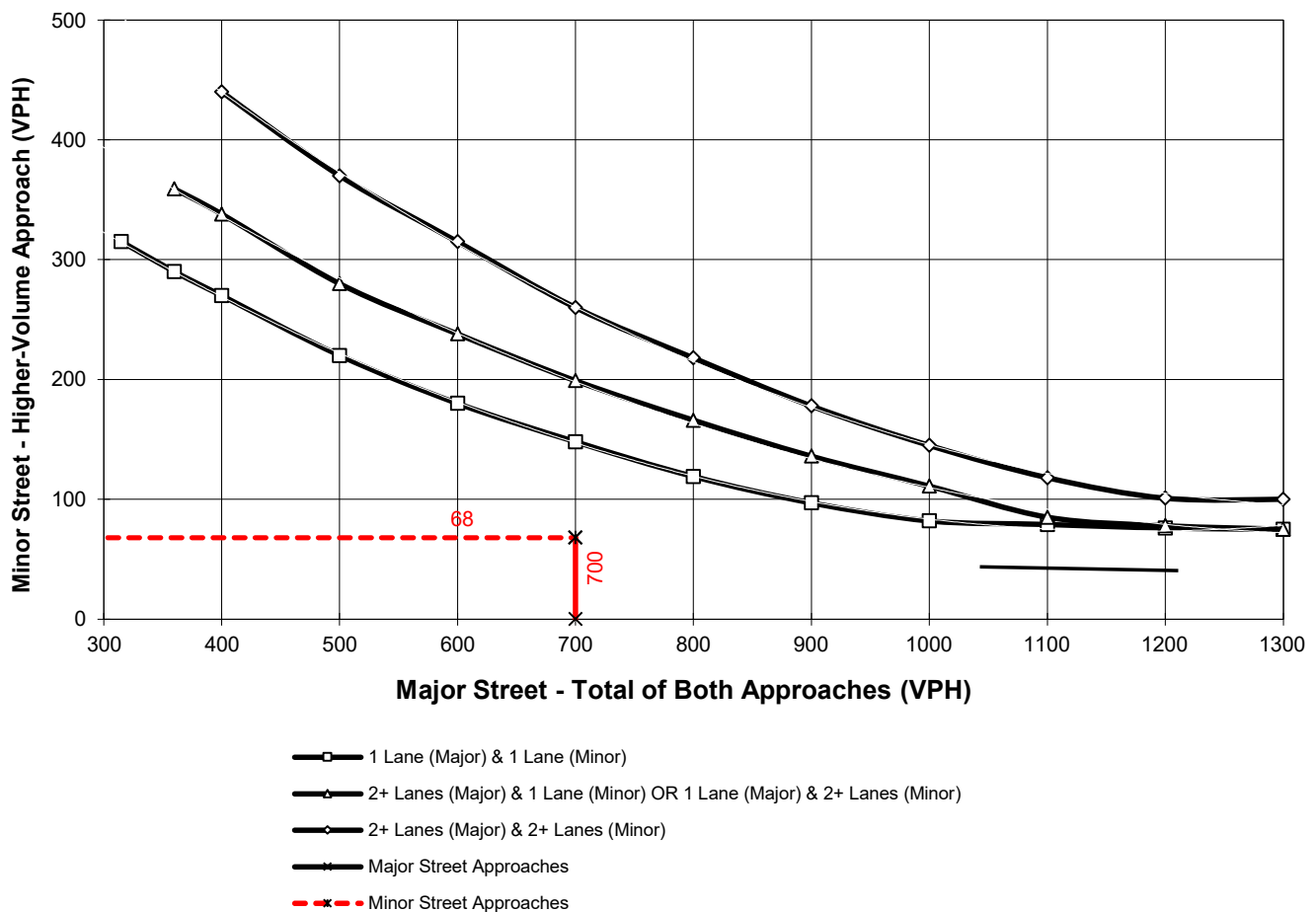
Major Street Name = **Lyon Av.**

Total of Both Approaches (VPH) = **700**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Appaloosa Dr.**

High Volume Approach (VPH) = **68**
 Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2023) Conditions - Weekday AM Peak Hour**

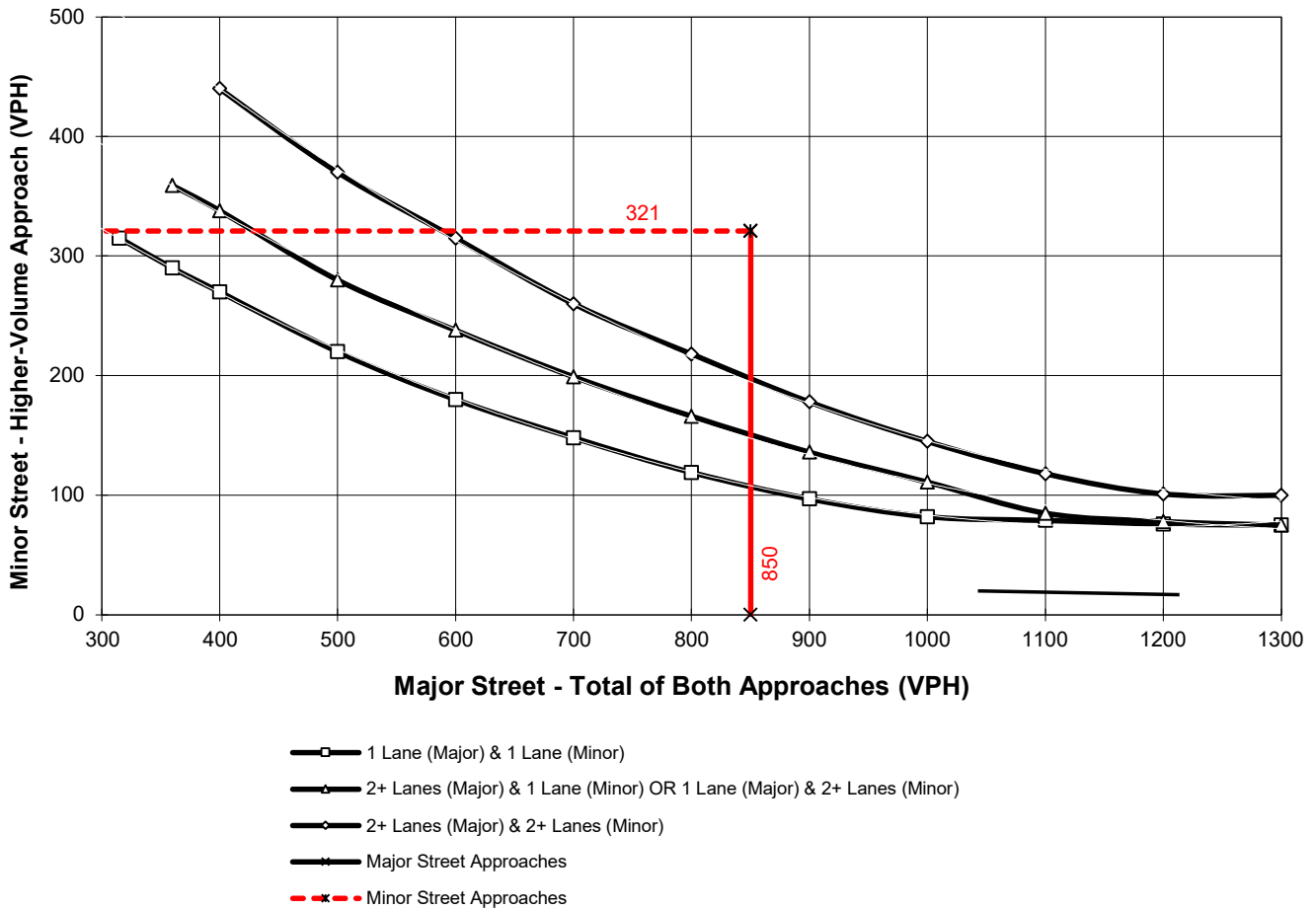
Major Street Name = **Cottonwood Av.**

Total of Both Approaches (VPH) = **850**
 Number of Approach Lanes Major Street = **1**

Minor Street Name = **Lyon Av.**

High Volume Approach (VPH) = **321**
 Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 5.1: EA (2026) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection						
Int Delay, s/veh	3.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	15	6	2	32	6	4
Future Vol, veh/h	15	6	2	32	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	7	2	39	7	5

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	41	22	0	0	41	0
Stage 1	22	-	-	-	-	-
Stage 2	19	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	970	1055	-	-	1568	-
Stage 1	1001	-	-	-	-	-
Stage 2	1004	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	966	1055	-	-	1568	-
Mov Cap-2 Maneuver	966	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	1000	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	4.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	990	1568
HCM Lane V/C Ratio	-	-	0.026	0.005
HCM Control Delay (s)	-	-	8.7	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	549	322	10	14	25
Future Vol, veh/h	29	549	322	10	14	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	624	366	11	16	28

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	377	0	-	0	1062 189
Stage 1	-	-	-	-	372 -
Stage 2	-	-	-	-	690 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	1180	-	-	-	233 821
Stage 1	-	-	-	-	668 -
Stage 2	-	-	-	-	497 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1180	-	-	-	226 821
Mov Cap-2 Maneuver	-	-	-	-	357 -
Stage 1	-	-	-	-	649 -
Stage 2	-	-	-	-	497 -

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1180	-	-	-	560
HCM Lane V/C Ratio	0.028	-	-	-	0.079
HCM Control Delay (s)	8.1	-	-	-	12
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Intersection Delay, s/veh	31.2
Intersection LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	175	77	304	271	73	191
Future Vol, veh/h	175	77	304	271	73	191
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	203	90	353	315	85	222
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	14.1	46.2	15
HCM LOS	B	E	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	28%
Vol Thru, %	53%	0%	0%	72%
Vol Right, %	47%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	575	175	77	264
LT Vol	0	175	0	73
Through Vol	304	0	0	191
RT Vol	271	0	77	0
Lane Flow Rate	669	203	90	307
Geometry Grp	2	7	7	2
Degree of Util (X)	0.954	0.425	0.156	0.507
Departure Headway (Hd)	5.136	7.515	6.288	5.943
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	702	478	568	605
Service Time	3.19	5.283	4.055	4.011
HCM Lane V/C Ratio	0.953	0.425	0.158	0.507
HCM Control Delay	46.2	15.8	10.2	15
HCM Lane LOS	E	C	B	B
HCM 95th-tile Q	13.9	2.1	0.5	2.9

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	53	11	7	612	331	38
Future Vol, veh/h	53	11	7	612	331	38
Conflicting Peds, #/hr	0	1	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	68	14	9	785	424	49

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1254	240	475	0	-	0
Stage 1	451	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	176	762	1085	-	-	-
Stage 1	609	-	-	-	-	-
Stage 2	440	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	173	760	1083	-	-	-
Mov Cap-2 Maneuver	173	-	-	-	-	-
Stage 1	599	-	-	-	-	-
Stage 2	439	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	35.2	0.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1083	-	199	-	-
HCM Lane V/C Ratio	0.008	-	0.412	-	-
HCM Control Delay (s)	8.4	0	35.2	-	-
HCM Lane LOS	A	A	E	-	-
HCM 95th %tile Q(veh)	0	-	1.9	-	-

Intersection	
Intersection Delay, s/veh	67.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	227	320	15	24	156	159	27	226	33	34	158	149
Future Vol, veh/h	227	320	15	24	156	159	27	226	33	34	158	149
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	264	372	17	28	181	185	31	263	38	40	184	173
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	70.7	107.2	72.4	19.9
HCM LOS	F	F	F	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	9%	100%	0%	7%	100%	0%	0%
Vol Thru, %	79%	0%	96%	46%	0%	100%	0%
Vol Right, %	12%	0%	4%	47%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	286	227	335	339	34	158	149
LT Vol	27	227	0	24	34	0	0
Through Vol	226	0	320	156	0	158	0
RT Vol	33	0	15	159	0	0	149
Lane Flow Rate	333	264	390	394	40	184	173
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	0.953	0.746	1.043	1.09	0.111	0.49	0.428
Departure Headway (Hd)	10.955	10.685	10.127	10.316	10.601	10.075	9.34
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	333	341	362	355	340	360	388
Service Time	8.655	8.385	7.827	8.016	8.301	7.775	7.04
HCM Lane V/C Ratio	1	0.774	1.077	1.11	0.118	0.511	0.446
HCM Control Delay	72.4	39	92.1	107.2	14.6	22.1	18.8
HCM Lane LOS	F	E	F	F	B	C	C
HCM 95th-tile Q	9.9	5.7	12.8	14.1	0.4	2.6	2.1

Intersection						
Int Delay, s/veh	5.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	TT		TT			TT
Traffic Vol, veh/h	69	7	5	56	8	3
Future Vol, veh/h	69	7	5	56	8	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	46	46	46	46	46	46
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	150	15	11	122	17	7

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	113	72	0	0	133
Stage 1	72	-	-	-	-
Stage 2	41	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	884	990	-	-	1452
Stage 1	951	-	-	-	-
Stage 2	981	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	873	990	-	-	1452
Mov Cap-2 Maneuver	873	-	-	-	-
Stage 1	951	-	-	-	-
Stage 2	969	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	5.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	883	1452
HCM Lane V/C Ratio	-	-	0.187	0.012
HCM Control Delay (s)	-	-	10	7.5
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.7	0

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	76	411	340	18	11	74
Future Vol, veh/h	76	411	340	18	11	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	99	534	442	23	14	96

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	465	0	-	0	1186 233
Stage 1	-	-	-	-	454 -
Stage 2	-	-	-	-	732 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	1095	-	-	-	195 770
Stage 1	-	-	-	-	607 -
Stage 2	-	-	-	-	475 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1095	-	-	-	177 770
Mov Cap-2 Maneuver	-	-	-	-	313 -
Stage 1	-	-	-	-	552 -
Stage 2	-	-	-	-	475 -

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1095	-	-	-	648
HCM Lane V/C Ratio	0.09	-	-	-	0.17
HCM Control Delay (s)	8.6	-	-	-	11.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.6

Intersection	
Intersection Delay, s/veh	18.4
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	143	57	162	196	73	205
Future Vol, veh/h	143	57	162	196	73	205
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	204	81	231	280	104	293
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	13.8	21.4	17.8
HCM LOS	B	C	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	26%
Vol Thru, %	45%	0%	0%	74%
Vol Right, %	55%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	358	143	57	278
LT Vol	0	143	0	73
Through Vol	162	0	0	205
RT Vol	196	0	57	0
Lane Flow Rate	511	204	81	397
Geometry Grp	2	7	7	2
Degree of Util (X)	0.736	0.417	0.138	0.626
Departure Headway (Hd)	5.179	7.341	6.116	5.678
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	696	490	584	635
Service Time	3.232	5.103	3.878	3.736
HCM Lane V/C Ratio	0.734	0.416	0.139	0.625
HCM Control Delay	21.4	15.3	9.9	17.8
HCM Lane LOS	C	C	A	C
HCM 95th-tile Q	6.5	2	0.5	4.4

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	24	48	53	354	293	42
Future Vol, veh/h	24	48	53	354	293	42
Conflicting Peds, #/hr	0	1	0	0	0	116
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	69	76	506	419	60

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1223	357	595	0	-	0
Stage 1	565	-	-	-	-	-
Stage 2	658	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	184	640	979	-	-	-
Stage 1	533	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	128	569	871	-	-	-
Mov Cap-2 Maneuver	128	-	-	-	-	-
Stage 1	417	-	-	-	-	-
Stage 2	457	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	26.9	1.2	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	871	-	265	-	-
HCM Lane V/C Ratio	0.087	-	0.388	-	-
HCM Control Delay (s)	9.5	0	26.9	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0.3	-	1.8	-	-

Intersection	
Intersection Delay, s/veh	56.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	125	262	34	31	170	117	51	153	24	52	192	137
Future Vol, veh/h	125	262	34	31	170	117	51	153	24	52	192	137
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	154	323	42	38	210	144	63	189	30	64	237	169
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	57.1	102.9	46.6	21.7
HCM LOS	F	F	E	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	22%	100%	0%	10%	100%	0%	0%
Vol Thru, %	67%	0%	89%	53%	0%	100%	0%
Vol Right, %	11%	0%	11%	37%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	228	125	296	318	52	192	137
LT Vol	51	125	0	31	52	0	0
Through Vol	153	0	262	170	0	192	0
RT Vol	24	0	34	117	0	0	137
Lane Flow Rate	281	154	365	393	64	237	169
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	0.807	0.435	0.97	1.081	0.175	0.612	0.404
Departure Headway (Hd)	10.906	10.567	9.958	9.911	10.208	9.684	8.951
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	335	343	365	365	354	375	404
Service Time	8.606	8.267	7.658	7.671	7.908	7.384	6.651
HCM Lane V/C Ratio	0.839	0.449	1	1.077	0.181	0.632	0.418
HCM Control Delay	46.6	21.2	72.2	102.9	15.1	26.5	17.6
HCM Lane LOS	E	C	F	F	C	D	C
HCM 95th-tile Q	6.8	2.1	10.8	14.1	0.6	3.9	1.9

Intersection						
Int Delay, s/veh	5.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	10	3	3	6	5	0
Future Vol, veh/h	10	3	3	6	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	6	6	11	9	0

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	30	12	0	0	17
Stage 1	12	-	-	-	-
Stage 2	18	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	984	1069	-	-	1600
Stage 1	1011	-	-	-	-
Stage 2	1005	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	978	1069	-	-	1600
Mov Cap-2 Maneuver	978	-	-	-	-
Stage 1	1011	-	-	-	-
Stage 2	999	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	7.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	998	1600
HCM Lane V/C Ratio	-	-	0.024	0.006
HCM Control Delay (s)	-	-	8.7	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	24	418	379	15	12	16
Future Vol, veh/h	24	418	379	15	12	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	440	399	16	13	17

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	415	0	-	0	897 208
Stage 1	-	-	-	-	407 -
Stage 2	-	-	-	-	490 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	1142	-	-	-	294 799
Stage 1	-	-	-	-	641 -
Stage 2	-	-	-	-	615 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1142	-	-	-	288 799
Mov Cap-2 Maneuver	-	-	-	-	415 -
Stage 1	-	-	-	-	627 -
Stage 2	-	-	-	-	615 -

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1142	-	-	-	572
HCM Lane V/C Ratio	0.022	-	-	-	0.052
HCM Control Delay (s)	8.2	-	-	-	11.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	49	36	166	70	76	267
Future Vol, veh/h	49	36	166	70	76	267
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	40	182	77	84	293
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	9.2	9.5	11.6
HCM LOS	A	A	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	22%
Vol Thru, %	70%	0%	0%	78%
Vol Right, %	30%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	236	49	36	343
LT Vol	0	49	0	76
Through Vol	166	0	0	267
RT Vol	70	0	36	0
Lane Flow Rate	259	54	40	377
Geometry Grp	2	7	7	2
Degree of Util (X)	0.319	0.096	0.057	0.474
Departure Headway (Hd)	4.435	6.432	5.218	4.523
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	809	555	682	795
Service Time	2.469	4.194	2.979	2.553
HCM Lane V/C Ratio	0.32	0.097	0.059	0.474
HCM Control Delay	9.5	9.9	8.3	11.6
HCM Lane LOS	A	A	A	B
HCM 95th-tile Q	1.4	0.3	0.2	2.6

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	4	4	3	255	322	7
Future Vol, veh/h	4	4	3	255	322	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	5	4	307	388	8

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	707	198	396	0	0
Stage 1	392	-	-	-	-
Stage 2	315	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-
Pot Cap-1 Maneuver	385	811	1161	-	-
Stage 1	653	-	-	-	-
Stage 2	739	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	383	811	1161	-	-
Mov Cap-2 Maneuver	383	-	-	-	-
Stage 1	650	-	-	-	-
Stage 2	739	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.1	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1161	-	520	-	-
HCM Lane V/C Ratio	0.003	-	0.019	-	-
HCM Control Delay (s)	8.1	0	12.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	51.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↕			↕		↖	↗	↖
Traffic Vol, veh/h	85	302	42	32	270	28	41	154	24	27	226	83
Future Vol, veh/h	85	302	42	32	270	28	41	154	24	27	226	83
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	98	347	48	37	310	32	47	177	28	31	260	95
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	64.6	74.3	33	23.1
HCM LOS	F	F	D	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	19%	100%	0%	10%	100%	0%	0%
Vol Thru, %	70%	0%	88%	82%	0%	100%	0%
Vol Right, %	11%	0%	12%	8%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	219	85	344	330	27	226	83
LT Vol	41	85	0	32	27	0	0
Through Vol	154	0	302	270	0	226	0
RT Vol	24	0	42	28	0	0	83
Lane Flow Rate	252	98	395	379	31	260	95
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	0.701	0.264	1	0.989	0.083	0.66	0.223
Departure Headway (Hd)	10.019	9.888	9.278	9.39	9.651	9.152	8.417
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	365	365	395	391	375	400	429
Service Time	7.687	7.588	6.978	7.086	7.314	6.813	6.112
HCM Lane V/C Ratio	0.69	0.268	1	0.969	0.083	0.65	0.221
HCM Control Delay	33	16.1	76.6	74.3	13.2	27.8	13.5
HCM Lane LOS	D	C	F	F	B	D	B
HCM 95th-tile Q	5.1	1	12.1	11.7	0.3	4.6	0.8

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APPENDIX 5.2: EAP (2026) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection						
Int Delay, s/veh	3.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	15	14	13	32	34	28
Future Vol, veh/h	15	14	13	32	34	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	17	16	39	41	34

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	152	36	0	0	55
Stage 1	36	-	-	-	-
Stage 2	116	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	840	1037	-	-	1550
Stage 1	986	-	-	-	-
Stage 2	909	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	817	1037	-	-	1550
Mov Cap-2 Maneuver	817	-	-	-	-
Stage 1	986	-	-	-	-
Stage 2	884	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	4.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	910	1550
HCM Lane V/C Ratio	-	-	0.039	0.027
HCM Control Delay (s)	-	-	9.1	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	549	322	14	18	45
Future Vol, veh/h	36	549	322	14	18	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	624	366	16	20	51

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	382	0	-	0	1080 191
Stage 1	-	-	-	-	374 -
Stage 2	-	-	-	-	706 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	1175	-	-	-	227 819
Stage 1	-	-	-	-	667 -
Stage 2	-	-	-	-	488 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1175	-	-	-	219 819
Mov Cap-2 Maneuver	-	-	-	-	350 -
Stage 1	-	-	-	-	644 -
Stage 2	-	-	-	-	488 -

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1175	-	-	-	592
HCM Lane V/C Ratio	0.035	-	-	-	0.121
HCM Control Delay (s)	8.2	-	-	-	11.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection	
Intersection Delay, s/veh	38.6
Intersection LOS	E

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	176	77	328	275	73	199
Future Vol, veh/h	176	77	328	275	73	199
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	205	90	381	320	85	231
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	14.4	59.1	15.7
HCM LOS	B	F	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	27%
Vol Thru, %	54%	0%	0%	73%
Vol Right, %	46%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	603	176	77	272
LT Vol	0	176	0	73
Through Vol	328	0	0	199
RT Vol	275	0	77	0
Lane Flow Rate	701	205	90	316
Geometry Grp	2	7	7	2
Degree of Util (X)	1.009	0.434	0.159	0.528
Departure Headway (Hd)	5.182	7.626	6.398	6.014
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	694	471	558	595
Service Time	3.242	5.399	4.17	4.09
HCM Lane V/C Ratio	1.01	0.435	0.161	0.531
HCM Control Delay	59.1	16.2	10.4	15.7
HCM Lane LOS	F	C	B	C
HCM 95th-tile Q	16.5	2.2	0.6	3.1

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	
Traffic Vol, veh/h	0	28	0	693	370	8
Future Vol, veh/h	0	28	0	693	370	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	30	0	753	402	9

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	206	-	0	0
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	800	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	800	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 800	-	-
HCM Lane V/C Ratio	- 0.038	-	-
HCM Control Delay (s)	- 9.7	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q(veh)	- 0.1	-	-

Intersection						
Int Delay, s/veh	5.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	81	11	14	612	359	39
Future Vol, veh/h	81	11	14	612	359	39
Conflicting Peds, #/hr	0	1	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	104	14	18	785	460	50

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1308	258	512	0	-	0
Stage 1	487	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	163	742	1051	-	-	-
Stage 1	584	-	-	-	-	-
Stage 2	431	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	157	740	1049	-	-	-
Mov Cap-2 Maneuver	157	-	-	-	-	-
Stage 1	565	-	-	-	-	-
Stage 2	430	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	61.5	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1049	-	173	-	-
HCM Lane V/C Ratio	0.017	-	0.682	-	-
HCM Control Delay (s)	8.5	0	61.5	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0.1	-	4	-	-

Intersection	
Intersection Delay, s/veh	75.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↕			↕		↖	↗	↖
Traffic Vol, veh/h	227	320	19	24	159	160	28	232	33	46	174	149
Future Vol, veh/h	227	320	19	24	159	160	28	232	33	46	174	149
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	264	372	22	28	185	186	33	270	38	53	202	173
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	79.4	121.9	82.8	21.3
HCM LOS	F	F	F	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	10%	100%	0%	7%	100%	0%	0%
Vol Thru, %	79%	0%	94%	46%	0%	100%	0%
Vol Right, %	11%	0%	6%	47%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	293	227	339	343	46	174	149
LT Vol	28	227	0	24	46	0	0
Through Vol	232	0	320	159	0	174	0
RT Vol	33	0	19	160	0	0	149
Lane Flow Rate	341	264	394	399	53	202	173
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	0.991	0.763	1.08	1.131	0.151	0.545	0.433
Departure Headway (Hd)	11.242	10.997	10.429	10.598	10.781	10.256	9.519
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	324	333	351	347	335	354	381
Service Time	8.942	8.697	8.129	8.298	8.481	7.956	7.219
HCM Lane V/C Ratio	1.052	0.793	1.123	1.15	0.158	0.571	0.454
HCM Control Delay	82.8	41.7	104.6	121.9	15.4	24.6	19.3
HCM Lane LOS	F	E	F	F	C	C	C
HCM 95th-tile Q	10.7	6	13.7	15.1	0.5	3.1	2.1

Intersection						
Int Delay, s/veh	6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	69	30	35	56	31	23
Future Vol, veh/h	69	30	35	56	31	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	46	46	46	46	46	46
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	150	65	76	122	67	50

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	321	137	0	0	198
Stage 1	137	-	-	-	-
Stage 2	184	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	673	911	-	-	1375
Stage 1	890	-	-	-	-
Stage 2	848	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	639	911	-	-	1375
Mov Cap-2 Maneuver	639	-	-	-	-
Stage 1	890	-	-	-	-
Stage 2	806	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	4.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	703	1375
HCM Lane V/C Ratio	-	-	0.306	0.049
HCM Control Delay (s)	-	-	12.4	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1.3	0.2

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	95	411	340	29	14	90
Future Vol, veh/h	95	411	340	29	14	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	123	534	442	38	18	117

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	480	0	-	0	1241 240
Stage 1	-	-	-	-	461 -
Stage 2	-	-	-	-	780 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	1081	-	-	-	180 762
Stage 1	-	-	-	-	602 -
Stage 2	-	-	-	-	451 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1081	-	-	-	159 762
Mov Cap-2 Maneuver	-	-	-	-	295 -
Stage 1	-	-	-	-	533 -
Stage 2	-	-	-	-	451 -

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1081	-	-	-	628
HCM Lane V/C Ratio	0.114	-	-	-	0.215
HCM Control Delay (s)	8.8	-	-	-	12.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.8

Intersection	
Intersection Delay, s/veh	21.7
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	147	57	182	199	73	228
Future Vol, veh/h	147	57	182	199	73	228
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	210	81	260	284	104	326
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	14.4	26.3	20.9
HCM LOS	B	D	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	24%
Vol Thru, %	48%	0%	0%	76%
Vol Right, %	52%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	381	147	57	301
LT Vol	0	147	0	73
Through Vol	182	0	0	228
RT Vol	199	0	57	0
Lane Flow Rate	544	210	81	430
Geometry Grp	2	7	7	2
Degree of Util (X)	0.801	0.439	0.142	0.691
Departure Headway (Hd)	5.3	7.522	6.295	5.782
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	680	477	567	623
Service Time	3.364	5.296	4.068	3.85
HCM Lane V/C Ratio	0.8	0.44	0.143	0.69
HCM Control Delay	26.3	16.1	10.1	20.9
HCM Lane LOS	D	C	B	C
HCM 95th-tile Q	8.1	2.2	0.5	5.5

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	
Traffic Vol, veh/h	0	23	0	402	339	23
Future Vol, veh/h	0	23	0	402	339	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	25	0	437	368	25

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	197	-	0	0
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	811	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	811	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	811	-	-
HCM Lane V/C Ratio	-	0.031	-	-
HCM Control Delay (s)	-	9.6	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Intersection						
Int Delay, s/veh	8.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	47	48	72	354	316	46
Future Vol, veh/h	47	48	72	354	316	46
Conflicting Peds, #/hr	0	1	0	0	0	116
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	67	69	103	506	451	66

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1312	376	633	0	-	0
Stage 1	600	-	-	-	-	-
Stage 2	712	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	162	622	948	-	-	-
Stage 1	512	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	106	553	843	-	-	-
Mov Cap-2 Maneuver	106	-	-	-	-	-
Stage 1	378	-	-	-	-	-
Stage 2	432	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	69.8	1.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	843	-	179	-	-
HCM Lane V/C Ratio	0.122	-	0.758	-	-
HCM Control Delay (s)	9.9	0	69.8	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0.4	-	4.9	-	-

Intersection	
Intersection Delay, s/veh	67.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	125	262	37	31	178	121	55	168	24	62	205	137
Future Vol, veh/h	125	262	37	31	178	121	55	168	24	62	205	137
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	154	323	46	38	220	149	68	207	30	77	253	169
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	64.7	128.4	61.3	24.2
HCM LOS	F	F	F	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	22%	100%	0%	9%	100%	0%	0%
Vol Thru, %	68%	0%	88%	54%	0%	100%	0%
Vol Right, %	10%	0%	12%	37%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	247	125	299	330	62	205	137
LT Vol	55	125	0	31	62	0	0
Through Vol	168	0	262	178	0	205	0
RT Vol	24	0	37	121	0	0	137
Lane Flow Rate	305	154	369	407	77	253	169
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	0.893	0.444	1.003	1.153	0.211	0.664	0.411
Departure Headway (Hd)	11.256	11.038	10.421	10.347	10.578	10.053	9.317
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	323	329	351	354	341	362	389
Service Time	8.956	8.738	8.121	8.047	8.278	7.753	7.017
HCM Lane V/C Ratio	0.944	0.468	1.051	1.15	0.226	0.699	0.434
HCM Control Delay	61.3	22.3	82.4	128.4	16.1	30.5	18.4
HCM Lane LOS	F	C	F	F	C	D	C
HCM 95th-tile Q	8.4	2.2	11.5	16	0.8	4.6	2

Intersection						
Int Delay, s/veh	4.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	10	30	39	6	24	16
Future Vol, veh/h	10	30	39	6	24	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	56	72	11	44	30

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	196	78	0	0	83
Stage 1	78	-	-	-	-
Stage 2	118	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	793	983	-	-	1514
Stage 1	945	-	-	-	-
Stage 2	907	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	769	983	-	-	1514
Mov Cap-2 Maneuver	769	-	-	-	-
Stage 1	945	-	-	-	-
Stage 2	880	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	4.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	919	1514
HCM Lane V/C Ratio	-	-	0.081	0.029
HCM Control Delay (s)	-	-	9.3	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	47	418	379	29	15	29
Future Vol, veh/h	47	418	379	29	15	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	440	399	31	16	31

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	430	0	-	0	953 215
Stage 1	-	-	-	-	415 -
Stage 2	-	-	-	-	538 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	1128	-	-	-	272 790
Stage 1	-	-	-	-	636 -
Stage 2	-	-	-	-	584 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1128	-	-	-	260 790
Mov Cap-2 Maneuver	-	-	-	-	391 -
Stage 1	-	-	-	-	609 -
Stage 2	-	-	-	-	584 -

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1128	-	-	-	586
HCM Lane V/C Ratio	0.044	-	-	-	0.079
HCM Control Delay (s)	8.3	-	-	-	11.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Intersection Delay, s/veh	11.2
Intersection LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	54	36	182	73	76	294
Future Vol, veh/h	54	36	182	73	76	294
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	40	200	80	84	323
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	9.4	10	12.4
HCM LOS	A	A	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	21%
Vol Thru, %	71%	0%	0%	79%
Vol Right, %	29%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	255	54	36	370
LT Vol	0	54	0	76
Through Vol	182	0	0	294
RT Vol	73	0	36	0
Lane Flow Rate	280	59	40	407
Geometry Grp	2	7	7	2
Degree of Util (X)	0.35	0.108	0.059	0.516
Departure Headway (Hd)	4.499	6.543	5.328	4.568
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	796	545	667	789
Service Time	2.541	4.317	3.101	2.605
HCM Lane V/C Ratio	0.352	0.108	0.06	0.516
HCM Control Delay	10	10.1	8.4	12.4
HCM Lane LOS	A	B	A	B
HCM 95th-tile Q	1.6	0.4	0.2	3

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	
Traffic Vol, veh/h	0	19	0	278	334	27
Future Vol, veh/h	0	19	0	278	334	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	21	0	302	363	29

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	196	-	0	0
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	812	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	812	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 812	-	-
HCM Lane V/C Ratio	- 0.025	-	-
HCM Control Delay (s)	- 9.5	-	-
HCM Lane LOS	- A	-	-
HCM 95th %tile Q(veh)	- 0.1	-	-

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	23	4	26	255	341	12
Future Vol, veh/h	23	4	26	255	341	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	5	31	307	411	14

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	787	213	425	0	-	0
Stage 1	418	-	-	-	-	-
Stage 2	369	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	344	793	1133	-	-	-
Stage 1	633	-	-	-	-	-
Stage 2	698	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	333	793	1133	-	-	-
Mov Cap-2 Maneuver	333	-	-	-	-	-
Stage 1	612	-	-	-	-	-
Stage 2	698	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.9	0.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1133	-	364	-	-
HCM Lane V/C Ratio	0.028	-	0.089	-	-
HCM Control Delay (s)	8.3	0	15.9	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Intersection Delay, s/veh	61.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↕			↕		↖	↗	↖
Traffic Vol, veh/h	85	302	45	32	279	33	46	172	24	35	237	83
Future Vol, veh/h	85	302	45	32	279	33	46	172	24	35	237	83
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	98	347	52	37	321	38	53	198	28	40	272	95
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	71.4	98.2	41.7	25.9
HCM LOS	F	F	E	D

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	19%	100%	0%	9%	100%	0%	0%
Vol Thru, %	71%	0%	87%	81%	0%	100%	0%
Vol Right, %	10%	0%	13%	10%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	242	85	347	344	35	237	83
LT Vol	46	85	0	32	35	0	0
Through Vol	172	0	302	279	0	237	0
RT Vol	24	0	45	33	0	0	83
Lane Flow Rate	278	98	399	395	40	272	95
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	0.773	0.267	1.024	1.067	0.109	0.697	0.226
Departure Headway (Hd)	10.654	10.297	9.678	9.883	10.171	9.648	8.915
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	342	351	379	372	354	376	405
Service Time	8.354	7.997	7.378	7.583	7.871	7.348	6.615
HCM Lane V/C Ratio	0.813	0.279	1.053	1.062	0.113	0.723	0.235
HCM Control Delay	41.7	16.7	84.8	98.2	14.1	31.8	14.2
HCM Lane LOS	E	C	F	F	B	D	B
HCM 95th-tile Q	6.2	1.1	12.5	13.7	0.4	5.1	0.9

APPENDIX 5.3: EA (2026) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EA (2026) Conditions - Weekday MD Peak Hour**

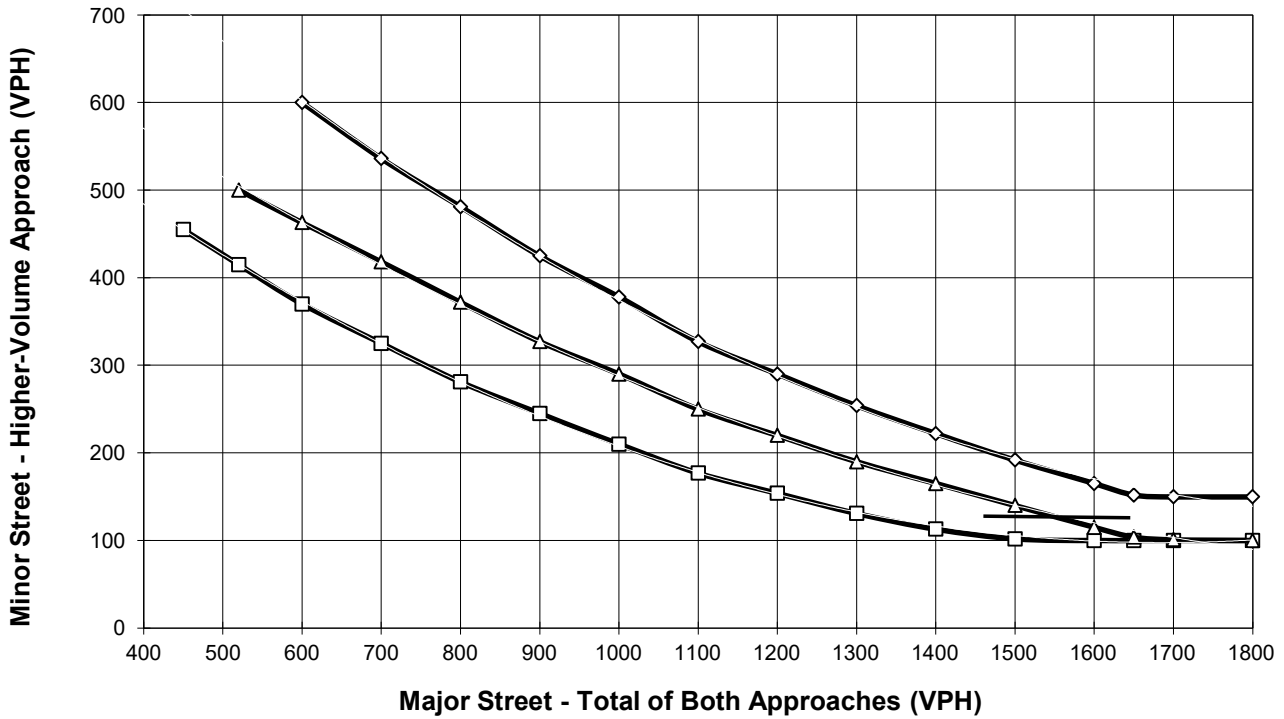
Major Street Name = **Appaloosa Dr.**

Total of Both Approaches (VPH) = **76**
 Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Lipizzan Dr.**

High Volume Approach (VPH) = **62**
 Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



- 1 Lane (Major) & 1 Lane (Minor)
- △— 2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)
- ◇— 2+ Lanes (Major) & 2+ Lanes (Minor)
- x— Major Street Approaches
- x— Minor Street Approaches

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

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EA (2026) Conditions - Weekday MD Peak Hour**

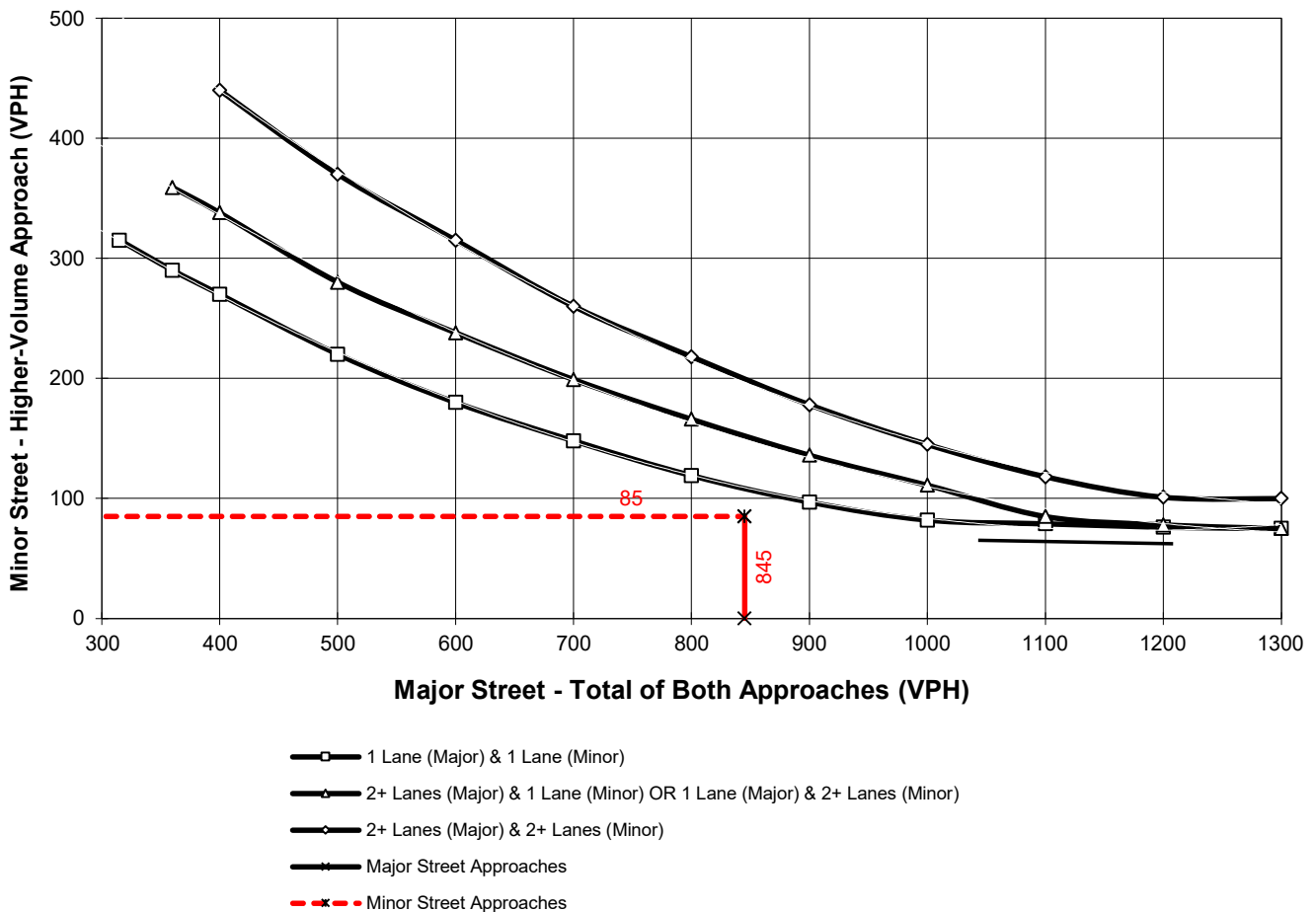
Major Street Name = **Cottonwood Av.**

Total of Both Approaches (VPH) = **845**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Lipizzan Dr.**

High Volume Approach (VPH) = **85**
 Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EA (2026) Conditions - Weekday MD Peak Hour**

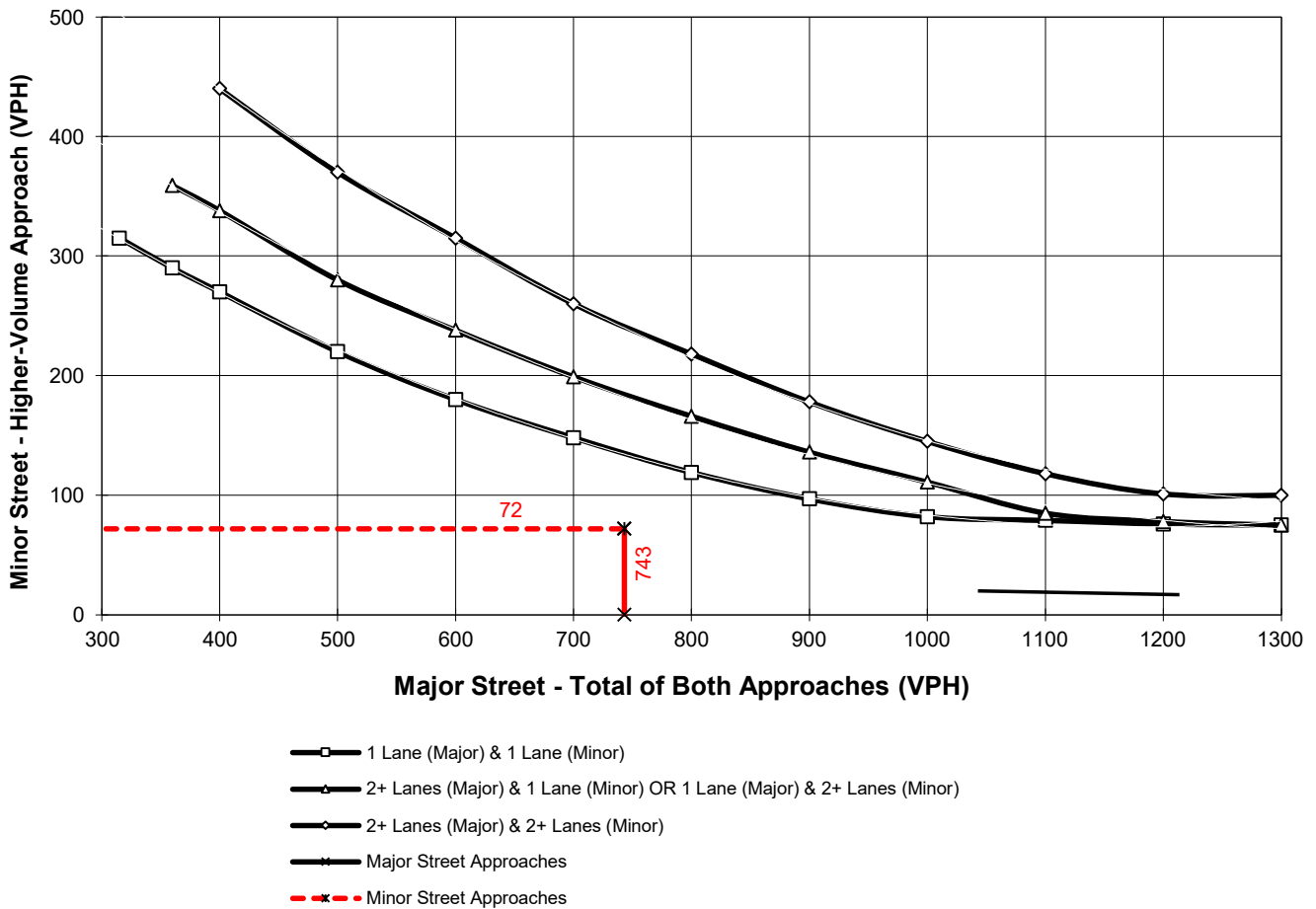
Major Street Name = **Lyon Av.**

Total of Both Approaches (VPH) = **743**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Appaloosa Dr.**

High Volume Approach (VPH) = **72**
 Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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**APPENDIX 5.4: EAP (2026) CONDITIONS TRAFFIC SIGNAL WARRANT
ANALYSIS WORKSHEETS**

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAP (2026) Conditions - Weekday MD Peak Hour**

Major Street Name = **Lipizzan Dr.**

Total of Both Approaches (VPH) = **146**

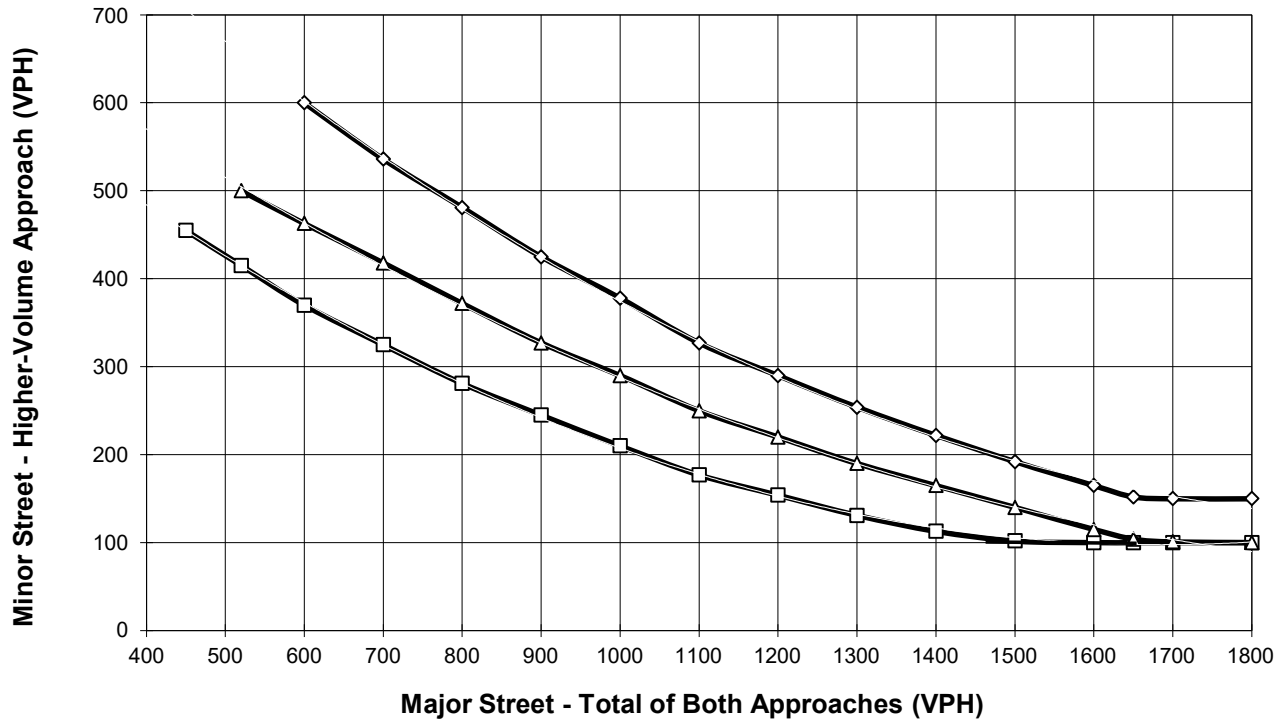
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Appaloosa Dr.**

High Volume Approach (VPH) = **99**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



- 1 Lane (Major) & 1 Lane (Minor)
- △— 2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)
- ◇— 2+ Lanes (Major) & 2+ Lanes (Minor)
- x— Major Street Approaches
- x— Minor Street Approaches

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

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2026) Conditions - Weekday MD Peak Hour**

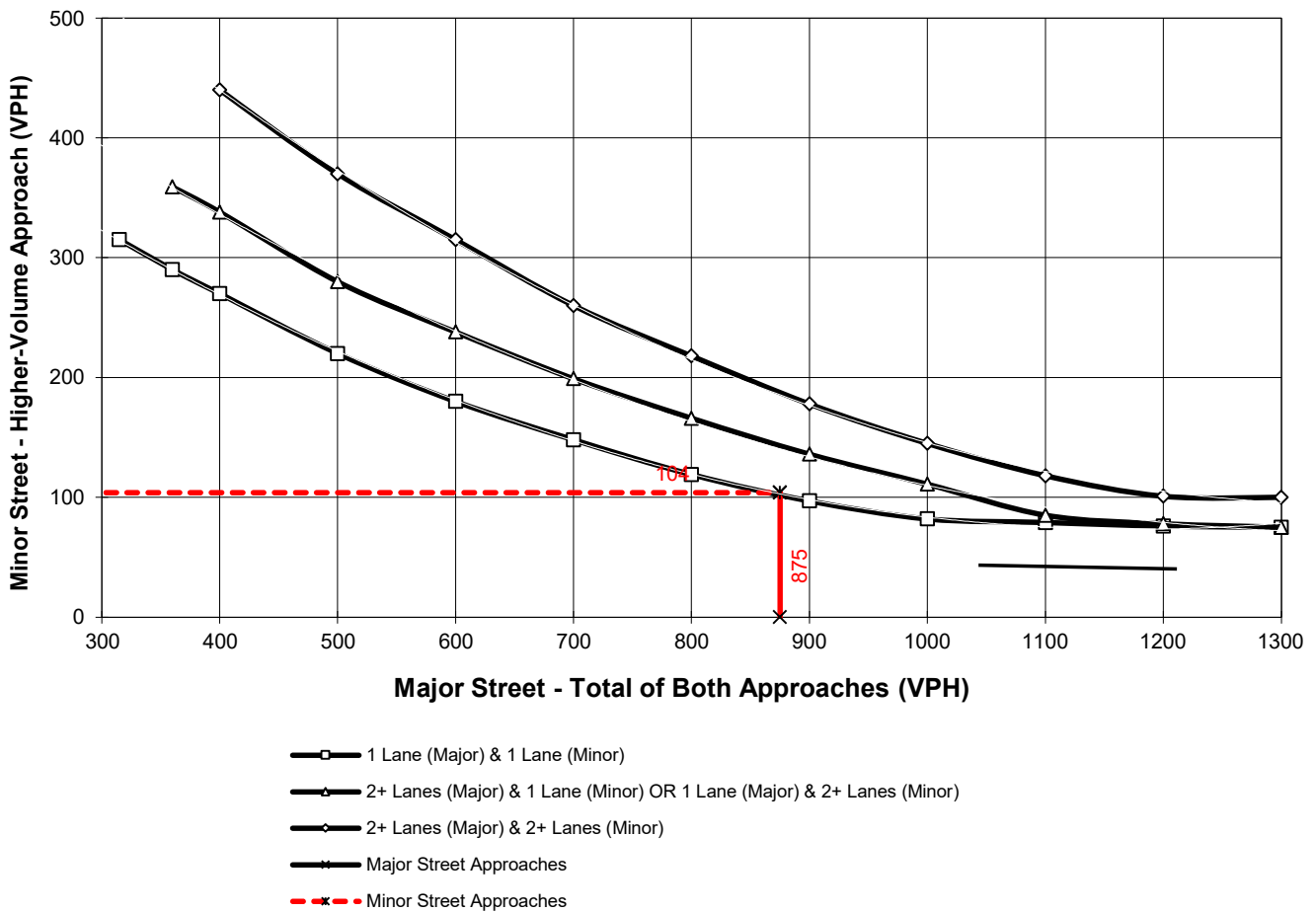
Major Street Name = **Cottonwood Av.**

Total of Both Approaches (VPH) = **875**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Lipizzan Dr.**

High Volume Approach (VPH) = **104**
 Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2026) Conditions - Weekday MD Peak Hour**

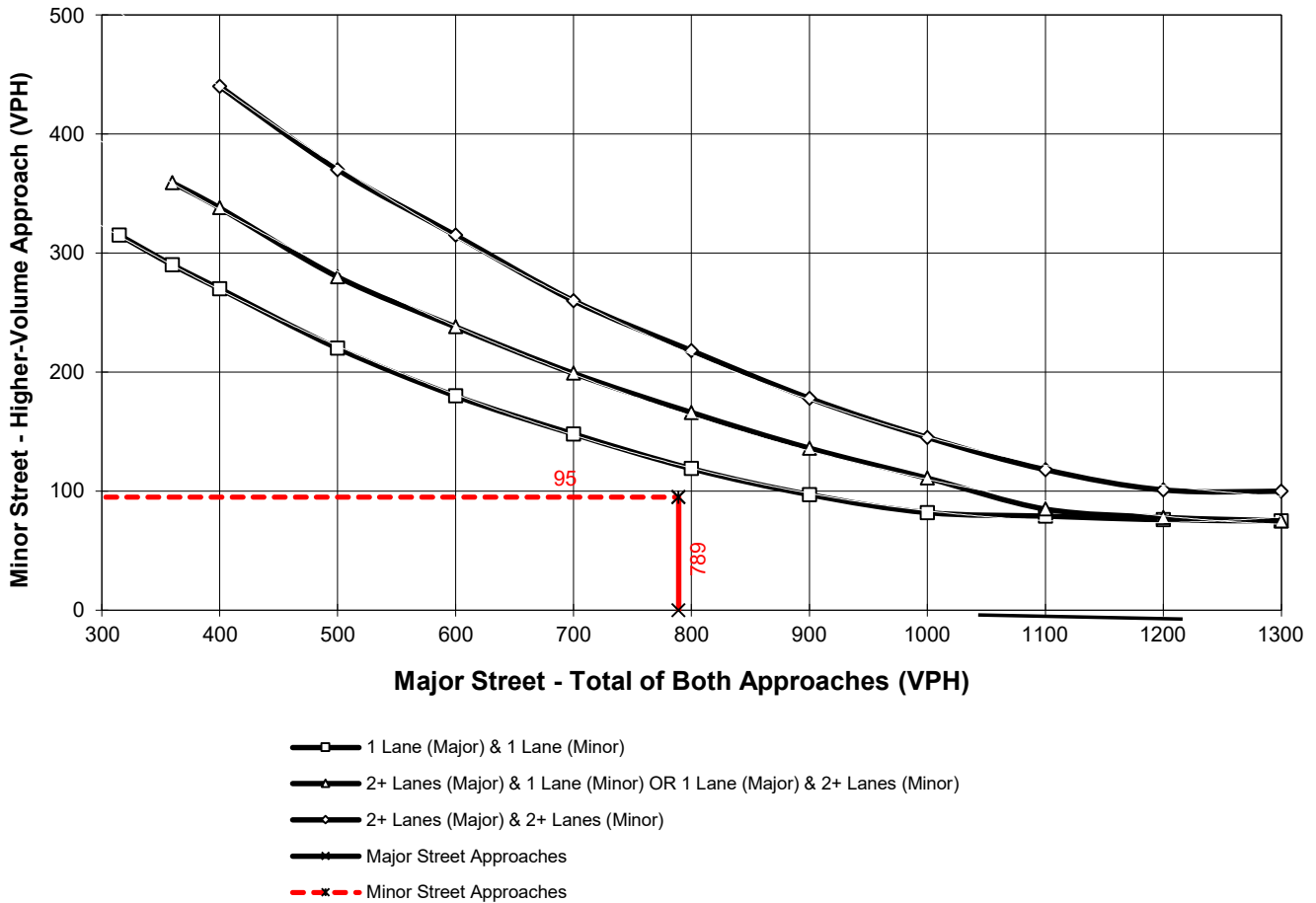
Major Street Name = **Lyon Av.**

Total of Both Approaches (VPH) = **789**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Appaloosa Dr.**

High Volume Approach (VPH) = **95**
 Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane



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APPENDIX 5.5: EAP (2026) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Intersection						
Int Delay, s/veh	5.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↖		↙	↗
Traffic Vol, veh/h	176	77	328	275	73	199
Future Vol, veh/h	176	77	328	275	73	199
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	55	0	-	-	120	-
Veh in Median Storage, #	1	-	2	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	205	90	381	320	85	231

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	942	541	0	0	701
Stage 1	541	-	-	-	-
Stage 2	401	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	292	541	-	-	896
Stage 1	583	-	-	-	-
Stage 2	676	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	264	541	-	-	896
Mov Cap-2 Maneuver	393	-	-	-	-
Stage 1	583	-	-	-	-
Stage 2	612	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.4	0	2.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	393	541	896
HCM Lane V/C Ratio	-	-	0.521	0.165	0.095
HCM Control Delay (s)	-	-	23.7	13	9.4
HCM Lane LOS	-	-	C	B	A
HCM 95th %tile Q(veh)	-	-	2.9	0.6	0.3

Timings
5: Lyon Av. & Appaloosa Dr.

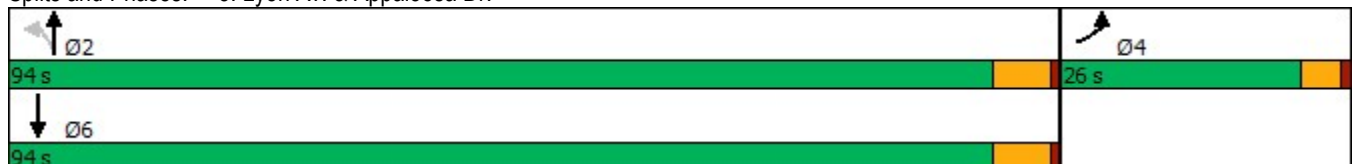


Lane Group	EBL	NBL	NBT	SBT
Lane Configurations	W	W	↑	↑↑
Traffic Volume (vph)	81	14	612	359
Future Volume (vph)	81	14	612	359
Turn Type	Prot	Perm	NA	NA
Protected Phases	4		2	6
Permitted Phases		2		
Detector Phase	4	2	2	6
Switch Phase				
Minimum Initial (s)	5.0	10.0	10.0	10.0
Minimum Split (s)	22.6	24.2	24.2	24.2
Total Split (s)	26.0	94.0	94.0	94.0
Total Split (%)	21.7%	78.3%	78.3%	78.3%
Yellow Time (s)	3.6	5.2	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	6.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Min	Min	Min
Act Effct Green (s)	9.2	36.8	36.8	36.8
Actuated g/C Ratio	0.17	0.70	0.70	0.70
v/c Ratio	0.38	0.03	0.60	0.21
Control Delay	23.6	5.1	9.4	4.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	23.6	5.1	9.4	4.6
LOS	C	A	A	A
Approach Delay	23.6		9.3	4.6
Approach LOS	C		A	A

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 52.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 8.8	Intersection LOS: A
Intersection Capacity Utilization 46.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: Lyon Av. & Appaloosa Dr.



HCM 6th Signalized Intersection Summary
 5: Lyon Av. & Appaloosa Dr.

Lyon Avenue Residential (JN:15026)

10/17/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	81	11	14	612	359	39
Future Volume (veh/h)	81	11	14	612	359	39
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	14	18	785	460	50
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	159	21	658	1053	1820	197
Arrive On Green	0.10	0.10	0.56	0.56	0.56	0.56
Sat Flow, veh/h	1535	207	889	1870	3327	350
Grp Volume(v), veh/h	119	0	18	785	252	258
Grp Sat Flow(s),veh/h/ln	1756	0	889	1870	1777	1807
Q Serve(g_s), s	2.1	0.0	0.3	10.2	2.3	2.4
Cycle Q Clear(g_c), s	2.1	0.0	2.7	10.2	2.3	2.4
Prop In Lane	0.87	0.12	1.00			0.19
Lane Grp Cap(c), veh/h	182	0	658	1053	1000	1017
V/C Ratio(X)	0.65	0.00	0.03	0.75	0.25	0.25
Avail Cap(c_a), veh/h	1160	0	2568	5071	4817	4898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	0.0	4.3	5.3	3.6	3.6
Incr Delay (d2), s/veh	1.5	0.0	0.0	1.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.5	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.5	0.0	4.3	6.4	3.7	3.7
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h				803	510	
Approach Delay, s/veh				6.4	3.7	
Approach LOS				A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		24.4		8.0		24.4
Change Period (Y+Rc), s		6.2		4.6		6.2
Max Green Setting (Gmax), s		87.8		21.4		87.8
Max Q Clear Time (g_c+I1), s		12.2		4.1		4.4
Green Ext Time (p_c), s		6.0		0.1		2.8
Intersection Summary						
HCM 6th Ctrl Delay			6.2			
HCM 6th LOS			A			

Timings
6: Lyon Av. & Cottonwood Av.

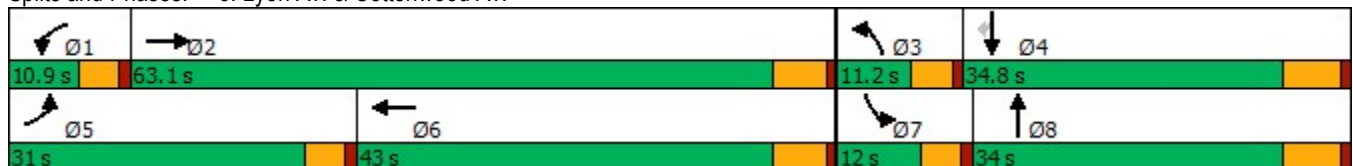


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↙	↘	↙	↘	↙	↘	↙	↘	↗
Traffic Volume (vph)	227	320	24	159	28	232	46	174	149
Future Volume (vph)	227	320	24	159	28	232	46	174	149
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	23.8	9.6	23.8	9.6	24.2	9.6	24.2	24.2
Total Split (s)	31.0	63.1	10.9	43.0	11.2	34.0	12.0	34.8	34.8
Total Split (%)	25.8%	52.6%	9.1%	35.8%	9.3%	28.3%	10.0%	29.0%	29.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None
Act Effct Green (s)	18.3	42.0	6.2	24.1	6.3	20.8	7.0	23.7	23.7
Actuated g/C Ratio	0.20	0.47	0.07	0.27	0.07	0.23	0.08	0.26	0.26
v/c Ratio	0.74	0.46	0.23	0.76	0.27	0.73	0.39	0.41	0.32
Control Delay	50.3	20.8	54.5	40.1	54.8	46.3	56.9	34.9	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.3	20.8	54.5	40.1	54.8	46.3	56.9	34.9	7.4
LOS	D	C	D	D	D	D	E	C	A
Approach Delay		32.6		41.1		47.2		26.5	
Approach LOS		C		D		D		C	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 90
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 35.8
 Intersection LOS: D
 Intersection Capacity Utilization 67.4%
 ICU Level of Service C
 Analysis Period (min) 15






















Splits and Phases: 6: Lyon Av. & Cottonwood Av.



HCM 6th Signalized Intersection Summary
6: Lyon Av. & Cottonwood Av.

Lyon Avenue Residential (JN:15026)

10/17/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	320	19	24	159	160	28	232	33	46	174	149
Future Volume (veh/h)	227	320	19	24	159	160	28	232	33	46	174	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	264	372	22	28	185	186	33	270	38	53	202	173
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	715	42	53	223	224	60	343	48	81	425	360
Arrive On Green	0.18	0.41	0.41	0.03	0.26	0.26	0.03	0.22	0.22	0.05	0.23	0.23
Sat Flow, veh/h	1781	1745	103	1781	843	848	1781	1593	224	1781	1870	1585
Grp Volume(v), veh/h	264	0	394	28	0	371	33	0	308	53	202	173
Grp Sat Flow(s),veh/h/ln	1781	0	1848	1781	0	1691	1781	0	1818	1781	1870	1585
Q Serve(g_s), s	10.2	0.0	11.3	1.1	0.0	14.6	1.3	0.0	11.3	2.1	6.6	6.7
Cycle Q Clear(g_c), s	10.2	0.0	11.3	1.1	0.0	14.6	1.3	0.0	11.3	2.1	6.6	6.7
Prop In Lane	1.00		0.06	1.00		0.50	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	312	0	757	53	0	447	60	0	391	81	425	360
V/C Ratio(X)	0.85	0.00	0.52	0.53	0.00	0.83	0.55	0.00	0.79	0.65	0.48	0.48
Avail Cap(c_a), veh/h	665	0	1496	159	0	889	166	0	714	186	756	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	15.7	33.8	0.0	24.5	33.7	0.0	26.2	33.2	23.7	23.7
Incr Delay (d2), s/veh	2.5	0.0	0.6	3.0	0.0	4.0	2.9	0.0	3.6	3.2	0.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	4.1	0.5	0.0	5.7	0.6	0.0	4.7	0.9	2.7	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	0.0	16.2	36.8	0.0	28.6	36.5	0.0	29.8	36.4	24.5	24.7
LnGrp LOS	C	A	B	D	A	C	D	A	C	D	C	C
Approach Vol, veh/h		658			399			341			428	
Approach Delay, s/veh		22.1			29.1			30.4			26.1	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.7	34.8	7.0	22.3	17.0	24.5	7.8	21.4				
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2				
Max Green Setting (Gmax), s	6.3	57.3	6.6	28.6	26.4	37.2	7.4	27.8				
Max Q Clear Time (g_c+I1), s	3.1	13.3	3.3	8.7	12.2	16.6	4.1	13.3				
Green Ext Time (p_c), s	0.0	2.4	0.0	1.4	0.3	2.1	0.0	1.3				
Intersection Summary												
HCM 6th Ctrl Delay				26.1								
HCM 6th LOS				C								

Intersection						
Int Delay, s/veh	5.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↖		↙	↗
Traffic Vol, veh/h	147	57	182	199	73	228
Future Vol, veh/h	147	57	182	199	73	228
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	55	0	-	-	120	-
Veh in Median Storage, #	1	-	2	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	210	81	260	284	104	326

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	936	402	0	0	544	0
Stage 1	402	-	-	-	-	-
Stage 2	534	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	294	648	-	-	1025	-
Stage 1	676	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	264	648	-	-	1025	-
Mov Cap-2 Maneuver	388	-	-	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	529	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21	0	2.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	388	648	1025
HCM Lane V/C Ratio	-	-	0.541	0.126	0.102
HCM Control Delay (s)	-	-	24.7	11.4	8.9
HCM Lane LOS	-	-	C	B	A
HCM 95th %tile Q(veh)	-	-	3.1	0.4	0.3

Timings
5: Lyon Av. & Appaloosa Dr.

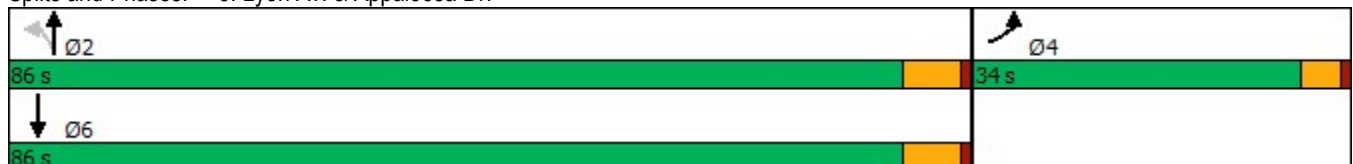


Lane Group	EBL	NBL	NBT	SBT
Lane Configurations	W	W	↑	↑↑
Traffic Volume (vph)	47	72	354	316
Future Volume (vph)	47	72	354	316
Turn Type	Prot	Perm	NA	NA
Protected Phases	4		2	6
Permitted Phases		2		
Detector Phase	4	2	2	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.6	24.2	24.2	24.2
Total Split (s)	34.0	86.0	86.0	86.0
Total Split (%)	28.3%	71.7%	71.7%	71.7%
Yellow Time (s)	3.6	5.2	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	6.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Min	Min	Min
Act Effct Green (s)	8.5	27.1	27.1	27.1
Actuated g/C Ratio	0.20	0.64	0.64	0.64
v/c Ratio	0.37	0.19	0.43	0.24
Control Delay	13.9	7.6	8.2	5.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.9	7.6	8.2	5.7
LOS	B	A	A	A
Approach Delay	13.9		8.1	5.7
Approach LOS	B		A	A

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 42.4
 Natural Cycle: 50
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.43
 Intersection Signal Delay: 7.7
 Intersection LOS: A
 Intersection Capacity Utilization 39.2%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Lyon Av. & Appaloosa Dr.



HCM 6th Signalized Intersection Summary
 5: Lyon Av. & Appaloosa Dr.

Lyon Avenue Residential (JN:15026)

10/17/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	47	48	72	354	316	46
Future Volume (veh/h)	47	48	72	354	316	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	0.95			0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	69	103	506	451	66
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	98	101	596	918	1493	216
Arrive On Green	0.12	0.12	0.49	0.49	0.49	0.49
Sat Flow, veh/h	820	844	838	1870	3135	440
Grp Volume(v), veh/h	137	0	103	506	261	256
Grp Sat Flow(s),veh/h/ln	1676	0	838	1870	1777	1705
Q Serve(g_s), s	2.2	0.0	2.3	5.2	2.4	2.5
Cycle Q Clear(g_c), s	2.2	0.0	4.8	5.2	2.4	2.5
Prop In Lane	0.49	0.50	1.00			0.26
Lane Grp Cap(c), veh/h	201	0	596	918	872	837
V/C Ratio(X)	0.68	0.00	0.17	0.55	0.30	0.31
Avail Cap(c_a), veh/h	1777	0	2596	5385	5115	4908
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	0.0	5.7	4.9	4.2	4.2
Incr Delay (d2), s/veh	1.5	0.0	0.1	0.5	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	0.2	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.2	0.0	5.8	5.4	4.4	4.4
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h	137			609	517	
Approach Delay, s/veh	13.2			5.5	4.4	
Approach LOS	B			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		19.8		7.9		19.8
Change Period (Y+Rc), s		6.2		4.6		6.2
Max Green Setting (Gmax), s		79.8		29.4		79.8
Max Q Clear Time (g_c+I1), s		7.2		4.2		4.5
Green Ext Time (p_c), s		3.8		0.2		3.0
Intersection Summary						
HCM 6th Ctrl Delay			5.9			
HCM 6th LOS			A			

Timings
6: Lyon Av. & Cottonwood Av.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↶	↷	↶	↷	↶	↷	↶	↷	↷
Traffic Volume (vph)	125	262	31	178	55	168	62	205	137
Future Volume (vph)	125	262	31	178	55	168	62	205	137
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	23.8	9.6	23.8	9.6	24.2	9.6	24.2	24.2
Total Split (s)	24.0	58.4	11.6	46.0	15.0	33.0	17.0	35.0	35.0
Total Split (%)	20.0%	48.7%	9.7%	38.3%	12.5%	27.5%	14.2%	29.2%	29.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None
Act Effct Green (s)	12.2	34.1	6.5	22.5	8.0	17.3	8.5	17.8	17.8
Actuated g/C Ratio	0.15	0.42	0.08	0.28	0.10	0.21	0.11	0.22	0.22
v/c Ratio	0.57	0.48	0.27	0.73	0.39	0.61	0.41	0.62	0.36
Control Delay	46.3	22.3	49.3	35.6	48.7	39.2	48.0	39.2	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.3	22.3	49.3	35.6	48.7	39.2	48.0	39.2	7.9
LOS	D	C	D	D	D	D	D	D	A
Approach Delay		29.4		36.9		41.4		29.9	
Approach LOS		C		D		D		C	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 80.7
 Natural Cycle: 70
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 33.4
 Intersection LOS: C
 Intersection Capacity Utilization 58.8%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 6: Lyon Av. & Cottonwood Av.



HCM 6th Signalized Intersection Summary
6: Lyon Av. & Cottonwood Av.

Lyon Avenue Residential (JN:15026)

10/17/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	262	37	31	178	121	55	168	24	62	205	137
Future Volume (veh/h)	125	262	37	31	178	121	55	168	24	62	205	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.93	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	154	323	46	38	220	149	68	207	30	77	253	169
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	544	77	70	279	189	101	325	47	108	391	326
Arrive On Green	0.11	0.34	0.34	0.04	0.27	0.27	0.06	0.21	0.21	0.06	0.21	0.21
Sat Flow, veh/h	1781	1599	228	1781	1038	703	1781	1581	229	1781	1870	1558
Grp Volume(v), veh/h	154	0	369	38	0	369	68	0	237	77	253	169
Grp Sat Flow(s),veh/h/ln	1781	0	1827	1781	0	1741	1781	0	1810	1781	1870	1558
Q Serve(g_s), s	5.0	0.0	10.0	1.3	0.0	11.8	2.2	0.0	7.2	2.5	7.4	5.7
Cycle Q Clear(g_c), s	5.0	0.0	10.0	1.3	0.0	11.8	2.2	0.0	7.2	2.5	7.4	5.7
Prop In Lane	1.00		0.12	1.00		0.40	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	197	0	621	70	0	468	101	0	372	108	391	326
V/C Ratio(X)	0.78	0.00	0.59	0.54	0.00	0.79	0.67	0.00	0.64	0.72	0.65	0.52
Avail Cap(c_a), veh/h	578	0	1608	209	0	1171	310	0	812	370	902	751
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.9	0.0	16.3	28.2	0.0	20.3	27.6	0.0	21.7	27.6	21.6	21.0
Incr Delay (d2), s/veh	2.5	0.0	0.9	2.5	0.0	3.0	2.9	0.0	1.8	3.3	1.8	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	3.6	0.5	0.0	4.4	0.9	0.0	2.7	1.0	2.9	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	0.0	17.2	30.6	0.0	23.3	30.5	0.0	23.5	30.9	23.4	22.2
LnGrp LOS	C	A	B	C	A	C	C	A	C	C	C	C
Approach Vol, veh/h		523			407			305			499	
Approach Delay, s/veh		20.5			24.0			25.1			24.2	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.9	26.1	8.0	18.7	11.2	21.8	8.2	18.5				
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2				
Max Green Setting (Gmax), s	7.0	52.6	10.4	28.8	19.4	40.2	12.4	26.8				
Max Q Clear Time (g_c+I1), s	3.3	12.0	4.2	9.4	7.0	13.8	4.5	9.2				
Green Ext Time (p_c), s	0.0	2.2	0.0	1.7	0.1	2.2	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay				23.2								
HCM 6th LOS				C								

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔		↔	↔
Traffic Vol, veh/h	54	36	182	73	76	294
Future Vol, veh/h	54	36	182	73	76	294
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	55	0	-	-	120	-
Veh in Median Storage, #	1	-	2	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	40	200	80	84	323

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	731	240	0	0	280
Stage 1	240	-	-	-	-
Stage 2	491	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	389	799	-	-	1283
Stage 1	800	-	-	-	-
Stage 2	615	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	364	799	-	-	1283
Mov Cap-2 Maneuver	462	-	-	-	-
Stage 1	800	-	-	-	-
Stage 2	575	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	1.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	462	799
HCM Lane V/C Ratio	-	-	0.128	0.05
HCM Control Delay (s)	-	-	13.9	9.7
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.4	0.2

Timings
5: Lyon Av. & Appaloosa Dr.

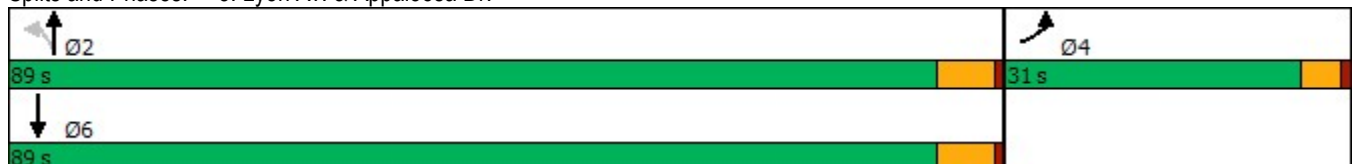


Lane Group	EBL	NBL	NBT	SBT
Lane Configurations	W	W	↑	↑↑
Traffic Volume (vph)	23	26	255	341
Future Volume (vph)	23	26	255	341
Turn Type	Prot	Perm	NA	NA
Protected Phases	4		2	6
Permitted Phases		2		
Detector Phase	4	2	2	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.6	24.2	24.2	24.2
Total Split (s)	31.0	89.0	89.0	89.0
Total Split (%)	25.8%	74.2%	74.2%	74.2%
Yellow Time (s)	3.6	5.2	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	6.2
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Min	Min	Min
Act Effct Green (s)	7.2	31.5	31.5	31.5
Actuated g/C Ratio	0.19	0.83	0.83	0.83
v/c Ratio	0.10	0.04	0.20	0.15
Control Delay	14.3	4.8	4.3	3.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.3	4.8	4.3	3.5
LOS	B	A	A	A
Approach Delay	14.3		4.3	3.5
Approach LOS	B		A	A

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 38	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.20	
Intersection Signal Delay: 4.3	Intersection LOS: A
Intersection Capacity Utilization 32.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: Lyon Av. & Appaloosa Dr.



HCM 6th Signalized Intersection Summary
 5: Lyon Av. & Appaloosa Dr.

Lyon Avenue Residential (JN:15026)
 10/17/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	23	4	26	255	341	12
Future Volume (veh/h)	23	4	26	255	341	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	5	31	307	411	14
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	63	11	656	647	1213	41
Arrive On Green	0.04	0.04	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1443	258	962	1870	3600	119
Grp Volume(v), veh/h	34	0	31	307	208	217
Grp Sat Flow(s),veh/h/ln	1752	0	962	1870	1777	1849
Q Serve(g_s), s	0.3	0.0	0.4	2.3	1.5	1.5
Cycle Q Clear(g_c), s	0.3	0.0	2.0	2.3	1.5	1.5
Prop In Lane	0.82	0.15	1.00			0.06
Lane Grp Cap(c), veh/h	76	0	656	647	614	639
V/C Ratio(X)	0.45	0.00	0.05	0.47	0.34	0.34
Avail Cap(c_a), veh/h	2615	0	4829	8757	8320	8657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.2	0.0	5.0	4.5	4.3	4.3
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.8	0.0	5.0	5.1	4.6	4.6
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h	34			338	425	
Approach Delay, s/veh	9.8			5.1	4.6	
Approach LOS	A			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		12.3		5.4		12.3
Change Period (Y+Rc), s		6.2		4.6		6.2
Max Green Setting (Gmax), s		82.8		26.4		82.8
Max Q Clear Time (g_c+I1), s		4.3		2.3		3.5
Green Ext Time (p_c), s		1.8		0.0		2.3
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

Timings

6: Lyon Av. & Cottonwood Av.

10/17/2023

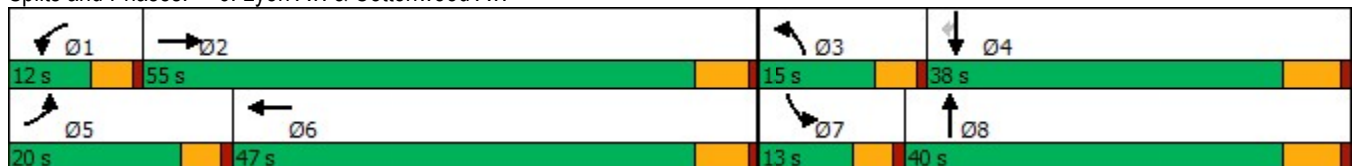


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↶	↷	↶	↷	↶	↷	↶	↷	↷
Traffic Volume (vph)	85	302	32	279	46	172	35	237	83
Future Volume (vph)	85	302	32	279	46	172	35	237	83
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	23.8	9.6	23.8	9.6	24.2	9.6	24.2	24.2
Total Split (s)	20.0	55.0	12.0	47.0	15.0	40.0	13.0	38.0	38.0
Total Split (%)	16.7%	45.8%	10.0%	39.2%	12.5%	33.3%	10.8%	31.7%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None
Act Effct Green (s)	9.7	27.0	6.9	21.7	7.8	18.8	7.1	18.3	18.3
Actuated g/C Ratio	0.14	0.38	0.10	0.30	0.11	0.26	0.10	0.26	0.26
v/c Ratio	0.41	0.58	0.22	0.64	0.28	0.47	0.23	0.57	0.18
Control Delay	41.3	24.5	43.6	30.8	42.3	29.6	43.1	33.4	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.3	24.5	43.6	30.8	42.3	29.6	43.1	33.4	1.9
LOS	D	C	D	C	D	C	D	C	A
Approach Delay		27.8		32.0		32.0		27.0	
Approach LOS		C		C		C		C	

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 71.4	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 29.4	Intersection LOS: C
Intersection Capacity Utilization 57.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: Lyon Av. & Cottonwood Av.



HCM 6th Signalized Intersection Summary
6: Lyon Av. & Cottonwood Av.

Lyon Avenue Residential (JN:15026)

10/17/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	302	45	32	279	33	46	172	24	35	237	83
Future Volume (veh/h)	85	302	45	32	279	33	46	172	24	35	237	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	347	52	37	321	38	53	198	28	40	272	95
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	464	70	71	424	50	92	344	49	75	384	325
Arrive On Green	0.07	0.29	0.29	0.04	0.26	0.26	0.05	0.21	0.21	0.04	0.21	0.21
Sat Flow, veh/h	1781	1589	238	1781	1641	194	1781	1603	227	1781	1870	1585
Grp Volume(v), veh/h	98	0	399	37	0	359	53	0	226	40	272	95
Grp Sat Flow(s),veh/h/ln	1781	0	1827	1781	0	1835	1781	0	1830	1781	1870	1585
Q Serve(g_s), s	2.8	0.0	10.2	1.0	0.0	9.3	1.5	0.0	5.7	1.1	7.0	2.6
Cycle Q Clear(g_c), s	2.8	0.0	10.2	1.0	0.0	9.3	1.5	0.0	5.7	1.1	7.0	2.6
Prop In Lane	1.00		0.13	1.00		0.11	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	130	0	533	71	0	475	92	0	393	75	384	325
V/C Ratio(X)	0.75	0.00	0.75	0.52	0.00	0.76	0.58	0.00	0.58	0.53	0.71	0.29
Avail Cap(c_a), veh/h	532	0	1745	256	0	1467	359	0	1200	290	1154	978
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	0.0	16.5	24.3	0.0	17.6	23.9	0.0	18.1	24.2	19.0	17.3
Incr Delay (d2), s/veh	3.3	0.0	2.1	2.2	0.0	2.5	2.1	0.0	1.3	2.1	2.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	3.7	0.4	0.0	3.5	0.6	0.0	2.1	0.5	2.7	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	0.0	18.7	26.4	0.0	20.1	26.0	0.0	19.5	26.3	21.5	17.8
LnGrp LOS	C	A	B	C	A	C	C	A	B	C	C	B
Approach Vol, veh/h		497			396			279			407	
Approach Delay, s/veh		20.2			20.7			20.7			21.1	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.7	20.8	7.3	16.8	8.4	19.1	6.8	17.3				
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2				
Max Green Setting (Gmax), s	7.4	49.2	10.4	31.8	15.4	41.2	8.4	33.8				
Max Q Clear Time (g_c+I1), s	3.0	12.2	3.5	9.0	4.8	11.3	3.1	7.7				
Green Ext Time (p_c), s	0.0	2.4	0.0	1.6	0.1	2.0	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay				20.7								
HCM 6th LOS				C								

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APPENDIX 6.1: EAC (2026) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection						
Int Delay, s/veh	3.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	15	6	2	32	6	4
Future Vol, veh/h	15	6	2	32	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	7	2	39	7	5

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	41	22	0	0	41	0
Stage 1	22	-	-	-	-	-
Stage 2	19	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	970	1055	-	-	1568	-
Stage 1	1001	-	-	-	-	-
Stage 2	1004	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	966	1055	-	-	1568	-
Mov Cap-2 Maneuver	966	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	1000	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	4.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	990	1568
HCM Lane V/C Ratio	-	-	0.026	0.005
HCM Control Delay (s)	-	-	8.7	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑	↑↑		↘	
Traffic Vol, veh/h	29	721	460	10	14	25
Future Vol, veh/h	29	721	460	10	14	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	819	523	11	16	28

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	534	0	-	0	1414 267
Stage 1	-	-	-	-	529 -
Stage 2	-	-	-	-	885 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	1032	-	-	-	140 732
Stage 1	-	-	-	-	556 -
Stage 2	-	-	-	-	402 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1032	-	-	-	136 732
Mov Cap-2 Maneuver	-	-	-	-	270 -
Stage 1	-	-	-	-	538 -
Stage 2	-	-	-	-	402 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	13.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1032	-	-	-	453
HCM Lane V/C Ratio	0.032	-	-	-	0.098
HCM Control Delay (s)	8.6	-	-	-	13.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Intersection Delay, s/veh	142.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕			↕	
Traffic Vol, veh/h	33	33	99	178	12	77	35	392	280	73	286	12
Future Vol, veh/h	33	33	99	178	12	77	35	392	280	73	286	12
Peak Hour Factor	0.92	0.92	0.92	0.86	0.92	0.86	0.92	0.86	0.86	0.86	0.86	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	36	108	207	13	90	38	456	326	85	333	13
Number of Lanes	0	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	18.6	19.3	269.1	42.7
HCM LOS	C	C	F	E

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	5%	20%	100%	0%	20%
Vol Thru, %	55%	20%	0%	13%	77%
Vol Right, %	40%	60%	0%	87%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	707	165	178	89	371
LT Vol	35	33	178	0	73
Through Vol	392	33	0	12	286
RT Vol	280	99	0	77	12
Lane Flow Rate	819	179	207	103	430
Geometry Grp	2	5	7	7	2
Degree of Util (X)	1.536	0.401	0.501	0.217	0.852
Departure Headway (Hd)	6.749	9.42	9.862	8.707	8.093
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	541	386	368	415	452
Service Time	4.796	7.42	7.562	6.407	6.093
HCM Lane V/C Ratio	1.514	0.464	0.563	0.248	0.951
HCM Control Delay	269.1	18.6	22.1	13.8	42.7
HCM Lane LOS	F	C	C	B	E
HCM 95th-tile Q	42.6	1.9	2.7	0.8	8.5

Intersection												
Int Delay, s/veh	12.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	53	0	11	33	0	19	7	726	12	7	521	38
Future Vol, veh/h	53	0	11	33	0	19	7	726	12	7	521	38
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	92	78	92	92	92	78	78	92	92	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	68	0	14	36	0	21	9	931	13	8	668	49

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1677	1673	362	1307	1691	938	719	0	0	944	0	0
Stage 1	711	711	-	956	956	-	-	-	-	-	-	-
Stage 2	966	962	-	351	735	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.93	7.33	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	68	95	635	127	93	320	880	-	-	725	-	-
Stage 1	391	435	-	309	336	-	-	-	-	-	-	-
Stage 2	305	333	-	639	425	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 62	91	633	120	89	320	878	-	-	725	-	-
Mov Cap-2 Maneuver	~ 62	91	-	120	89	-	-	-	-	-	-	-
Stage 1	382	426	-	302	329	-	-	-	-	-	-	-
Stage 2	279	326	-	612	416	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	242.6		40.6		0.1		0.2	
HCM LOS	F		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	878	-	-	73	156	725	-
HCM Lane V/C Ratio	0.01	-	-	1.124	0.362	0.01	-
HCM Control Delay (s)	9.1	0	-	242.6	40.6	10	0.1
HCM Lane LOS	A	A	-	F	E	B	A
HCM 95th %tile Q(veh)	0	-	-	6.1	1.5	0	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Intersection Delay, s/veh	194.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↘			↕			↕		↗	↘	↗
Traffic Vol, veh/h	256	462	16	26	221	168	31	314	39	59	287	217
Future Vol, veh/h	256	462	16	26	221	168	31	314	39	59	287	217
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	298	537	19	30	257	195	36	365	45	69	334	252
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	245.7	266.8	234.2	47.7
HCM LOS	F	F	F	E

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	8%	100%	0%	6%	100%	0%	0%
Vol Thru, %	82%	0%	97%	53%	0%	100%	0%
Vol Right, %	10%	0%	3%	40%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	384	256	478	415	59	287	217
LT Vol	31	256	0	26	59	0	0
Through Vol	314	0	462	221	0	287	0
RT Vol	39	0	16	168	0	0	217
Lane Flow Rate	447	298	556	483	69	334	252
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	1.4	0.924	1.645	1.483	0.195	0.902	0.633
Departure Headway (Hd)	13.249	13.675	13.114	12.784	12.567	12.035	11.29
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	277	268	283	290	287	304	323
Service Time	10.949	11.375	10.814	10.484	10.267	9.735	8.99
HCM Lane V/C Ratio	1.614	1.112	1.965	1.666	0.24	1.099	0.78
HCM Control Delay	234.2	76.6	336.3	266.8	18.3	66	31.6
HCM Lane LOS	F	F	F	F	C	F	D
HCM 95th-tile Q	20.5	8.4	28.1	23.6	0.7	8.4	4.1

Intersection						
Int Delay, s/veh	5.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	TT		TT			TT
Traffic Vol, veh/h	69	7	5	56	8	3
Future Vol, veh/h	69	7	5	56	8	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	46	46	46	46	46	46
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	150	15	11	122	17	7

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	113	72	0	0	133
Stage 1	72	-	-	-	-
Stage 2	41	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	884	990	-	-	1452
Stage 1	951	-	-	-	-
Stage 2	981	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	873	990	-	-	1452
Mov Cap-2 Maneuver	873	-	-	-	-
Stage 1	951	-	-	-	-
Stage 2	969	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	5.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	883	1452
HCM Lane V/C Ratio	-	-	0.187	0.012
HCM Control Delay (s)	-	-	10	7.5
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.7	0

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	76	620	564	18	11	74
Future Vol, veh/h	76	620	564	18	11	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	99	805	732	23	14	96

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	755	0	-	0	1747 378
Stage 1	-	-	-	-	744 -
Stage 2	-	-	-	-	1003 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	853	-	-	-	85 621
Stage 1	-	-	-	-	432 -
Stage 2	-	-	-	-	354 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	853	-	-	-	75 621
Mov Cap-2 Maneuver	-	-	-	-	202 -
Stage 1	-	-	-	-	382 -
Stage 2	-	-	-	-	354 -

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	14.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	853	-	-	-	490
HCM Lane V/C Ratio	0.116	-	-	-	0.225
HCM Control Delay (s)	9.8	-	-	-	14.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.9

Intersection	
Intersection Delay, s/veh	142.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕			↕	
Traffic Vol, veh/h	27	27	81	152	32	57	95	269	204	73	307	32
Future Vol, veh/h	27	27	81	152	32	57	95	269	204	73	307	32
Peak Hour Factor	0.92	0.92	0.92	0.70	0.92	0.70	0.92	0.70	0.70	0.70	0.70	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	29	88	217	35	81	103	384	291	104	439	35
Number of Lanes	0	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	18.1	20.4	244.4	106.9
HCM LOS	C	C	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	17%	20%	100%	0%	18%
Vol Thru, %	47%	20%	0%	36%	75%
Vol Right, %	36%	60%	0%	64%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	568	135	152	89	412
LT Vol	95	27	152	0	73
Through Vol	269	27	0	32	307
RT Vol	204	81	0	57	32
Lane Flow Rate	779	147	217	116	578
Geometry Grp	2	5	7	7	2
Degree of Util (X)	1.475	0.344	0.532	0.254	1.121
Departure Headway (Hd)	7.206	9.995	9.963	8.97	7.913
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	514	362	365	403	462
Service Time	5.206	7.995	7.663	6.67	5.913
HCM Lane V/C Ratio	1.516	0.406	0.595	0.288	1.251
HCM Control Delay	244.4	18.1	23.4	14.7	106.9
HCM Lane LOS	F	C	C	B	F
HCM 95th-tile Q	37.1	1.5	3	1	17.7

Intersection												
Int Delay, s/veh	12.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	0	48	27	0	15	53	548	32	18	467	42
Future Vol, veh/h	24	0	48	27	0	15	53	548	32	18	467	42
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	116
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	92	70	92	92	92	70	70	92	92	70	70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	0	69	29	0	16	76	783	35	20	667	60

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1814	1823	481	1328	1836	801	843	0	0	818	0	0
Stage 1	853	853	-	953	953	-	-	-	-	-	-	-
Stage 2	961	970	-	375	883	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.93	7.33	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	54	77	532	122	75	384	791	-	-	808	-	-
Stage 1	321	375	-	310	337	-	-	-	-	-	-	-
Stage 2	307	331	-	619	363	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	38	53	473	86	51	384	704	-	-	808	-	-
Mov Cap-2 Maneuver	38	53	-	86	51	-	-	-	-	-	-	-
Stage 1	229	320	-	248	270	-	-	-	-	-	-	-
Stage 2	235	265	-	507	310	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	185.1		53		0.9		0.4	
HCM LOS	F		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	704	-	-	98	119	808	-	-
HCM Lane V/C Ratio	0.108	-	-	1.05	0.384	0.024	-	-
HCM Control Delay (s)	10.7	0	-	185.1	53	9.6	0.2	-
HCM Lane LOS	B	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	6.5	1.6	0.1	-	-

Intersection	
Intersection Delay, s/veh	254.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↕			↕		↖	↗	↖
Traffic Vol, veh/h	194	400	38	37	330	141	54	286	29	73	313	196
Future Vol, veh/h	194	400	38	37	330	141	54	286	29	73	313	196
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	240	494	47	46	407	174	67	353	36	90	386	242
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	245.4	472.6	256.5	71.5
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	15%	100%	0%	7%	100%	0%	0%
Vol Thru, %	78%	0%	91%	65%	0%	100%	0%
Vol Right, %	8%	0%	9%	28%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	369	194	438	508	73	313	196
LT Vol	54	194	0	37	73	0	0
Through Vol	286	0	400	330	0	313	0
RT Vol	29	0	38	141	0	0	196
Lane Flow Rate	456	240	541	627	90	386	242
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	1.444	0.755	1.62	1.958	0.256	1.044	0.607
Departure Headway (Hd)	14.525	15.239	14.631	13.261	14.138	13.602	12.852
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	255	240	254	282	256	270	283
Service Time	12.225	12.939	12.331	10.961	11.838	11.302	10.552
HCM Lane V/C Ratio	1.788	1	2.13	2.223	0.352	1.43	0.855
HCM Control Delay	256.5	53.5	330.4	472.6	21.6	106.8	33.6
HCM Lane LOS	F	F	F	F	C	F	D
HCM 95th-tile Q	20.4	5.3	25	37.8	1	10.9	3.7

Intersection						
Int Delay, s/veh	5.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	10	3	3	6	5	0
Future Vol, veh/h	10	3	3	6	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	6	6	11	9	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	30	12	0	0	17	0
Stage 1	12	-	-	-	-	-
Stage 2	18	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	984	1069	-	-	1600	-
Stage 1	1011	-	-	-	-	-
Stage 2	1005	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	978	1069	-	-	1600	-
Mov Cap-2 Maneuver	978	-	-	-	-	-
Stage 1	1011	-	-	-	-	-
Stage 2	999	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	7.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	998	1600
HCM Lane V/C Ratio	-	-	0.024	0.006
HCM Control Delay (s)	-	-	8.7	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	24	622	614	15	12	16
Future Vol, veh/h	24	622	614	15	12	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	655	646	16	13	17

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	662	0	-	0	1359 331
Stage 1	-	-	-	-	654 -
Stage 2	-	-	-	-	705 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	925	-	-	-	151 666
Stage 1	-	-	-	-	480 -
Stage 2	-	-	-	-	489 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	925	-	-	-	147 666
Mov Cap-2 Maneuver	-	-	-	-	285 -
Stage 1	-	-	-	-	467 -
Stage 2	-	-	-	-	489 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	925	-	-	-	423
HCM Lane V/C Ratio	0.027	-	-	-	0.07
HCM Control Delay (s)	9	-	-	-	14.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Intersection Delay, s/veh	28.3
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕			↕	
Traffic Vol, veh/h	22	22	66	60	38	36	113	268	76	76	377	38
Future Vol, veh/h	22	22	66	60	38	36	113	268	76	76	377	38
Peak Hour Factor	0.92	0.92	0.92	0.91	0.92	0.91	0.92	0.91	0.91	0.91	0.91	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	24	72	66	41	40	123	295	84	84	414	41
Number of Lanes	0	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	12.4	12	28.9	35.7
HCM LOS	B	B	D	E

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	25%	20%	100%	0%	15%
Vol Thru, %	59%	20%	0%	51%	77%
Vol Right, %	17%	60%	0%	49%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	457	110	60	74	491
LT Vol	113	22	60	0	76
Through Vol	268	22	0	38	377
RT Vol	76	66	0	36	38
Lane Flow Rate	501	120	66	81	539
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.808	0.236	0.151	0.166	0.871
Departure Headway (Hd)	5.807	7.114	8.252	7.385	5.816
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	621	503	434	484	625
Service Time	3.852	5.185	6.017	5.151	3.816
HCM Lane V/C Ratio	0.807	0.239	0.152	0.167	0.862
HCM Control Delay	28.9	12.4	12.5	11.6	35.7
HCM Lane LOS	D	B	B	B	E
HCM 95th-tile Q	8.1	0.9	0.5	0.6	10.1

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	0	4	22	0	13	3	464	37	21	486	7
Future Vol, veh/h	4	0	4	22	0	13	3	464	37	21	486	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	92	83	92	92	92	83	83	92	92	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	5	24	0	14	4	559	40	23	586	8

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1230	1243	297	926	1227	579	594	0	0	599	0	0
Stage 1	636	636	-	587	587	-	-	-	-	-	-	-
Stage 2	594	607	-	339	640	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.93	7.33	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	144	174	700	236	178	514	980	-	-	976	-	-
Stage 1	433	471	-	495	496	-	-	-	-	-	-	-
Stage 2	490	485	-	650	469	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	136	167	700	227	171	514	980	-	-	976	-	-
Mov Cap-2 Maneuver	136	167	-	227	171	-	-	-	-	-	-	-
Stage 1	430	455	-	492	493	-	-	-	-	-	-	-
Stage 2	474	482	-	623	453	-	-	-	-	-	-	-

Approach	EB		WB		NB			SB		
HCM Control Delay, s	21.5		19.5		0.1			0.4		
HCM LOS	C		C							

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	980	-	-	228	286	976	-	-
HCM Lane V/C Ratio	0.004	-	-	0.042	0.133	0.023	-	-
HCM Control Delay (s)	8.7	0	-	21.5	19.5	8.8	0.1	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.5	0.1	-	-

Intersection	
Intersection Delay, s/veh	246
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	162	425	46	39	449	57	44	295	28	44	343	135
Future Vol, veh/h	162	425	46	39	449	57	44	295	28	44	343	135
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	186	489	53	45	516	66	51	339	32	51	394	155
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	239	447.6	193.7	80.6
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	12%	100%	0%	7%	100%	0%	0%
Vol Thru, %	80%	0%	90%	82%	0%	100%	0%
Vol Right, %	8%	0%	10%	10%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	367	162	471	545	44	343	135
LT Vol	44	162	0	39	44	0	0
Through Vol	295	0	425	449	0	343	0
RT Vol	28	0	46	57	0	0	135
Lane Flow Rate	422	186	541	626	51	394	155
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	1.287	0.572	1.577	1.903	0.144	1.065	0.389
Departure Headway (Hd)	14.447	14.339	13.725	12.926	13.711	13.176	12.427
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	257	253	271	288	263	280	292
Service Time	12.147	12.039	11.425	10.626	11.411	10.876	10.127
HCM Lane V/C Ratio	1.642	0.735	1.996	2.174	0.194	1.407	0.531
HCM Control Delay	193.7	34.6	309.3	447.6	18.7	111.3	22.8
HCM Lane LOS	F	D	F	F	C	F	C
HCM 95th-tile Q	16.3	3.2	25.1	36.8	0.5	11.6	1.8

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APPENDIX 6.2: EAPC (2026) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection						
Int Delay, s/veh	3.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	15	14	13	32	34	28
Future Vol, veh/h	15	14	13	32	34	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	17	16	39	41	34

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	152	36	0	0	55
Stage 1	36	-	-	-	-
Stage 2	116	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	840	1037	-	-	1550
Stage 1	986	-	-	-	-
Stage 2	909	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	817	1037	-	-	1550
Mov Cap-2 Maneuver	817	-	-	-	-
Stage 1	986	-	-	-	-
Stage 2	884	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	4.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	910	1550
HCM Lane V/C Ratio	-	-	0.039	0.027
HCM Control Delay (s)	-	-	9.1	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	721	460	14	18	45
Future Vol, veh/h	36	721	460	14	18	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	819	523	16	20	51

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	539	0	-	0	1432 270
Stage 1	-	-	-	-	531 -
Stage 2	-	-	-	-	901 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	1027	-	-	-	136 729
Stage 1	-	-	-	-	555 -
Stage 2	-	-	-	-	395 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1027	-	-	-	131 729
Mov Cap-2 Maneuver	-	-	-	-	265 -
Stage 1	-	-	-	-	533 -
Stage 2	-	-	-	-	395 -

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	13.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1027	-	-	-	486
HCM Lane V/C Ratio	0.04	-	-	-	0.147
HCM Control Delay (s)	8.7	-	-	-	13.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Intersection Delay, s/veh	160.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕			↕	
Traffic Vol, veh/h	33	33	99	179	12	77	35	416	284	73	294	12
Future Vol, veh/h	33	33	99	179	12	77	35	416	284	73	294	12
Peak Hour Factor	0.92	0.92	0.92	0.86	0.92	0.86	0.92	0.86	0.86	0.86	0.86	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	36	108	208	13	90	38	484	330	85	342	13
Number of Lanes	0	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	19	19.8	300.9	46.1
HCM LOS	C	C	F	E

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	5%	20%	100%	0%	19%
Vol Thru, %	57%	20%	0%	13%	78%
Vol Right, %	39%	60%	0%	87%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	735	165	179	89	379
LT Vol	35	33	179	0	73
Through Vol	416	33	0	12	294
RT Vol	284	99	0	77	12
Lane Flow Rate	852	179	208	103	440
Geometry Grp	2	5	7	7	2
Degree of Util (X)	1.609	0.404	0.506	0.218	0.872
Departure Headway (Hd)	6.8	9.632	10.022	8.865	8.227
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	537	377	362	407	444
Service Time	4.85	7.632	7.722	6.565	6.227
HCM Lane V/C Ratio	1.587	0.475	0.575	0.253	0.991
HCM Control Delay	300.9	19	22.6	14	46.1
HCM Lane LOS	F	C	C	B	E
HCM 95th-tile Q	46.8	1.9	2.7	0.8	9

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	
Traffic Vol, veh/h	0	28	0	826	567	8
Future Vol, veh/h	0	28	0	826	567	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	30	0	898	616	9

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	313	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	683	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			
Mov Cap-1 Maneuver	-	683	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	683	-	-
HCM Lane V/C Ratio	-	0.045	-	-
HCM Control Delay (s)	-	10.5	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Intersection												
Int Delay, s/veh	35.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	81	0	11	33	0	19	14	726	12	7	549	39
Future Vol, veh/h	81	0	11	33	0	19	14	726	12	7	549	39
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	92	78	92	92	92	78	78	92	92	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	104	0	14	36	0	21	18	931	13	8	704	50

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1731	1727	380	1343	1746	938	756	0	0	944	0	0
Stage 1	747	747	-	974	974	-	-	-	-	-	-	-
Stage 2	984	980	-	369	772	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.93	7.33	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	~ 63	88	619	119	86	320	853	-	-	725	-	-
Stage 1	372	419	-	302	329	-	-	-	-	-	-	-
Stage 2	298	327	-	624	408	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 56	82	617	111	80	320	851	-	-	725	-	-
Mov Cap-2 Maneuver	~ 56	82	-	111	80	-	-	-	-	-	-	-
Stage 1	355	410	-	288	314	-	-	-	-	-	-	-
Stage 2	266	312	-	598	399	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	552.8	44.4	0.2	0.2
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	851	-	-	63	146	725	-	-
HCM Lane V/C Ratio	0.021	-	-	1.872	0.387	0.01	-	-
HCM Control Delay (s)	9.3	0	-	552.8	44.4	10	0.1	-
HCM Lane LOS	A	A	-	F	E	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	10.9	1.7	0	-	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Intersection Delay, s/veh	204.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	256	462	20	26	224	169	32	320	39	71	303	217
Future Vol, veh/h	256	462	20	26	224	169	32	320	39	71	303	217
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	298	537	23	30	260	197	37	372	45	83	352	252
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	255.9	281.2	252.4	53.2
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	8%	100%	0%	6%	100%	0%	0%
Vol Thru, %	82%	0%	96%	53%	0%	100%	0%
Vol Right, %	10%	0%	4%	40%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	391	256	482	419	71	303	217
LT Vol	32	256	0	26	71	0	0
Through Vol	320	0	462	224	0	303	0
RT Vol	39	0	20	169	0	0	217
Lane Flow Rate	455	298	560	487	83	352	252
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	1.443	0.933	1.674	1.516	0.234	0.948	0.629
Departure Headway (Hd)	13.419	13.956	13.388	12.974	12.752	12.219	11.474
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	277	262	275	283	283	299	318
Service Time	11.119	11.656	11.088	10.674	10.452	9.919	9.174
HCM Lane V/C Ratio	1.643	1.137	2.036	1.721	0.293	1.177	0.792
HCM Control Delay	252.4	79.6	349.6	281.2	19.3	76.4	31.8
HCM Lane LOS	F	F	F	F	C	F	D
HCM 95th-tile Q	21.6	8.5	28.6	24.4	0.9	9.3	4

Intersection						
Int Delay, s/veh	6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	69	30	35	56	31	23
Future Vol, veh/h	69	30	35	56	31	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	46	46	46	46	46	46
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	150	65	76	122	67	50

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	321	137	0	0	198
Stage 1	137	-	-	-	-
Stage 2	184	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	673	911	-	-	1375
Stage 1	890	-	-	-	-
Stage 2	848	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	639	911	-	-	1375
Mov Cap-2 Maneuver	639	-	-	-	-
Stage 1	890	-	-	-	-
Stage 2	806	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	4.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	703	1375
HCM Lane V/C Ratio	-	-	0.306	0.049
HCM Control Delay (s)	-	-	12.4	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1.3	0.2

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑	↑↑		↘	
Traffic Vol, veh/h	95	620	564	29	14	90
Future Vol, veh/h	95	620	564	29	14	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	123	805	732	38	18	117

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	770	0	-	0	1802 385
Stage 1	-	-	-	-	751 -
Stage 2	-	-	-	-	1051 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	842	-	-	-	79 614
Stage 1	-	-	-	-	428 -
Stage 2	-	-	-	-	335 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	842	-	-	-	67 614
Mov Cap-2 Maneuver	-	-	-	-	190 -
Stage 1	-	-	-	-	366 -
Stage 2	-	-	-	-	335 -

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	15.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	842	-	-	-	472
HCM Lane V/C Ratio	0.147	-	-	-	0.286
HCM Control Delay (s)	10	-	-	-	15.7
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.5	-	-	-	1.2

Intersection	
Intersection Delay, s/veh	165.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕			↕	
Traffic Vol, veh/h	27	27	81	156	32	57	95	289	207	73	330	32
Future Vol, veh/h	27	27	81	156	32	57	95	289	207	73	330	32
Peak Hour Factor	0.92	0.92	0.92	0.70	0.92	0.70	0.92	0.70	0.70	0.70	0.70	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	29	88	223	35	81	103	413	296	104	471	35
Number of Lanes	0	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	18.7	21.2	277.1	133.7
HCM LOS	C	C	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	16%	20%	100%	0%	17%
Vol Thru, %	49%	20%	0%	36%	76%
Vol Right, %	35%	60%	0%	64%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	591	135	156	89	435
LT Vol	95	27	156	0	73
Through Vol	289	27	0	32	330
RT Vol	207	81	0	57	32
Lane Flow Rate	812	147	223	116	610
Geometry Grp	2	5	7	7	2
Degree of Util (X)	1.55	0.346	0.546	0.254	1.194
Departure Headway (Hd)	7.353	10.355	10.173	9.178	8.062
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	503	349	357	394	458
Service Time	5.353	8.355	7.873	6.878	6.062
HCM Lane V/C Ratio	1.614	0.421	0.625	0.294	1.332
HCM Control Delay	277.1	18.7	24.5	15	133.7
HCM Lane LOS	F	C	C	B	F
HCM 95th-tile Q	40.7	1.5	3.1	1	20.6

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	
Traffic Vol, veh/h	0	23	0	611	532	23
Future Vol, veh/h	0	23	0	611	532	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	25	0	664	578	25

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	302	-	0	0
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	694	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	694	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	694	-	-
HCM Lane V/C Ratio	-	0.036	-	-
HCM Control Delay (s)	-	10.4	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Intersection												
Int Delay, s/veh	58.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	47	0	48	27	0	15	72	548	32	18	490	46
Future Vol, veh/h	47	0	48	27	0	15	72	548	32	18	490	46
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	116
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	92	70	92	92	92	70	70	92	92	70	70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	0	69	29	0	16	103	783	35	20	700	66

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1904	1913	500	1398	1929	801	882	0	0	818	0	0
Stage 1	889	889	-	1007	1007	-	-	-	-	-	-	-
Stage 2	1015	1024	-	391	922	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.93	7.33	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	~ 47	68	517	109	66	384	765	-	-	808	-	-
Stage 1	305	361	-	289	318	-	-	-	-	-	-	-
Stage 2	286	312	-	606	348	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 30	42	459	70	40	384	680	-	-	808	-	-
Mov Cap-2 Maneuver	~ 30	42	-	70	40	-	-	-	-	-	-	-
Stage 1	195	307	-	208	229	-	-	-	-	-	-	-
Stage 2	197	225	-	492	296	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	784.1	69.3	1.3	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	680	-	-	57	99	808	-	-
HCM Lane V/C Ratio	0.151	-	-	2.381	0.461	0.024	-	-
HCM Control Delay (s)	11.2	0	-	784.1	69.3	9.6	0.2	-
HCM Lane LOS	B	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0.5	-	-	13.6	2	0.1	-	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Intersection Delay, s/veh	269.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	194	400	41	37	338	145	58	301	29	83	326	196
Future Vol, veh/h	194	400	41	37	338	145	58	301	29	83	326	196
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	240	494	51	46	417	179	72	372	36	102	402	242
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	251.3	496.6	290.6	79.9
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	15%	100%	0%	7%	100%	0%	0%
Vol Thru, %	78%	0%	91%	65%	0%	100%	0%
Vol Right, %	7%	0%	9%	28%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	388	194	441	520	83	326	196
LT Vol	58	194	0	37	83	0	0
Through Vol	301	0	400	338	0	326	0
RT Vol	29	0	41	145	0	0	196
Lane Flow Rate	479	240	544	642	102	402	242
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	1.525	0.756	1.634	2.011	0.291	1.088	0.607
Departure Headway (Hd)	14.71	15.693	15.079	13.519	14.558	14.021	13.269
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	254	232	245	276	249	262	276
Service Time	12.41	13.393	12.779	11.219	12.258	11.721	10.969
HCM Lane V/C Ratio	1.886	1.034	2.22	2.326	0.41	1.534	0.877
HCM Control Delay	290.6	54.9	337.7	496.6	23.1	121.7	34.5
HCM Lane LOS	F	F	F	F	C	F	D
HCM 95th-tile Q	22.3	5.3	24.8	38.8	1.2	11.7	3.6

Intersection						
Int Delay, s/veh	4.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	30	39	6	24	16
Future Vol, veh/h	10	30	39	6	24	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	56	72	11	44	30

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	196	78	0	0	83
Stage 1	78	-	-	-	-
Stage 2	118	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	793	983	-	-	1514
Stage 1	945	-	-	-	-
Stage 2	907	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	769	983	-	-	1514
Mov Cap-2 Maneuver	769	-	-	-	-
Stage 1	945	-	-	-	-
Stage 2	880	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	4.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	919	1514
HCM Lane V/C Ratio	-	-	0.081	0.029
HCM Control Delay (s)	-	-	9.3	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	47	622	614	29	15	29
Future Vol, veh/h	47	622	614	29	15	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	655	646	31	16	31

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	677	0	-	0	1415 339
Stage 1	-	-	-	-	662 -
Stage 2	-	-	-	-	753 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	913	-	-	-	139 658
Stage 1	-	-	-	-	476 -
Stage 2	-	-	-	-	464 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	913	-	-	-	131 658
Mov Cap-2 Maneuver	-	-	-	-	268 -
Stage 1	-	-	-	-	450 -
Stage 2	-	-	-	-	464 -

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	14.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	913	-	-	-	440
HCM Lane V/C Ratio	0.054	-	-	-	0.105
HCM Control Delay (s)	9.2	-	-	-	14.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

Intersection	
Intersection Delay, s/veh	34.8
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕			↕	
Traffic Vol, veh/h	22	22	66	65	38	36	113	284	79	76	404	38
Future Vol, veh/h	22	22	66	65	38	36	113	284	79	76	404	38
Peak Hour Factor	0.92	0.92	0.92	0.91	0.92	0.91	0.92	0.91	0.91	0.91	0.91	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	24	72	71	41	40	123	312	87	84	444	41
Number of Lanes	0	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	12.8	12.4	34.8	45.4
HCM LOS	B	B	D	E

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	24%	20%	100%	0%	15%
Vol Thru, %	60%	20%	0%	51%	78%
Vol Right, %	17%	60%	0%	49%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	476	110	65	74	518
LT Vol	113	22	65	0	76
Through Vol	284	22	0	38	404
RT Vol	79	66	0	36	38
Lane Flow Rate	522	120	71	81	569
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.859	0.244	0.167	0.17	0.93
Departure Headway (Hd)	5.928	7.341	8.441	7.573	5.886
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	610	488	424	472	614
Service Time	3.978	5.416	6.208	5.339	3.934
HCM Lane V/C Ratio	0.856	0.246	0.167	0.172	0.927
HCM Control Delay	34.8	12.8	12.9	11.9	45.4
HCM Lane LOS	D	B	B	B	E
HCM 95th-tile Q	9.6	0.9	0.6	0.6	12.1

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	
Traffic Vol, veh/h	0	19	0	499	520	27
Future Vol, veh/h	0	19	0	499	520	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	21	0	542	565	29

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	297	-	0	0
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	699	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	699	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	699	-	-
HCM Lane V/C Ratio	-	0.03	-	-
HCM Control Delay (s)	-	10.3	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	23	0	4	22	0	13	26	464	37	21	505	12
Future Vol, veh/h	23	0	4	22	0	13	26	464	37	21	505	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	92	83	92	92	92	83	83	92	92	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	0	5	24	0	14	31	559	40	23	608	14

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1309	1322	311	991	1309	579	622	0	0	599	0	0
Stage 1	661	661	-	641	641	-	-	-	-	-	-	-
Stage 2	648	661	-	350	668	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.93	7.33	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	126	156	686	212	159	514	957	-	-	976	-	-
Stage 1	419	459	-	462	469	-	-	-	-	-	-	-
Stage 2	458	459	-	640	455	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	115	143	686	197	146	514	957	-	-	976	-	-
Mov Cap-2 Maneuver	115	143	-	197	146	-	-	-	-	-	-	-
Stage 1	398	442	-	439	446	-	-	-	-	-	-	-
Stage 2	424	437	-	613	439	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	41.3		21.5		0.4		0.4	
HCM LOS	E		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	957	-	-	131	256	976	-	-
HCM Lane V/C Ratio	0.033	-	-	0.248	0.149	0.023	-	-
HCM Control Delay (s)	8.9	0	-	41.3	21.5	8.8	0.1	-
HCM Lane LOS	A	A	-	E	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	0.5	0.1	-	-

Intersection	
Intersection Delay, s/veh	261.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	162	425	49	39	458	62	49	313	28	52	354	135
Future Vol, veh/h	162	425	49	39	458	62	49	313	28	52	354	135
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	186	489	56	45	526	71	56	360	32	60	407	155
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	3	1	2
HCM Control Delay	244.7	472.5	228.2	87.4
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	13%	100%	0%	7%	100%	0%	0%
Vol Thru, %	80%	0%	90%	82%	0%	100%	0%
Vol Right, %	7%	0%	10%	11%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	390	162	474	559	52	354	135
LT Vol	49	162	0	39	52	0	0
Through Vol	313	0	425	458	0	354	0
RT Vol	28	0	49	62	0	0	135
Lane Flow Rate	448	186	545	643	60	407	155
Geometry Grp	8	8	8	8	7	7	7
Degree of Util (X)	1.373	0.573	1.59	1.958	0.169	1.093	0.387
Departure Headway (Hd)	14.663	14.792	14.172	13.211	14.141	13.605	12.855
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	251	246	262	283	255	273	282
Service Time	12.363	12.492	11.872	10.911	11.841	11.305	10.555
HCM Lane V/C Ratio	1.785	0.756	2.08	2.272	0.235	1.491	0.55
HCM Control Delay	228.2	35.6	316.2	472.5	19.7	121.7	23.4
HCM Lane LOS	F	E	F	F	C	F	C
HCM 95th-tile Q	18.3	3.2	24.8	37.9	0.6	12.1	1.8

**APPENDIX 6.3: EAC (2026) CONDITIONS TRAFFIC SIGNAL WARRANT
ANALYSIS WORKSHEETS**

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2026) Conditions - Weekday MD Peak Hour**

Major Street Name = **Appaloosa Dr.**

Total of Both Approaches (VPH) = **77**

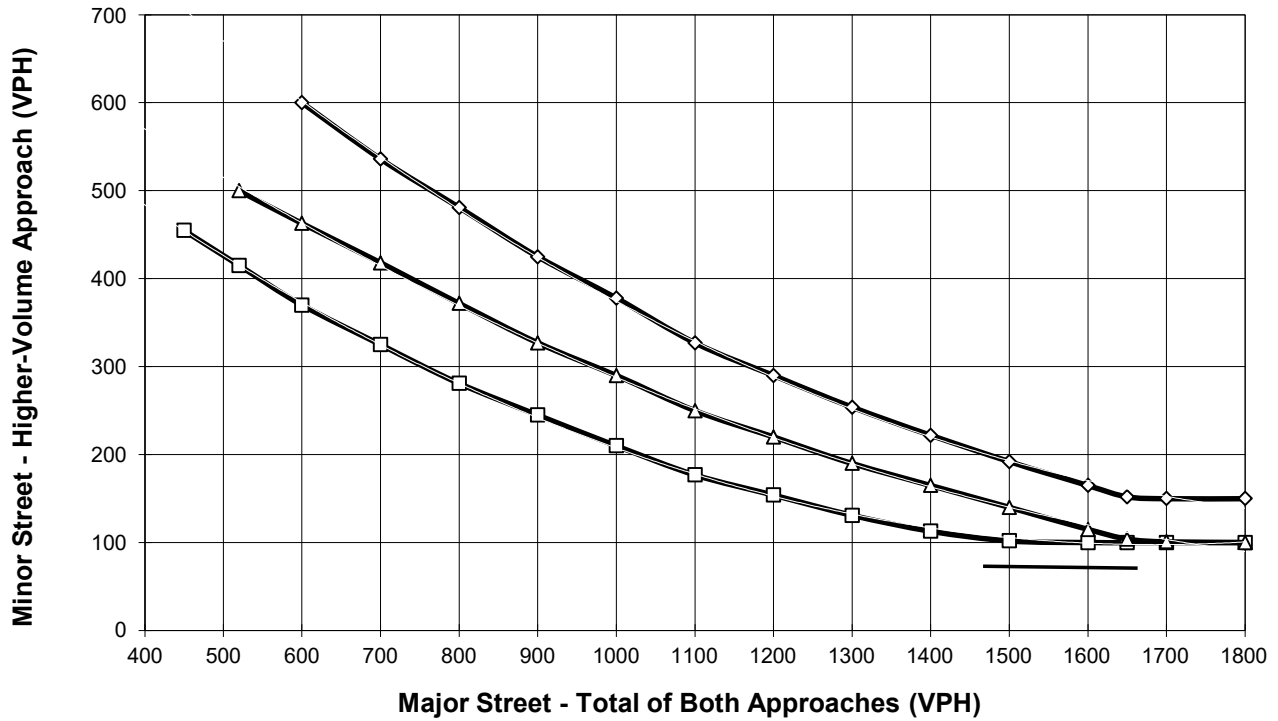
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Lipizzan Dr.**

High Volume Approach (VPH) = **62**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



- 1 Lane (Major) & 1 Lane (Minor)
- △— 2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)
- ◇— 2+ Lanes (Major) & 2+ Lanes (Minor)
- x— Major Street Approaches
- *— Minor Street Approaches

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

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2026) Conditions - Weekday MD Peak Hour**

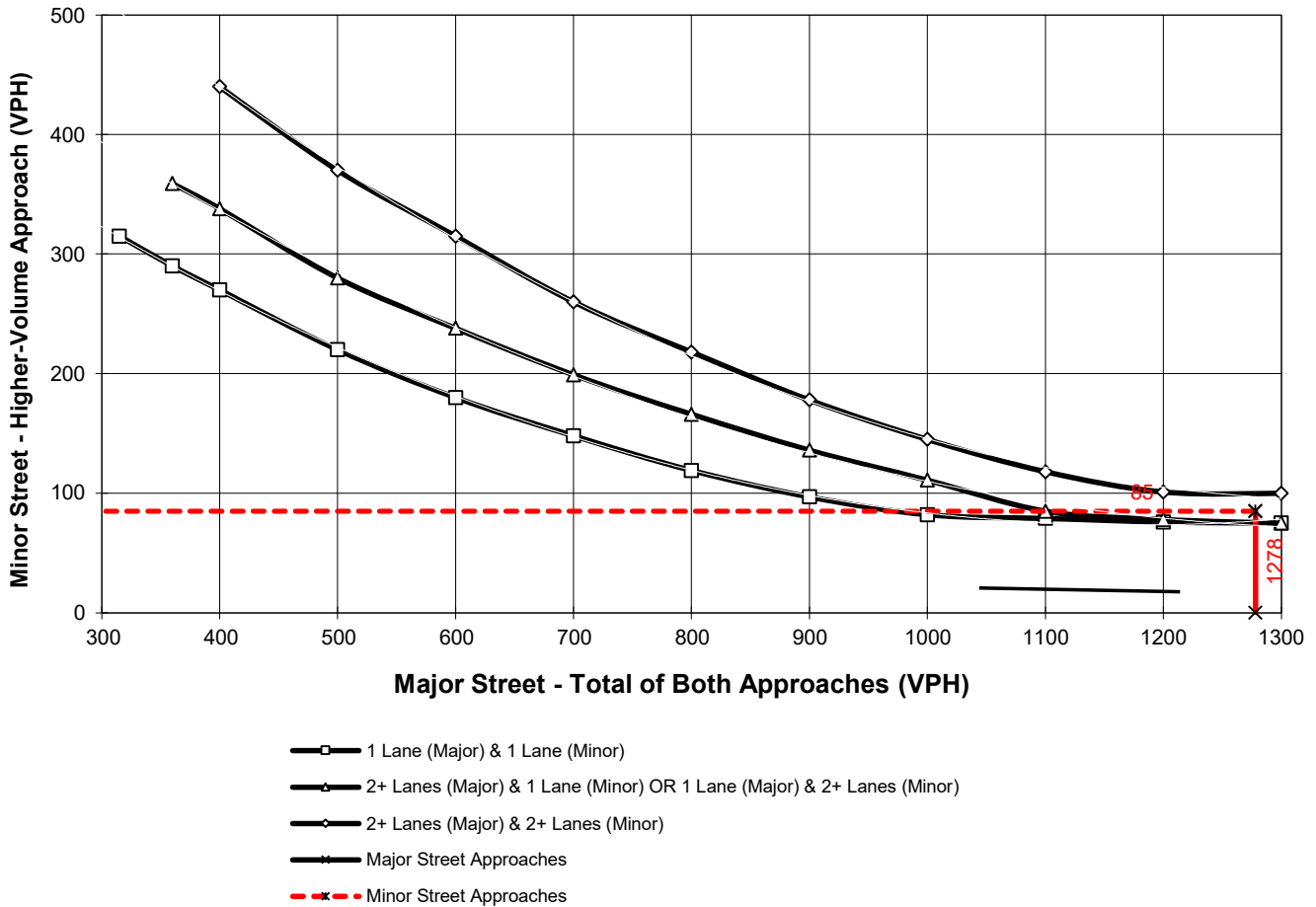
Major Street Name = **Cottonwood Av.**

Total of Both Approaches (VPH) = **1278**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Lipizzan Dr.**

High Volume Approach (VPH) = **85**
 Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2026) Conditions - Weekday MD Peak Hour**

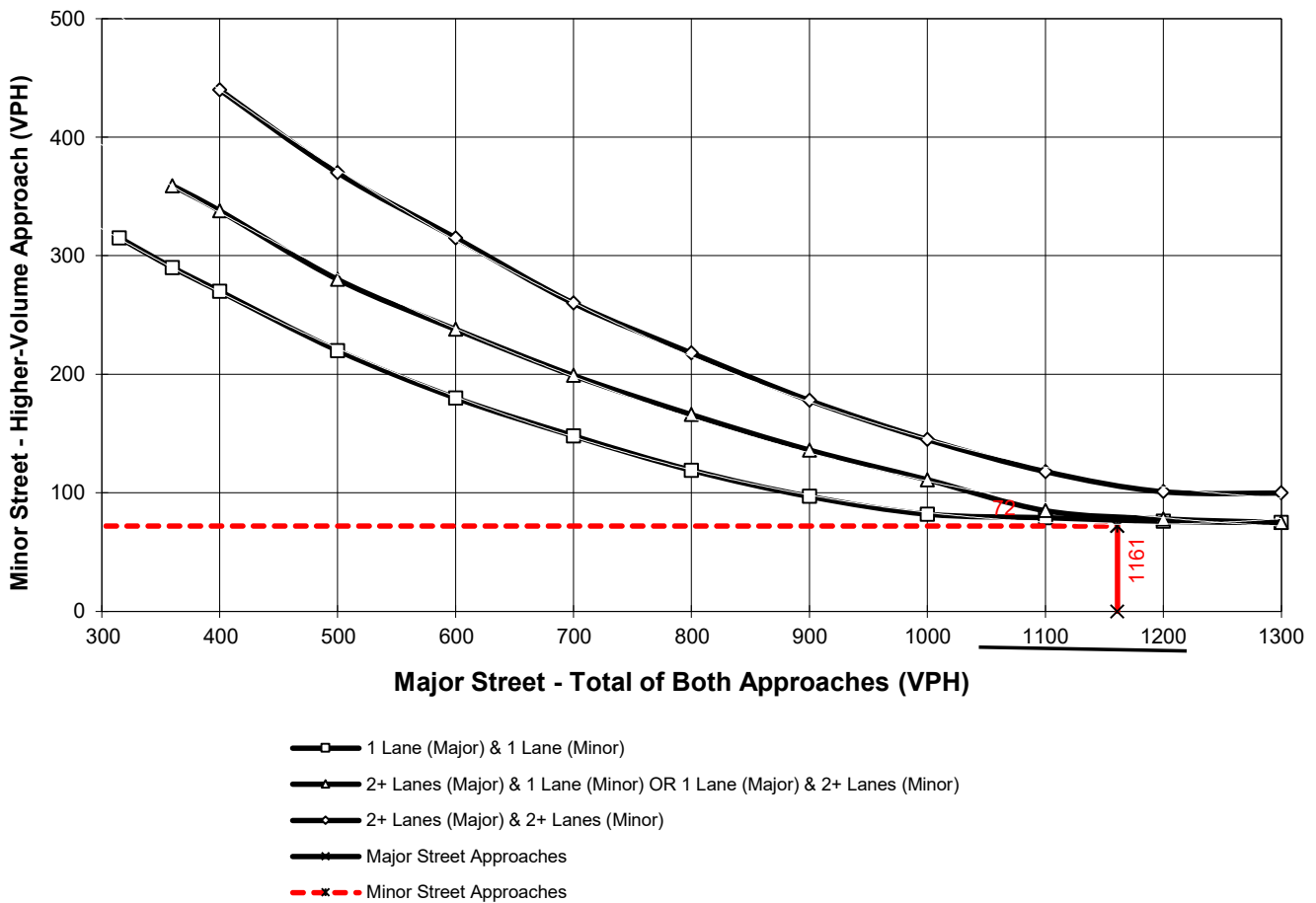
Major Street Name = **Lyon Av.**

Total of Both Approaches (VPH) = **1161**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Appaloosa Dr.**

High Volume Approach (VPH) = **72**
 Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 6.4: EAPC (2026) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2026) Conditions - Weekday MD Peak Hour**

Major Street Name = **Lipizzan Dr.**

Total of Both Approaches (VPH) = **146**

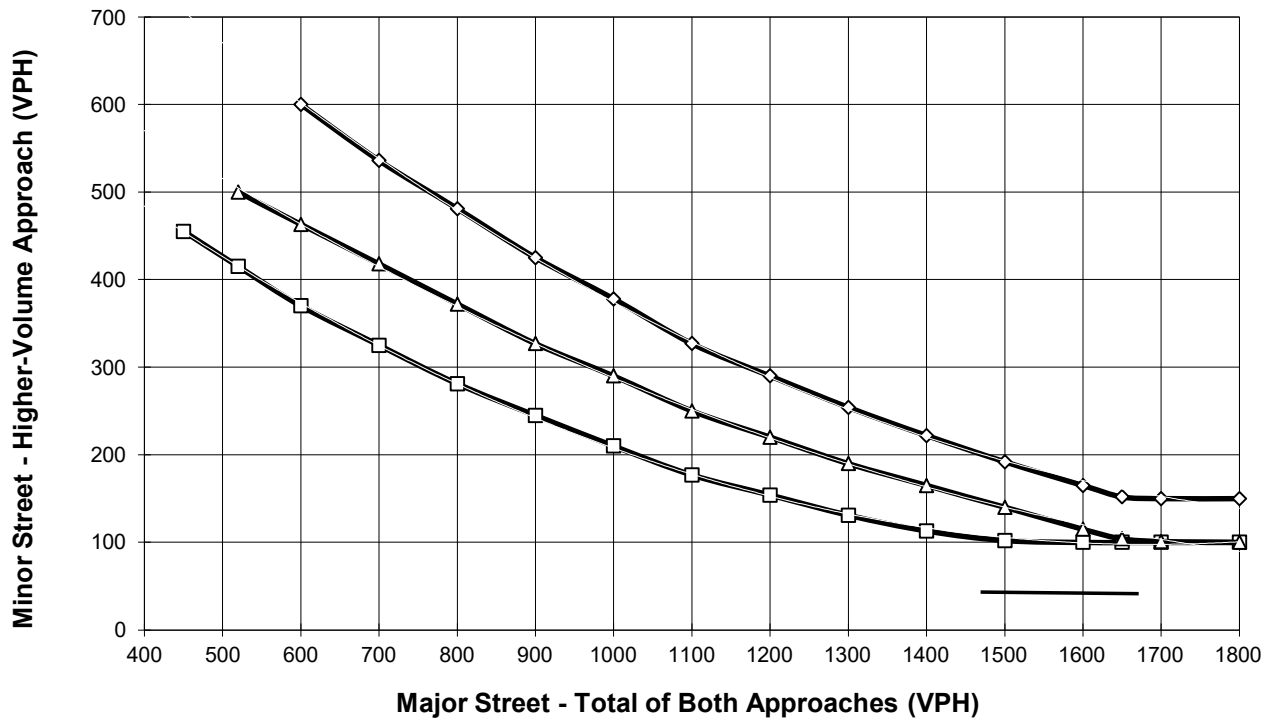
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Appaloosa Dr.**

High Volume Approach (VPH) = **99**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



- 1 Lane (Major) & 1 Lane (Minor)
- △— 2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)
- ◇— 2+ Lanes (Major) & 2+ Lanes (Minor)
- x— Major Street Approaches
- *— Minor Street Approaches

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

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAPC (2026) Conditions - Weekday AM Peak Hour**

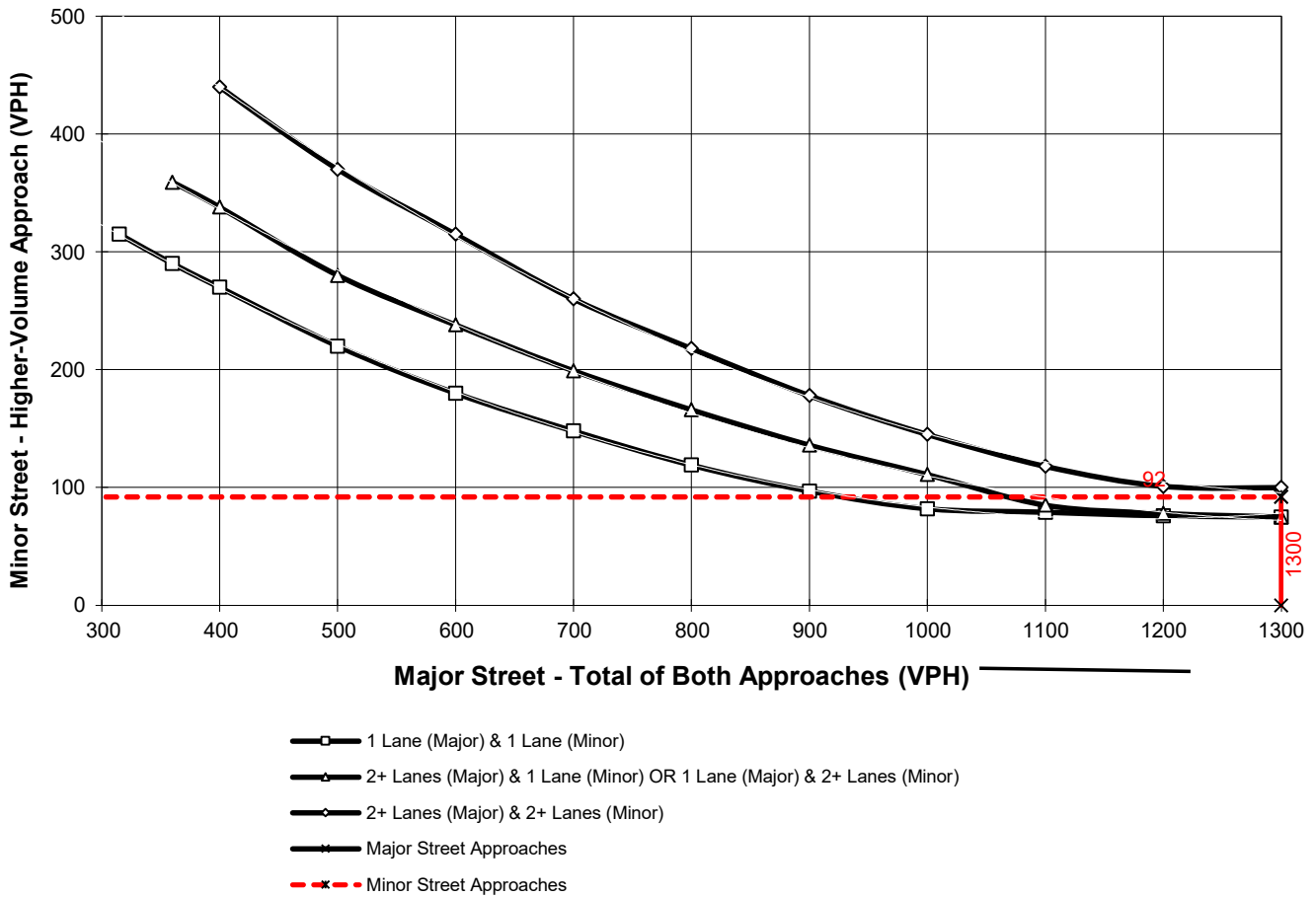
Major Street Name = **Lyon Av.**

Total of Both Approaches (VPH) = **1347**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Appaloosa Dr.**

High Volume Approach (VPH) = **92**
 Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

**APPENDIX 6.5: EAPC (2026) CONDITIONS INTERSECTION OPERATIONS
ANALYSIS WORKSHEETS WITH IMPROVEMENTS**

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Timings
3: Lyon Av. & De Anza Dr.

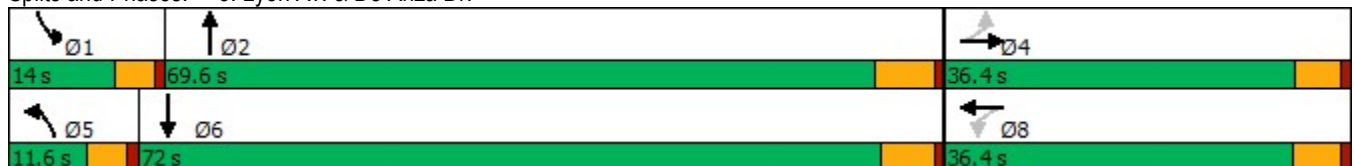


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↔	↖	↗	↖	↗	↖	↗
Traffic Volume (vph)	33	33	179	12	35	416	73	294
Future Volume (vph)	33	33	179	12	35	416	73	294
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.1	23.1	23.4	23.4	9.6	24.2	9.6	23.8
Total Split (s)	36.4	36.4	36.4	36.4	11.6	69.6	14.0	72.0
Total Split (%)	30.3%	30.3%	30.3%	30.3%	9.7%	58.0%	11.7%	60.0%
Yellow Time (s)	4.1	4.1	4.4	4.4	3.6	5.2	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1	5.4	5.4	4.6	6.2	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		25.8	25.5	25.5	7.0	51.8	9.0	56.4
Actuated g/C Ratio		0.26	0.26	0.26	0.07	0.52	0.09	0.56
v/c Ratio		0.40	0.78	0.22	0.31	0.88	0.53	0.34
Control Delay		26.0	60.0	11.0	59.5	33.9	63.8	14.1
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		26.0	60.0	11.0	59.5	33.9	63.8	14.1
LOS		C	E	B	E	C	E	B
Approach Delay		26.0		43.8		35.1		23.7
Approach LOS		C		D		D		C

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 100	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 32.9	Intersection LOS: C
Intersection Capacity Utilization 80.7%	ICU Level of Service D
Analysis Period (min) 15	

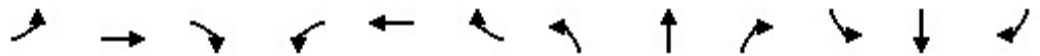
Splits and Phases: 3: Lyon Av. & De Anza Dr.



HCM 6th Signalized Intersection Summary
 3: Lyon Av. & De Anza Dr.

Lyon Avenue Residential (JN:15026)

10/17/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	33	33	99	179	12	77	35	416	284	73	294	12
Future Volume (veh/h)	33	33	99	179	12	77	35	416	284	73	294	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	36	108	208	13	90	38	484	307	85	342	13
Peak Hour Factor	0.92	0.92	0.92	0.86	0.92	0.86	0.92	0.86	0.86	0.86	0.86	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	96	209	344	44	306	65	545	346	110	957	36
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.04	0.51	0.51	0.06	0.53	0.53
Sat Flow, veh/h	199	444	965	1244	204	1412	1781	1070	679	1781	1790	68
Grp Volume(v), veh/h	180	0	0	208	0	103	38	0	791	85	0	355
Grp Sat Flow(s),veh/h/ln	1608	0	0	1244	0	1616	1781	0	1748	1781	0	1858
Q Serve(g_s), s	1.2	0.0	0.0	6.2	0.0	4.1	1.6	0.0	31.0	3.6	0.0	8.4
Cycle Q Clear(g_c), s	7.2	0.0	0.0	13.5	0.0	4.1	1.6	0.0	31.0	3.6	0.0	8.4
Prop In Lane	0.20		0.60	1.00		0.87	1.00		0.39	1.00		0.04
Lane Grp Cap(c), veh/h	405	0	0	344	0	351	65	0	890	110	0	994
V/C Ratio(X)	0.44	0.00	0.00	0.60	0.00	0.29	0.59	0.00	0.89	0.77	0.00	0.36
Avail Cap(c_a), veh/h	707	0	0	579	0	656	163	0	1451	219	0	1611
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.2	0.0	0.0	29.0	0.0	25.0	36.2	0.0	16.8	35.3	0.0	10.2
Incr Delay (d2), s/veh	0.8	0.0	0.0	1.7	0.0	0.5	8.3	0.0	4.3	10.9	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.0	3.6	0.0	1.5	0.8	0.0	10.6	1.8	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	0.0	0.0	30.7	0.0	25.5	44.5	0.0	21.1	46.2	0.0	10.4
LnGrp LOS	C	A	A	C	A	C	D	A	C	D	A	B
Approach Vol, veh/h		180			311			829				440
Approach Delay, s/veh		27.0			29.0			22.1				17.4
Approach LOS		C			C			C				B
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	45.1		22.0	7.4	47.0		22.0				
Change Period (Y+Rc), s	4.6	6.2		* 5.4	4.6	* 6.2		5.4				
Max Green Setting (Gmax), s	9.4	63.4		* 31	7.0	* 66		31.0				
Max Q Clear Time (g_c+I1), s	5.6	33.0		9.2	3.6	10.4		15.5				
Green Ext Time (p_c), s	0.0	5.9		1.0	0.0	2.1		1.1				

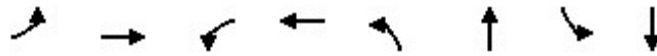
Intersection Summary

HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
5: Lyon Av. & Appaloosa Dr.

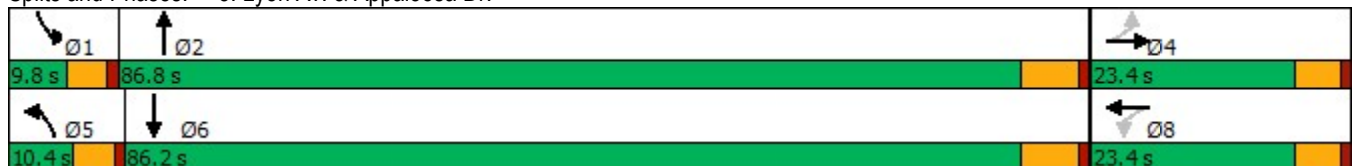


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↗	↖	↗	↕
Traffic Volume (vph)	81	0	33	0	14	726	7	549
Future Volume (vph)	81	0	33	0	14	726	7	549
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.1	23.1	23.1	23.1	9.6	24.2	9.6	24.2
Total Split (s)	23.4	23.4	23.4	23.4	10.4	86.8	9.8	86.2
Total Split (%)	19.5%	19.5%	19.5%	19.5%	8.7%	72.3%	8.2%	71.8%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1		5.1	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		11.9		11.9	5.8	43.1	5.5	43.0
Actuated g/C Ratio		0.17		0.17	0.08	0.63	0.08	0.63
v/c Ratio		0.41		0.19	0.12	0.81	0.06	0.34
Control Delay		20.3		8.8	40.5	16.4	40.9	6.4
Queue Delay		0.0		0.0	0.0	0.2	0.0	0.0
Total Delay		20.3		8.8	40.5	16.6	40.9	6.4
LOS		C		A	D	B	D	A
Approach Delay		20.3		8.8		17.0		6.8
Approach LOS		C		A		B		A

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 68.5	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 12.9	Intersection LOS: B
Intersection Capacity Utilization 56.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: Lyon Av. & Appaloosa Dr.



HCM 6th Signalized Intersection Summary
 5: Lyon Av. & Appaloosa Dr.

Lyon Avenue Residential (JN:15026)

10/17/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (veh/h)	81	0	11	33	0	19	14	726	12	7	549	39
Future Volume (veh/h)	81	0	11	33	0	19	14	726	12	7	549	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	0	14	36	0	21	18	931	13	8	704	50
Peak Hour Factor	0.78	0.92	0.78	0.92	0.92	0.92	0.78	0.78	0.92	0.92	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	7	27	228	20	90	38	1077	15	18	1933	137
Arrive On Green	0.15	0.00	0.15	0.15	0.00	0.15	0.02	0.59	0.59	0.01	0.57	0.57
Sat Flow, veh/h	1261	45	176	885	133	594	1781	1840	26	1781	3365	239
Grp Volume(v), veh/h	118	0	0	57	0	0	18	0	944	8	372	382
Grp Sat Flow(s),veh/h/ln	1483	0	0	1613	0	0	1781	0	1866	1781	1777	1827
Q Serve(g_s), s	2.6	0.0	0.0	0.0	0.0	0.0	0.6	0.0	26.8	0.3	7.1	7.1
Cycle Q Clear(g_c), s	4.4	0.0	0.0	1.8	0.0	0.0	0.6	0.0	26.8	0.3	7.1	7.1
Prop In Lane	0.88		0.12	0.63		0.37	1.00		0.01	1.00		0.13
Lane Grp Cap(c), veh/h	333	0	0	339	0	0	38	0	1092	18	1021	1049
V/C Ratio(X)	0.35	0.00	0.00	0.17	0.00	0.00	0.47	0.00	0.86	0.43	0.36	0.36
Avail Cap(c_a), veh/h	527	0	0	540	0	0	164	0	2382	147	2252	2315
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	0.0	0.0	23.4	0.0	0.0	30.5	0.0	11.0	31.1	7.2	7.2
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.2	0.0	0.0	3.3	0.0	2.2	5.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	0.7	0.0	0.0	0.3	0.0	7.3	0.1	1.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.1	0.0	0.0	23.7	0.0	0.0	33.9	0.0	13.2	36.9	7.4	7.4
LnGrp LOS	C	A	A	C	A	A	C	A	B	D	A	A
Approach Vol, veh/h		118			57			962				762
Approach Delay, s/veh		25.1			23.7			13.5				7.8
Approach LOS		C			C			B				A
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	43.2		14.7	6.0	42.5		14.7				
Change Period (Y+Rc), s	4.6	6.2		5.1	4.6	6.2		5.1				
Max Green Setting (Gmax), s	5.2	80.6		18.3	5.8	80.0		18.3				
Max Q Clear Time (g_c+I1), s	2.3	28.8		6.4	2.6	9.1		3.8				
Green Ext Time (p_c), s	0.0	8.2		0.4	0.0	4.6		0.2				
Intersection Summary												
HCM 6th Ctrl Delay				12.2								
HCM 6th LOS				B								

Timings
6: Lyon Av. & Cottonwood Av.

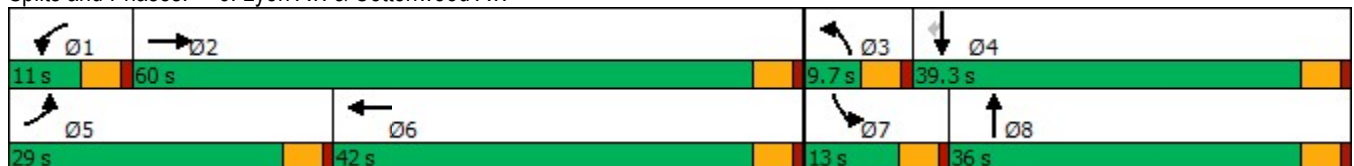


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↖	↗	↗
Traffic Volume (vph)	256	462	26	224	32	320	71	303	217
Future Volume (vph)	256	462	26	224	32	320	71	303	217
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	4
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	22.6	9.6	22.6	9.6	22.6	9.6	22.6	22.6
Total Split (s)	29.0	60.0	11.0	42.0	9.7	36.0	13.0	39.3	39.3
Total Split (%)	24.2%	50.0%	9.2%	35.0%	8.1%	30.0%	10.8%	32.8%	32.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	Min	None	Min	Min
Act Effct Green (s)	22.0	52.4	6.4	31.5	5.4	28.4	8.3	32.8	32.8
Actuated g/C Ratio	0.21	0.49	0.06	0.30	0.05	0.27	0.08	0.31	0.31
v/c Ratio	0.81	0.61	0.28	0.85	0.42	0.85	0.60	0.61	0.38
Control Delay	61.1	25.5	60.9	50.2	69.5	56.1	71.7	38.8	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.1	25.5	60.9	50.2	69.5	56.1	71.7	38.8	5.8
LOS	E	C	E	D	E	E	E	D	A
Approach Delay		37.9		50.8		57.2		30.7	
Approach LOS		D		D		E		C	

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 105.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 42.0	Intersection LOS: D
Intersection Capacity Utilization 75.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 6: Lyon Av. & Cottonwood Av.



HCM 6th Signalized Intersection Summary
6: Lyon Av. & Cottonwood Av.

Lyon Avenue Residential (JN:15026)

10/17/2023

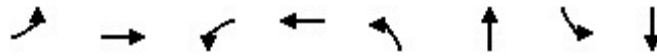


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	462	20	26	224	169	32	320	39	71	303	217
Future Volume (veh/h)	256	462	20	26	224	169	32	320	39	71	303	217
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	298	537	23	30	260	197	37	372	45	83	352	252
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	814	35	52	291	221	59	419	51	107	531	450
Arrive On Green	0.19	0.46	0.46	0.03	0.30	0.30	0.03	0.26	0.26	0.06	0.28	0.28
Sat Flow, veh/h	1781	1778	76	1781	980	743	1781	1629	197	1781	1870	1585
Grp Volume(v), veh/h	298	0	560	30	0	457	37	0	417	83	352	252
Grp Sat Flow(s),veh/h/ln	1781	0	1854	1781	0	1723	1781	0	1826	1781	1870	1585
Q Serve(g_s), s	15.3	0.0	22.0	1.6	0.0	23.8	1.9	0.0	20.6	4.3	15.6	12.7
Cycle Q Clear(g_c), s	15.3	0.0	22.0	1.6	0.0	23.8	1.9	0.0	20.6	4.3	15.6	12.7
Prop In Lane	1.00		0.04	1.00		0.43	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	337	0	849	52	0	512	59	0	469	107	531	450
V/C Ratio(X)	0.88	0.00	0.66	0.58	0.00	0.89	0.63	0.00	0.89	0.78	0.66	0.56
Avail Cap(c_a), veh/h	464	0	1096	122	0	688	97	0	612	160	693	587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	0.0	19.7	44.9	0.0	31.5	44.7	0.0	33.5	43.4	29.6	28.6
Incr Delay (d2), s/veh	14.0	0.0	1.0	10.0	0.0	11.2	10.6	0.0	12.3	13.0	1.5	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	0.0	8.7	0.8	0.0	10.8	1.0	0.0	10.0	2.2	6.7	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.9	0.0	20.7	54.9	0.0	42.7	55.3	0.0	45.8	56.4	31.1	29.7
LnGrp LOS	D	A	C	D	A	D	E	A	D	E	C	C
Approach Vol, veh/h		858			487			454			687	
Approach Delay, s/veh		31.2			43.4			46.6			33.6	
Approach LOS		C			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	47.5	7.7	31.2	22.3	32.5	10.2	28.7				
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6				
Max Green Setting (Gmax), s	6.4	55.4	5.1	34.7	24.4	37.4	8.4	31.4				
Max Q Clear Time (g_c+I1), s	3.6	24.0	3.9	17.6	17.3	25.8	6.3	22.6				
Green Ext Time (p_c), s	0.0	3.6	0.0	2.5	0.5	2.1	0.0	1.5				

Intersection Summary

HCM 6th Ctrl Delay	37.1
HCM 6th LOS	D

Timings
3: Lyon Av. & De Anza Dr.

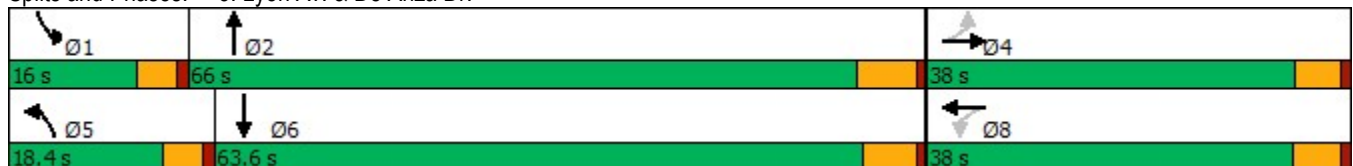


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	27	27	156	32	95	289	73	330
Future Volume (vph)	27	27	156	32	95	289	73	330
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.1	23.1	23.4	23.4	9.6	24.2	9.6	23.8
Total Split (s)	38.0	38.0	38.0	38.0	18.4	66.0	16.0	63.6
Total Split (%)	31.7%	31.7%	31.7%	31.7%	15.3%	55.0%	13.3%	53.0%
Yellow Time (s)	4.1	4.1	4.4	4.4	3.6	5.2	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1	5.4	5.4	4.6	6.2	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		24.7	24.4	24.4	11.1	43.2	10.5	43.0
Actuated g/C Ratio		0.27	0.27	0.27	0.12	0.47	0.11	0.47
v/c Ratio		0.31	0.71	0.23	0.48	0.84	0.51	0.59
Control Delay		21.1	48.8	13.9	53.4	32.1	56.3	22.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		21.1	48.8	13.9	53.4	32.1	56.3	22.9
LOS		C	D	B	D	C	E	C
Approach Delay		21.1		36.8		34.8		28.6
Approach LOS		C		D		C		C

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 91.8	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 32.1	Intersection LOS: C
Intersection Capacity Utilization 60.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 3: Lyon Av. & De Anza Dr.



HCM 6th Signalized Intersection Summary
 3: Lyon Av. & De Anza Dr.

Lyon Avenue Residential (JN:15026)

10/17/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕		↕	↕	
Traffic Volume (veh/h)	27	27	81	156	32	57	95	289	207	73	330	32
Future Volume (veh/h)	27	27	81	156	32	57	95	289	207	73	330	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	29	88	223	35	81	103	413	267	104	471	35
Peak Hour Factor	0.92	0.92	0.92	0.70	0.92	0.70	0.92	0.70	0.70	0.70	0.70	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	95	200	395	103	239	135	484	313	135	786	58
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.08	0.46	0.46	0.08	0.46	0.46
Sat Flow, veh/h	180	460	971	1275	501	1160	1781	1061	686	1781	1720	128
Grp Volume(v), veh/h	146	0	0	223	0	116	103	0	680	104	0	506
Grp Sat Flow(s),veh/h/ln	1612	0	0	1275	0	1662	1781	0	1747	1781	0	1847
Q Serve(g_s), s	0.0	0.0	0.0	4.8	0.0	3.7	3.5	0.0	21.5	3.6	0.0	12.7
Cycle Q Clear(g_c), s	4.7	0.0	0.0	9.5	0.0	3.7	3.5	0.0	21.5	3.6	0.0	12.7
Prop In Lane	0.20		0.60	1.00		0.70	1.00		0.39	1.00		0.07
Lane Grp Cap(c), veh/h	402	0	0	395	0	343	135	0	797	135	0	844
V/C Ratio(X)	0.36	0.00	0.00	0.56	0.00	0.34	0.77	0.00	0.85	0.77	0.00	0.60
Avail Cap(c_a), veh/h	908	0	0	803	0	874	397	0	1686	328	0	1723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.4	0.0	0.0	23.1	0.0	21.0	28.1	0.0	15.0	28.1	0.0	12.6
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.3	0.0	0.6	8.7	0.0	2.7	8.8	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	2.9	0.0	1.3	1.6	0.0	6.8	1.7	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	0.0	24.4	0.0	21.6	36.8	0.0	17.7	36.9	0.0	13.3
LnGrp LOS	C	A	A	C	A	C	D	A	B	D	A	B
Approach Vol, veh/h		146			339			783				610
Approach Delay, s/veh		21.9			23.4			20.2				17.3
Approach LOS		C			C			C				B
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	34.5		18.2	9.3	34.5		18.2				
Change Period (Y+Rc), s	4.6	6.2		* 5.4	4.6	* 6.2		5.4				
Max Green Setting (Gmax), s	11.4	59.8		* 33	13.8	* 58		32.6				
Max Q Clear Time (g_c+I1), s	5.6	23.5		6.7	5.5	14.7		11.5				
Green Ext Time (p_c), s	0.1	4.8		0.8	0.1	3.2		1.3				

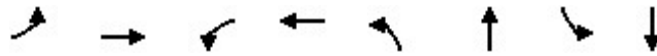
Intersection Summary

HCM 6th Ctrl Delay	20.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
5: Lyon Av. & Appaloosa Dr.

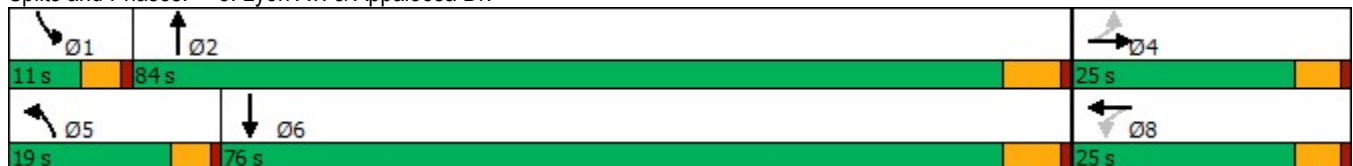


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↗	↖	↗	↕
Traffic Volume (vph)	47	0	27	0	72	548	18	490
Future Volume (vph)	47	0	27	0	72	548	18	490
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.1	23.1	23.1	23.1	9.6	24.2	9.6	24.2
Total Split (s)	25.0	25.0	25.0	25.0	19.0	84.0	11.0	76.0
Total Split (%)	20.8%	20.8%	20.8%	20.8%	15.8%	70.0%	9.2%	63.3%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1		5.1	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		8.5		8.5	8.9	37.7	5.9	29.5
Actuated g/C Ratio		0.14		0.14	0.14	0.61	0.10	0.48
v/c Ratio		0.47		0.16	0.41	0.72	0.12	0.47
Control Delay		15.7		1.2	34.2	14.5	37.2	12.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		15.7		1.2	34.2	14.5	37.2	12.6
LOS		B		A	C	B	D	B
Approach Delay		15.7		1.2		16.7		13.3
Approach LOS		B		A		B		B

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 61.9	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 14.8	Intersection LOS: B
Intersection Capacity Utilization 54.6%	ICU Level of Service A
Analysis Period (min) 15	

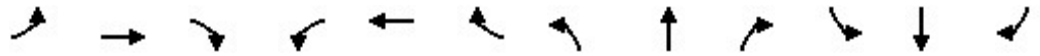
Splits and Phases: 5: Lyon Av. & Appaloosa Dr.



HCM 6th Signalized Intersection Summary
 5: Lyon Av. & Appaloosa Dr.

Lyon Avenue Residential (JN:15026)

10/17/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Volume (veh/h)	47	0	48	27	0	15	72	548	32	18	490	46
Future Volume (veh/h)	47	0	48	27	0	15	72	548	32	18	490	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	0	69	29	0	16	103	783	35	20	700	66
Peak Hour Factor	0.70	0.92	0.70	0.92	0.92	0.92	0.70	0.70	0.92	0.92	0.70	0.70
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	13	97	229	24	74	135	948	42	43	1555	146
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.08	0.53	0.53	0.02	0.48	0.48
Sat Flow, veh/h	654	101	778	884	192	594	1781	1777	79	1781	3228	304
Grp Volume(v), veh/h	136	0	0	45	0	0	103	0	818	20	385	381
Grp Sat Flow(s),veh/h/ln	1534	0	0	1669	0	0	1781	0	1856	1781	1777	1755
Q Serve(g_s), s	3.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	18.4	0.6	7.2	7.2
Cycle Q Clear(g_c), s	4.2	0.0	0.0	1.1	0.0	0.0	2.8	0.0	18.4	0.6	7.2	7.2
Prop In Lane	0.49		0.51	0.64		0.36	1.00		0.04	1.00		0.17
Lane Grp Cap(c), veh/h	299	0	0	327	0	0	135	0	990	43	856	845
V/C Ratio(X)	0.45	0.00	0.00	0.14	0.00	0.00	0.76	0.00	0.83	0.46	0.45	0.45
Avail Cap(c_a), veh/h	703	0	0	711	0	0	512	0	2881	227	2475	2444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	0.0	19.7	0.0	0.0	22.7	0.0	9.8	24.1	8.6	8.6
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.2	0.0	0.0	3.3	0.0	1.8	2.9	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	0.4	0.0	0.0	1.1	0.0	4.5	0.2	1.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.0	0.0	0.0	19.9	0.0	0.0	26.0	0.0	11.6	27.0	9.0	9.0
LnGrp LOS	C	A	A	B	A	A	C	A	B	C	A	A
Approach Vol, veh/h		136			45			921				786
Approach Delay, s/veh		22.0			19.9			13.2				9.4
Approach LOS		C			B			B				A
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	32.9		11.4	8.4	30.3		11.4				
Change Period (Y+Rc), s	4.6	6.2		5.1	4.6	6.2		5.1				
Max Green Setting (Gmax), s	6.4	77.8		19.9	14.4	69.8		19.9				
Max Q Clear Time (g_c+I1), s	2.6	20.4		6.2	4.8	9.2		3.1				
Green Ext Time (p_c), s	0.0	6.3		0.5	0.1	4.7		0.1				

Intersection Summary												
HCM 6th Ctrl Delay				12.4								
HCM 6th LOS				B								

Timings
6: Lyon Av. & Cottonwood Av.

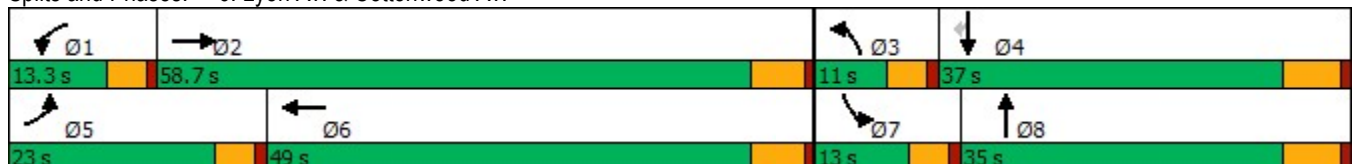


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↖	↗	↗
Traffic Volume (vph)	194	400	37	338	58	301	83	326	196
Future Volume (vph)	194	400	37	338	58	301	83	326	196
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	23.8	9.6	23.8	9.6	24.2	9.6	24.2	24.2
Total Split (s)	23.0	58.7	13.3	49.0	11.0	35.0	13.0	37.0	37.0
Total Split (%)	19.2%	48.9%	11.1%	40.8%	9.2%	29.2%	10.8%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	Min	None	Min	Min
Act Effct Green (s)	17.5	53.0	7.2	40.4	6.4	27.6	8.3	29.5	29.5
Actuated g/C Ratio	0.15	0.46	0.06	0.35	0.06	0.24	0.07	0.26	0.26
v/c Ratio	0.90	0.64	0.42	0.94	0.74	0.93	0.81	0.84	0.42
Control Delay	82.9	29.1	65.5	59.5	95.7	71.8	95.9	58.3	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.9	29.1	65.5	59.5	95.7	71.8	95.9	58.3	6.8
LOS	F	C	E	E	F	E	F	E	A
Approach Delay		45.6		60.0		75.4		46.8	
Approach LOS		D		E		E		D	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 115.1
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 54.8
 Intersection LOS: D
 Intersection Capacity Utilization 77.5%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 6: Lyon Av. & Cottonwood Av.



HCM 6th Signalized Intersection Summary
6: Lyon Av. & Cottonwood Av.

Lyon Avenue Residential (JN:15026)

10/17/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	400	41	37	338	145	58	301	29	83	326	196
Future Volume (veh/h)	194	400	41	37	338	145	58	301	29	83	326	196
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.94	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	240	494	51	46	417	179	72	372	36	102	402	242
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	786	81	60	441	189	92	399	39	126	484	403
Arrive On Green	0.15	0.47	0.47	0.03	0.36	0.36	0.05	0.24	0.24	0.07	0.26	0.26
Sat Flow, veh/h	1781	1666	172	1781	1241	533	1781	1668	161	1781	1870	1559
Grp Volume(v), veh/h	240	0	545	46	0	596	72	0	408	102	402	242
Grp Sat Flow(s),veh/h/ln	1781	0	1838	1781	0	1773	1781	0	1830	1781	1870	1559
Q Serve(g_s), s	15.2	0.0	25.6	2.9	0.0	37.5	4.6	0.0	25.1	6.5	23.3	15.6
Cycle Q Clear(g_c), s	15.2	0.0	25.6	2.9	0.0	37.5	4.6	0.0	25.1	6.5	23.3	15.6
Prop In Lane	1.00		0.09	1.00		0.30	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	267	0	867	60	0	630	92	0	438	126	484	403
V/C Ratio(X)	0.90	0.00	0.63	0.77	0.00	0.95	0.78	0.00	0.93	0.81	0.83	0.60
Avail Cap(c_a), veh/h	286	0	867	135	0	667	99	0	459	130	502	418
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.9	0.0	22.8	55.0	0.0	36.0	53.8	0.0	42.8	52.5	40.2	37.3
Incr Delay (d2), s/veh	26.5	0.0	1.5	7.6	0.0	22.0	27.3	0.0	25.5	27.1	11.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	0.0	10.6	1.4	0.0	19.1	2.7	0.0	13.8	3.7	11.7	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.4	0.0	24.2	62.6	0.0	58.0	81.1	0.0	68.2	79.7	51.2	39.6
LnGrp LOS	E	A	C	E	A	E	F	A	E	E	D	D
Approach Vol, veh/h		785			642			480			746	
Approach Delay, s/veh		39.6			58.3			70.2			51.3	
Approach LOS		D			E			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.4	59.9	10.5	35.9	21.8	46.6	12.7	33.7				
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2				
Max Green Setting (Gmax), s	8.7	52.9	6.4	30.8	18.4	43.2	8.4	28.8				
Max Q Clear Time (g_c+I1), s	4.9	27.6	6.6	25.3	17.2	39.5	8.5	27.1				
Green Ext Time (p_c), s	0.0	3.3	0.0	1.5	0.0	1.3	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay				52.9								
HCM 6th LOS				D								

Timings
3: Lyon Av. & De Anza Dr.

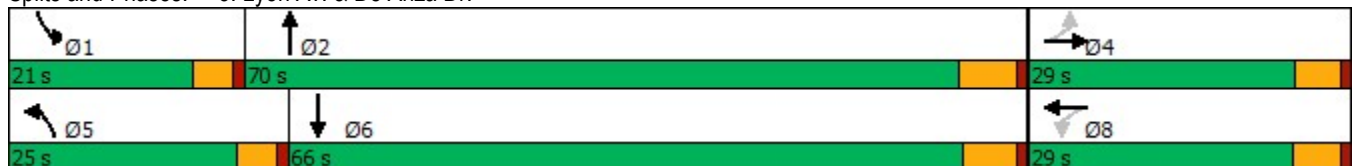


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕	↗	↖	↗	↖	↗	↖
Traffic Volume (vph)	22	22	65	38	113	284	76	404
Future Volume (vph)	22	22	65	38	113	284	76	404
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.1	23.1	24.2	24.2	9.6	24.2	9.6	23.8
Total Split (s)	29.0	29.0	29.0	29.0	25.0	70.0	21.0	66.0
Total Split (%)	24.2%	24.2%	24.2%	24.2%	20.8%	58.3%	17.5%	55.0%
Yellow Time (s)	4.1	4.1	4.4	4.4	3.6	5.2	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1	5.4	5.4	4.6	6.2	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		13.2	12.9	12.9	10.8	29.3	9.3	28.5
Actuated g/C Ratio		0.23	0.23	0.23	0.19	0.52	0.16	0.50
v/c Ratio		0.29	0.22	0.19	0.36	0.42	0.29	0.52
Control Delay		16.9	25.9	16.7	28.8	15.0	29.4	18.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		16.9	25.9	16.7	28.8	15.0	29.4	18.0
LOS		B	C	B	C	B	C	B
Approach Delay		16.9		21.0		18.3		19.7
Approach LOS		B		C		B		B

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 56.5	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 19.0	Intersection LOS: B
Intersection Capacity Utilization 55.8%	ICU Level of Service B
Analysis Period (min) 15	

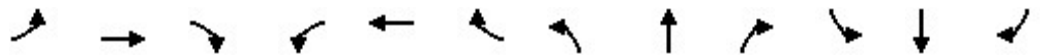
Splits and Phases: 3: Lyon Av. & De Anza Dr.



HCM 6th Signalized Intersection Summary
 3: Lyon Av. & De Anza Dr.

Lyon Avenue Residential (JN:15026)

10/17/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕		↕	↕	
Traffic Volume (veh/h)	22	22	66	65	38	36	113	284	79	76	404	38
Future Volume (veh/h)	22	22	66	65	38	36	113	284	79	76	404	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	24	72	71	41	40	123	312	65	84	444	41
Peak Hour Factor	0.92	0.92	0.92	0.91	0.92	0.91	0.92	0.91	0.91	0.91	0.91	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	101	206	460	183	179	164	548	114	128	581	54
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.09	0.36	0.36	0.07	0.34	0.34
Sat Flow, veh/h	170	479	974	1300	869	848	1781	1501	313	1781	1687	156
Grp Volume(v), veh/h	120	0	0	71	0	81	123	0	377	84	0	485
Grp Sat Flow(s),veh/h/ln	1624	0	0	1300	0	1718	1781	0	1814	1781	0	1842
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.8	3.1	0.0	7.7	2.1	0.0	10.8
Cycle Q Clear(g_c), s	2.8	0.0	0.0	1.5	0.0	1.8	3.1	0.0	7.7	2.1	0.0	10.8
Prop In Lane	0.20		0.60	1.00		0.49	1.00		0.17	1.00		0.08
Lane Grp Cap(c), veh/h	437	0	0	460	0	362	164	0	662	128	0	635
V/C Ratio(X)	0.27	0.00	0.00	0.15	0.00	0.22	0.75	0.00	0.57	0.66	0.00	0.76
Avail Cap(c_a), veh/h	922	0	0	854	0	883	791	0	2520	636	0	2415
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.4	0.0	0.0	14.9	0.0	15.0	20.3	0.0	11.7	20.8	0.0	13.4
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.2	0.0	0.3	6.8	0.0	0.8	5.7	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.5	0.0	0.6	1.3	0.0	2.2	0.9	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.7	0.0	0.0	15.0	0.0	15.3	27.1	0.0	12.5	26.5	0.0	15.3
LnGrp LOS	B	A	A	B	A	B	C	A	B	C	A	B
Approach Vol, veh/h		120			152			500				569
Approach Delay, s/veh		15.7			15.2			16.1				17.0
Approach LOS		B			B			B				B
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	23.0		15.1	8.8	22.0		15.1				
Change Period (Y+Rc), s	4.6	6.2		* 5.4	4.6	* 6.2		5.4				
Max Green Setting (Gmax), s	16.4	63.8		* 24	20.4	* 60		23.6				
Max Q Clear Time (g_c+I1), s	4.1	9.7		4.8	5.1	12.8		3.8				
Green Ext Time (p_c), s	0.1	2.2		0.6	0.2	3.1		0.5				

Intersection Summary

HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
5: Lyon Av. & Appaloosa Dr.

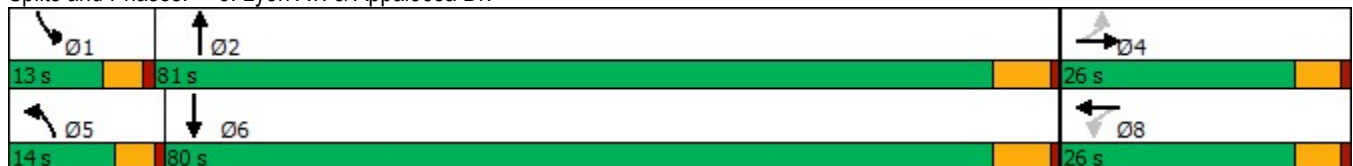


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↗	↖	↗	↕↖
Traffic Volume (vph)	23	0	22	0	26	464	21	505
Future Volume (vph)	23	0	22	0	26	464	21	505
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.1	23.1	23.1	23.1	9.6	24.2	9.6	24.2
Total Split (s)	26.0	26.0	26.0	26.0	14.0	81.0	13.0	80.0
Total Split (%)	21.7%	21.7%	21.7%	21.7%	11.7%	67.5%	10.8%	66.7%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1		5.1	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)		7.7		7.7	6.3	34.4	6.1	32.0
Actuated g/C Ratio		0.17		0.17	0.14	0.75	0.13	0.70
v/c Ratio		0.10		0.13	0.13	0.43	0.10	0.25
Control Delay		2.1		3.3	26.0	8.4	26.3	7.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		2.1		3.3	26.0	8.4	26.3	7.7
LOS		A		A	C	A	C	A
Approach Delay		2.1		3.3		9.2		8.3
Approach LOS		A		A		A		A

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 46	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 8.5	Intersection LOS: A
Intersection Capacity Utilization 40.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: Lyon Av. & Appaloosa Dr.



HCM 6th Signalized Intersection Summary
5: Lyon Av. & Appaloosa Dr.

Lyon Avenue Residential (JN:15026)

10/17/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↘		↗	↘	
Traffic Volume (veh/h)	23	0	4	22	0	13	26	464	37	21	505	12
Future Volume (veh/h)	23	0	4	22	0	13	26	464	37	21	505	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	0	5	24	0	14	31	559	40	23	608	14
Peak Hour Factor	0.83	0.92	0.83	0.92	0.92	0.92	0.83	0.83	0.92	0.92	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	285	0	17	240	0	41	66	758	54	51	1531	35
Arrive On Green	0.07	0.00	0.07	0.07	0.00	0.07	0.04	0.44	0.44	0.03	0.43	0.43
Sat Flow, veh/h	1299	0	232	981	0	572	1781	1725	123	1781	3551	82
Grp Volume(v), veh/h	33	0	0	38	0	0	31	0	599	23	304	318
Grp Sat Flow(s),veh/h/ln	1531	0	0	1554	0	0	1781	0	1848	1781	1777	1856
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	0.6	0.0	9.3	0.4	4.1	4.1
Cycle Q Clear(g_c), s	0.6	0.0	0.0	0.7	0.0	0.0	0.6	0.0	9.3	0.4	4.1	4.1
Prop In Lane	0.85		0.15	0.63		0.37	1.00		0.07	1.00		0.04
Lane Grp Cap(c), veh/h	302	0	0	281	0	0	66	0	812	51	766	800
V/C Ratio(X)	0.11	0.00	0.00	0.14	0.00	0.00	0.47	0.00	0.74	0.45	0.40	0.40
Avail Cap(c_a), veh/h	1062	0	0	1066	0	0	485	0	4001	433	3796	3964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.2	0.0	0.0	15.2	0.0	0.0	16.3	0.0	8.0	16.5	6.7	6.7
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	1.9	0.0	1.3	2.3	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.0	1.7	0.2	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.3	0.0	0.0	15.4	0.0	0.0	18.2	0.0	9.4	18.8	7.1	7.1
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		33			38			630			645	
Approach Delay, s/veh		15.3			15.4			9.8			7.5	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.6	21.4		7.6	5.9	21.1		7.6				
Change Period (Y+Rc), s	4.6	6.2		5.1	4.6	6.2		5.1				
Max Green Setting (Gmax), s	8.4	74.8		20.9	9.4	73.8		20.9				
Max Q Clear Time (g_c+I1), s	2.4	11.3		2.6	2.6	6.1		2.7				
Green Ext Time (p_c), s	0.0	3.9		0.1	0.0	3.6		0.1				

Intersection Summary

HCM 6th Ctrl Delay				9.0								
HCM 6th LOS				A								

Timings
6: Lyon Av. & Cottonwood Av.

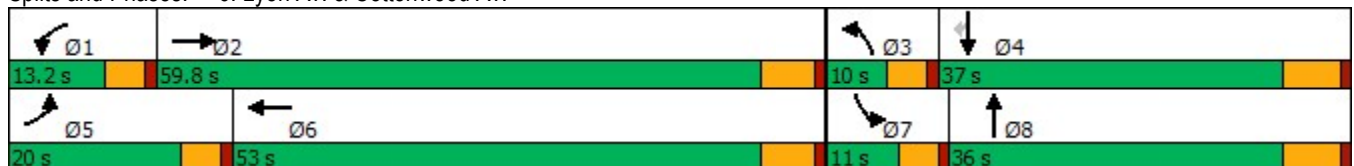


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↶	↷	↶	↷	↶	↷	↶	↷	↷
Traffic Volume (vph)	162	425	39	458	49	313	52	354	135
Future Volume (vph)	162	425	39	458	49	313	52	354	135
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	23.8	9.6	23.8	9.6	24.2	9.6	24.2	24.2
Total Split (s)	20.0	59.8	13.2	53.0	10.0	36.0	11.0	37.0	37.0
Total Split (%)	16.7%	49.8%	11.0%	44.2%	8.3%	30.0%	9.2%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	Min	None	Min	Min
Act Effct Green (s)	14.1	48.8	7.2	38.7	5.6	26.3	6.3	27.1	27.1
Actuated g/C Ratio	0.13	0.47	0.07	0.37	0.05	0.25	0.06	0.26	0.26
v/c Ratio	0.78	0.64	0.37	0.88	0.59	0.84	0.57	0.85	0.30
Control Delay	70.5	27.6	61.6	47.0	80.1	56.8	74.9	56.5	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.5	27.6	61.6	47.0	80.1	56.8	74.9	56.5	7.2
LOS	E	C	E	D	F	E	E	E	A
Approach Delay		38.5		48.0		59.7		46.0	
Approach LOS		D		D		E		D	

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 104.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 46.8	Intersection LOS: D
Intersection Capacity Utilization 77.3%	ICU Level of Service D
Analysis Period (min) 15	






















Splits and Phases: 6: Lyon Av. & Cottonwood Av.



HCM 6th Signalized Intersection Summary
6: Lyon Av. & Cottonwood Av.

Lyon Avenue Residential (JN:15026)

10/17/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	425	49	39	458	62	49	313	28	52	354	135
Future Volume (veh/h)	162	425	49	39	458	62	49	313	28	52	354	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	186	489	56	45	526	71	56	360	32	60	407	155
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	742	85	65	586	79	72	417	37	77	466	395
Arrive On Green	0.12	0.45	0.45	0.04	0.36	0.36	0.04	0.25	0.25	0.04	0.25	0.25
Sat Flow, veh/h	1781	1648	189	1781	1613	218	1781	1693	150	1781	1870	1585
Grp Volume(v), veh/h	186	0	545	45	0	597	56	0	392	60	407	155
Grp Sat Flow(s),veh/h/ln	1781	0	1836	1781	0	1831	1781	0	1843	1781	1870	1585
Q Serve(g_s), s	9.7	0.0	22.0	2.4	0.0	29.2	3.0	0.0	19.3	3.2	19.8	7.7
Cycle Q Clear(g_c), s	9.7	0.0	22.0	2.4	0.0	29.2	3.0	0.0	19.3	3.2	19.8	7.7
Prop In Lane	1.00		0.10	1.00		0.12	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	220	0	826	65	0	665	72	0	455	77	466	395
V/C Ratio(X)	0.85	0.00	0.66	0.69	0.00	0.90	0.77	0.00	0.86	0.78	0.87	0.39
Avail Cap(c_a), veh/h	289	0	1045	161	0	911	101	0	579	120	607	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	0.0	20.4	45.2	0.0	28.5	45.1	0.0	34.2	44.9	34.2	29.6
Incr Delay (d2), s/veh	13.1	0.0	1.0	4.8	0.0	9.1	13.2	0.0	10.5	6.2	10.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	8.7	1.1	0.0	13.4	1.5	0.0	9.3	1.5	9.7	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	0.0	21.4	49.9	0.0	37.6	58.3	0.0	44.7	51.1	45.0	30.3
LnGrp LOS	D	A	C	D	A	D	E	A	D	D	D	C
Approach Vol, veh/h		731			642			448			622	
Approach Delay, s/veh		29.7			38.4			46.4			41.9	
Approach LOS		C			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	48.5	8.5	29.8	16.3	40.3	8.7	29.6				
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2				
Max Green Setting (Gmax), s	8.6	54.0	5.4	30.8	15.4	47.2	6.4	29.8				
Max Q Clear Time (g_c+I1), s	4.4	24.0	5.0	21.8	11.7	31.2	5.2	21.3				
Green Ext Time (p_c), s	0.0	3.4	0.0	1.8	0.1	3.3	0.0	1.3				
Intersection Summary												
HCM 6th Ctrl Delay				38.2								
HCM 6th LOS				D								