APPENDIX 1.1:

APPROVED TRAFFIC STUDY SCOPING AGREEMENT

This Page Intentionally Left Blank

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:	KASBERGEN/HAFLIGER TT34271
Project Address:	east of Alessandro Av., south of Ramona Expy., and west of Vernon St.
Project Opening Year:	2024
Project Description:	151 new single family residential dwelling units

	Consultant:	Developer:
Name:	URBAN CROSSROADS, INC. - Marlie Whiteman	Cornell Kasbergen
Address:	1133 Camelback St. #8329	21744 Road 152
	Newport Beach, CA 92658	Tulare, CA 93274
Telephone:	(714) 585-0574 Mobile	
Fax/Email:	mwhiteman@urbanxroads.com	

Trip Generation Information:

Trip Generation Data Source: Institute of Transportation Engineers (ITE) Trip Generation (11th Edition, 2021) manual

Current General Plan Land Use: Low Density Residential

Proposed General Plan Land Use: Low Density Residential

Current Zoning: RL

Proposed Zoning: RL

	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips	0	0	0	27	79	106
PM Trips	0	0	0	89	51	140

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): _____

VMT screening assessment will be prepared under separate cover

Level of Service Scoping

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

North	South	East	West
%	45 %	10 %	45 %

- 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
- 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 January 2022
- 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 RIVTAM/RIVCOM
- 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)

This Page Intentionally Left Blank

January 19, 2022

Mr. Kevin White
City of San Jacinto
595 S. San Jacinto Avenue
San Jacinto, CA 92583

SUBJECT: KASBERGEN/HAFLIGER TT34271 TRAFFIC AND VMT ANALYSES SCOPING AGREEMENT

Dear Mr. Kevin White:

Urban Crossroads, Inc. is pleased to resubmit this scoping letter to City of San Jacinto regarding the Traffic and VMT Analyses for the proposed Kasbergen/Hafliger TT34271 development ("Project"), which is located east of Alessandro Avenue, south of Ramona Expressway, and west of Vernon Avenue. It is our understanding that the Project is to consist of 151 new single family residential dwelling units.

The remainder of this letter describes the proposed analysis methodology, Project trip generation, trip distribution, and Project traffic assignment/project trips on the surrounding roadway network. The following scoping assumptions have been prepared in accordance with the City of San Jacinto's Traffic Impact Guidelines for Vehicle Miles Traveled and Level of Service Assessment (Adopted June 16, 2020).

A preliminary site plan the proposed Project is shown on Exhibit 1. Exhibit 2 depicts the location of the proposed project in relation to the existing roadway network. It is anticipated that the Project would be fully developed by year 2024. Project will have two full access driveways along the Alessandro Avenue and one full access driveway along Vernon Avenue.

TRIP GENERATION

In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) *Trip Generation* (11th Edition, 2021) manual for the proposed land use (ITE Land Use Codes: 210 – Single Family Detached Residential) is used. Table 1 presents the trip generation rates and the resulting trip generation summary for the proposed Project. As shown in Table 1, the Project is anticipated to generate a net total of 1,424 trip-ends per day with 106 AM peak hour trips and 140 PM peak hour trips.

TRIP DISTRIBUTION AND TRIP ASSIGNMENT

The trip distribution pattern is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to arterials and local collector roadways. RIVCOM Traffic forecasts in the study area have also been reviewed. Exhibit 3 presents the resulting Project distribution pattern. Based on the identified Project traffic generation and trip distribution patterns, Project ADT and peak hour intersection turning movement volumes are shown on Exhibit 4.

ANALYSIS SCENARIOS

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

- Existing (2022) Conditions
- Background Conditions: Existing plus Ambient plus Cumulative (EAC) (2024)
- Background Plus Project: Existing plus Ambient plus Project plus Cumulative (EAPC) (2024)

The City of San Jacinto General Plan Circulation Element is depicted on Exhibit 5, while the accompanying roadway cross-sections are presented on Exhibit 6.

STUDY AREA

The traffic impact study area was defined in conformance with the requirements of the City of San Jacinto's Traffic Impact Guidelines for Vehicle Miles Traveled and Level of Service Assessment. Consistent with the City's LOS guidelines, study area intersections have been identified for the Project based on the contribution of 50 or more peak hour trips. Based on this criterion, anticipated trip generation and trip distribution, the following intersections will be evaluated:

ID	Intersection	ID	Intersection
1	State St. (SR-79) / Ramona Exwy. (SR-79)	6	Alessandro Av. / Main St.
2	Alessandro Av. / Ramona Exwy.	7	Vernon Av. / Main St.
3	Vernon Av. / Ramona Exwy.	8	Alessandro Av. / St. 'A' - *(Future Project Driveway)*
4	Alessandro Av. / 1st St.	9	Alessandro Av. / St. 'G'- *(Future Project Driveway)*
5	Vernon Av. / 1st St.	10	Vernon Av. / St. 'E'- *(Future Project Driveway)*

Exhibit 2 identifies the proposed study area intersection analysis locations.

LEVEL OF SERVICE (LOS) CRITERIA

The City of San Jacinto has established a peak hour Level of Service D or better as acceptable for all intersections along the designated street and highway system. Projects that may result in an increase in traffic must prepare a traffic analysis that evaluates long-term impacts of the project and any mitigation necessary to ensure the project achieves or maintains the peak hour intersection LOS D standard.

Signalized Intersection Operating Requirements

- Any signalized study intersection operating at an acceptable LOS D1 or better without project traffic in which the addition of project traffic causes the intersection to degrade to a LOS E or F shall identify improvements to improve operations to LOS D or better.
- Any signalized study intersection that is operating at LOS E or F without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

Unsignalized Intersection General Plan Consistency Requirements

An operational improvement would be required if the study determines that either section a) or both sections b) and c) occur:

a) The addition of project related traffic causes the intersection to degrade from an acceptable LOS D or better to LOS E or F.

OR

b) The project adds 5.0 seconds or more of delay to an intersection that is already projected to operate without project traffic at a LOS E or F,

AND

c) The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

If the conditions above are satisfied, improvements will be identified that achieve LOS D or better for case a) above or to pre-project LOS and delay for case b) above.

PREFERRED ANALYSIS METHODOLOGY

For the purposes of this analysis, signalized intersection operations analysis will be based on the methodology described in the Highway Capacity Manual (6th Edition). Intersection LOS operations are based on an intersection's average control delay. Unsignalized intersections will be evaluated using the methodology described in the HCM 6th Edition. At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane.

TRAFFIC COUNTS

Traffic count data will be collected on January 2022 during the AM peak period of 7:00 AM to 9:00 AM and PM peak period of 4:00 PM to 6:00 PM.

CUMULATIVE DEVELOPMENT TRAFFIC

It is requested that City staff review the list of cumulative development projects (shown on Exhibit 7 and listed on Table 2) for inclusion in the traffic study. Consistent with other studies performed in the area, an ambient growth rate of 2% per year will be utilized as a minimum if necessary. The rate will be compounded over a 2-year period (i.e., 1.02^{2years} = 1.0404 or 4.04%) for Interim Year (2024) conditions.

VEHICLE MILES TRAVELED (VMT)

The VMT screening assessment will be prepared under separate cover in accordance with SB743 and consistent with the methodology and thresholds outlined in the City of San Jacinto's June 2020 VMT methodology guidelines.

Please review this scoping agreement let us know if it is acceptable, or if the City requests any changes to this proposed scope of work. If you have any questions, please contact John Kain at (949) 375-2435 or Marlie Whiteman (714) 585-0574.

Respectfully submitted,

URBAN CROSSROADS, INC.

John Kain

John Kain, AICP
Principal

Marlie Whiteman

Marlie Whiteman, PE
Senior Associate

EXHIBIT 1: PRELIMINARY SITE PLAN

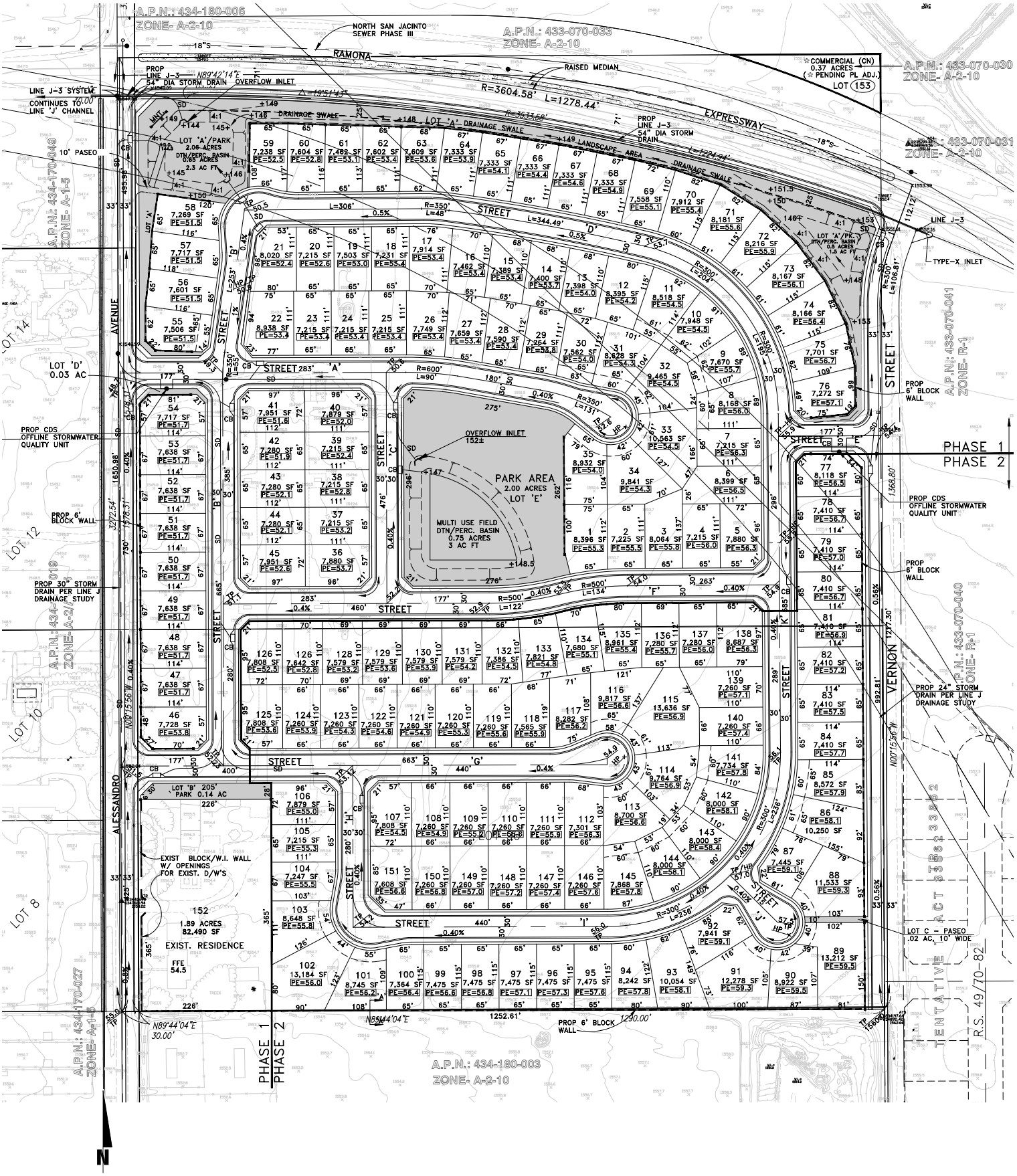


EXHIBIT 2: STUDY AREA



14573 - 001 - scope.dwg

URBAN CROSSROADS

TABLE 1: PROJECT TRIP GENERATION SUMMARY

Trip Generation Rates[1]									
	ITE LU		AM Peak Hour			PM Peak Hour			
Land Use	Code	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Single Family Detached	210	151 DU	0.18	0.52	0.70	0.59	0.34	0.93	9.43

Trip Generation Results									
	ITE LU		AM Peak Hour			PM Peak Hour			
Land Use	Code	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Single Family Detached	210	151 DU	27	79	106	89	51	140	1,424

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

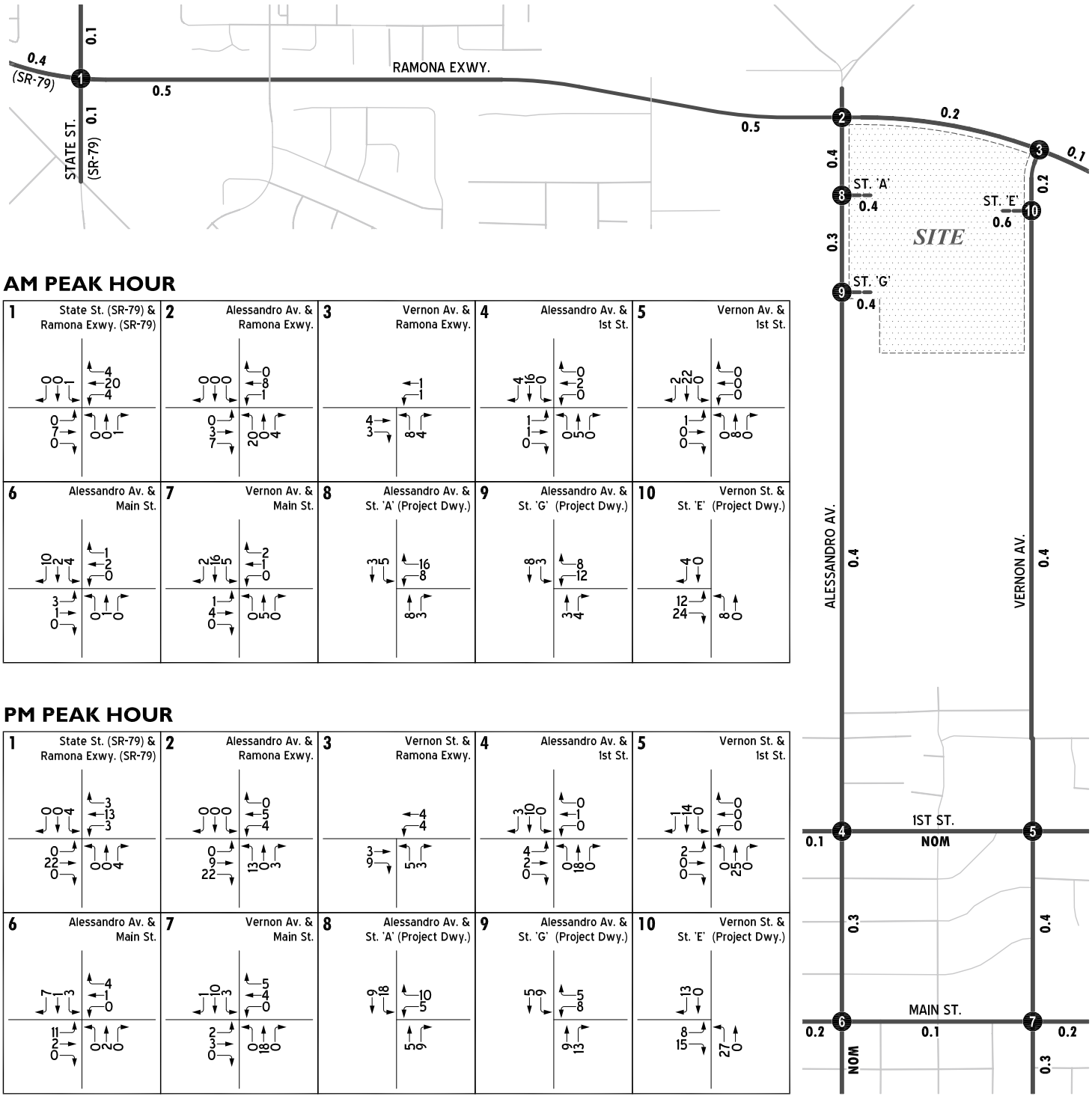
[2] DU = Dwelling Unit

F:\UXRjobs_14100-14500\14573\LOS\Excel\[14573-02 - Scope.xlsx]14573-TG

EXHIBIT 3: PROJECT TRIP DISTRIBUTION



EXHIBIT 4: PROJECT ONLY TRAFFIC VOLUMES



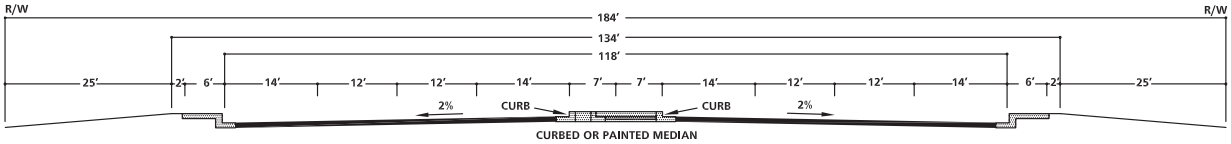
AM PEAK HOUR

1 State St. (SR-79) & Ramona Exwy. (SR-79)	2 Alessandro Av. & Ramona Exwy.	3 Vernon Av. & Ramona Exwy.	4 Alessandro Av. & 1st St.	5 Vernon Av. & 1st St.
6 Alessandro Av. & Main St.	7 Vernon Av. & Main St.	8 Alessandro Av. & St. 'A' (Project Dwy.)	9 Alessandro Av. & St. 'G' (Project Dwy.)	10 Vernon St. & St. 'E' (Project Dwy.)

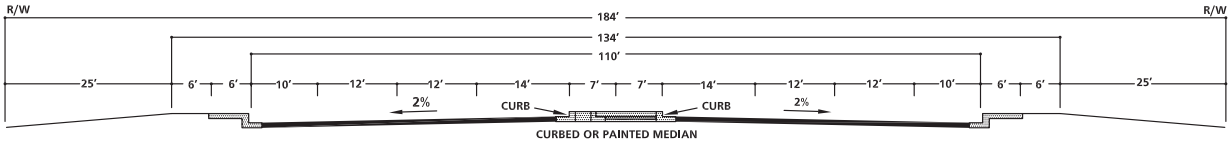
PM PEAK HOUR

1 State St. (SR-79) & Ramona Exwy. (SR-79)	2 Alessandro Av. & Ramona Exwy.	3 Vernon St. & Ramona Exwy.	4 Alessandro Av. & 1st St.	5 Vernon St. & 1st St.
6 Alessandro Av. & Main St.	7 Vernon Av. & Main St.	8 Alessandro Av. & St. 'A' (Project Dwy.)	9 Alessandro Av. & St. 'G' (Project Dwy.)	10 Vernon St. & St. 'E' (Project Dwy.)

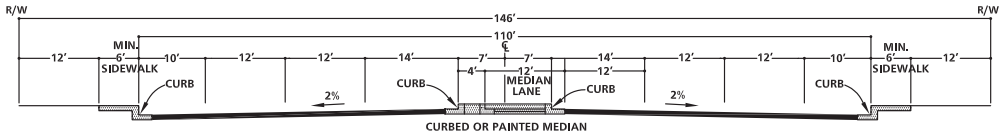
EXHIBIT 5: CITY OF SAN JACINTO GENERAL PLAN ROADWAY CROSS-SECTIONS



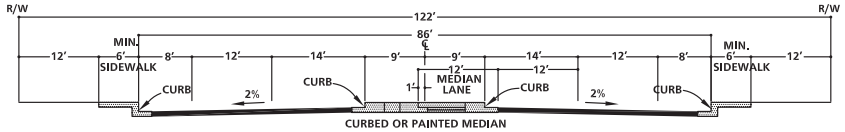
LIMITED ACCESS CONVENTIONAL HIGHWAY - 8 LANES



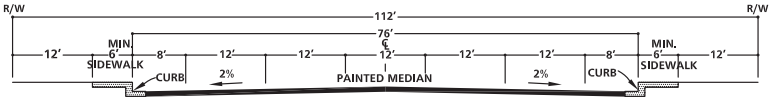
LIMITED ACCESS CONVENTIONAL HIGHWAY - 6 LANES



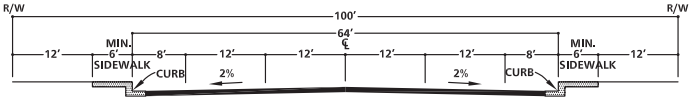
URBAN ARTERIAL HIGHWAY



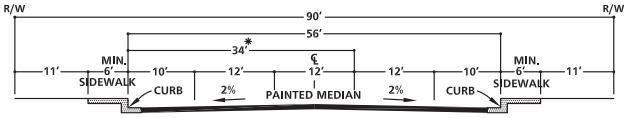
ARTERIAL HIGHWAY



MAJOR HIGHWAY

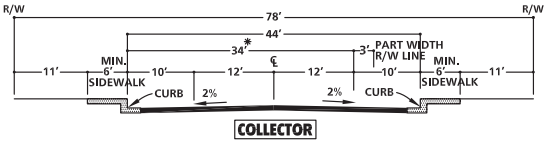


SECONDARY HIGHWAY



INDUSTRIAL COLLECTOR

*PART WIDTH STREET SECTION FOR AN INTERIOR COMMERCIAL OR INDUSTRIAL STREET

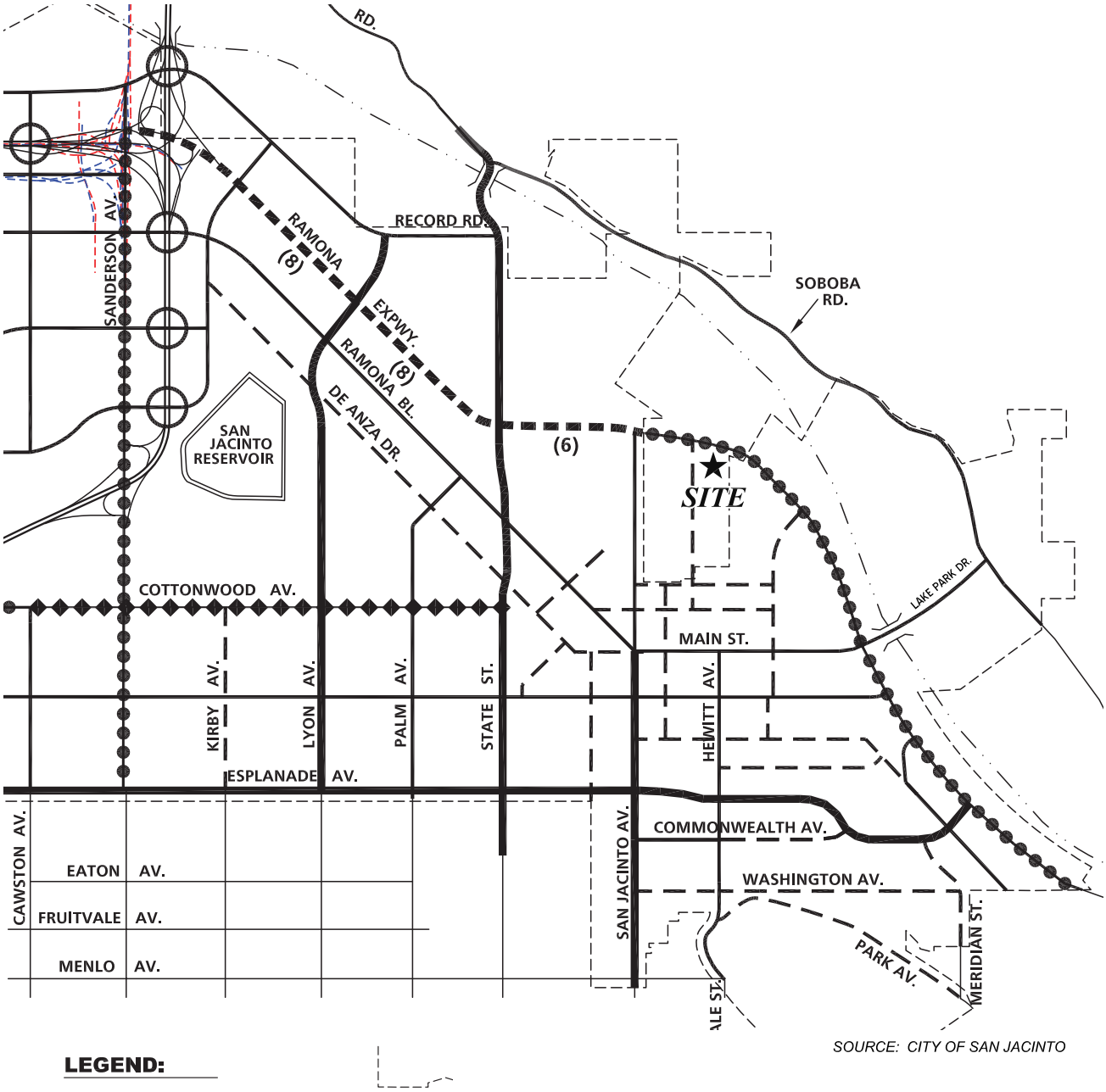


COLLECTOR

* PART WIDTH STREET SECTION FOR ALL COLLECTOR STREET - 34' IMPROVEMENTS ON 48' R/W

SOURCE: CITY OF SAN JACINTO

EXHIBIT 6: CITY OF SAN JACINTO GENERAL PLAN CIRCULATION ELEMENT



SOURCE: CITY OF SAN JACINTO

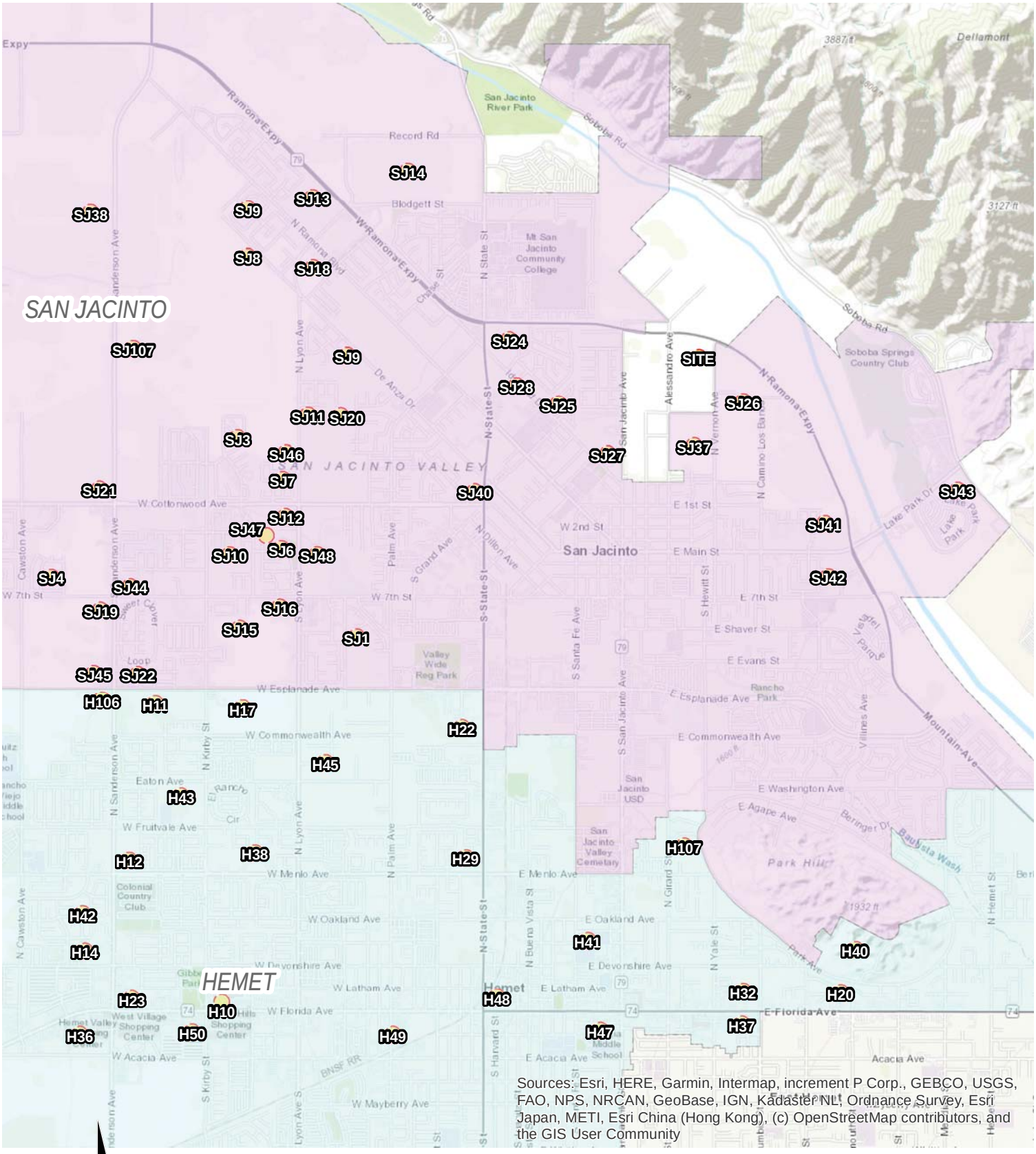
LEGEND:

- = CITY BOUNDARY
- = FREEWAY
- = LIMITED ACCESS CONVENTIONAL HIGHWAY (6 OR 8 LANES)
- = URBAN ARTERIAL
- = ARTERIAL
- = MAJOR
- = SECONDARY
- = COLLECTOR
- = ROADWAY OUTSIDE CITY SPHERE
- = OVER/UNDER CROSSING
- = MID COUNTY PARKWAY ALTERNATIVE 1
- = MID COUNTY PARKWAY ALTERNATIVE 2

14573 - 001 - scope.dwg

URBAN CROSSROADS

EXHIBIT 7: CUMULATIVE DEVELOPMENT MAP



14573-CD Map.mxd

TABLE 2: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project Name	Land Use[1]	Quantity	Units[2]
City of San Jacinto				
SJ1	TR22665 (50% Occupied)	Single Family Residential	75	DU
SJ3	TR30481	Single Family Residential	30	DU
SJ4	TR30597	Single Family Residential	83	DU
SJ5	TR30659	Single Family Residential	64	DU
SJ6	TR30878	Single Family Residential	15	DU
SJ7	TR30944	Single Family Residential	14	DU
SJ8	TR31037	Single Family Residential	263	DU
SJ9	TR31154	Single Family Residential	88	DU
SJ10	TR31294	Single Family Residential	37	DU
SJ11	VTR31384	Single Family Residential	91	DU
SJ12	TR33546	Single Family Residential	5	DU
SJ13	TR31886 - Under Construction	Single Family Residential	321	DU
SJ14	TR30598 (SP 1-03)	Single Family Residential	580	DU
SJ15	TR31929	Single Family Residential	78	DU
SJ16	TR32247	Single Family Residential	150	DU
SJ18	TR32555	Single Family Residential	12	DU
SJ19	TR33420A1	Single Family Residential	108	DU
SJ20	Future Schools (Middle / Elementary)	School	1200	STU
SJ21	PM35626	Shopping Center	195.740	TSF
		Apartments	150	DU
SJ22	PM33196 San Jacinto Retail Center	Drive-In Bank	4.700	TSF
		Fast-Food w/ Drive Thru	3.450	TSF
SJ23	TR32352	Single Family Residential	47	DU
SJ24	CUP 6-07 99c Only Shopping Center	Shopping Ctr.	120	TSF
SJ25	TR32153	Single Family Residential	44	DU
SJ26	TR33862A1	Single Family Residential	98	DU
SJ27	TR34665	Single Family Residential	20	DU
SJ28	CUP 8-10	Multi-Family Residential	34	DU
SJ37	TR30379	Single Family Residential	126	DU
SJ38	TR36188	Single Family Residential	1323	DU
S40	San Jacinto Retail	Retail	8.54	TSF
		Conv. Market w/ Gas Station	2.95	TSF
		Fast-Food Restaurant	2.89	TSF
SJ41	KPC Promenade	Gas Station/Conv. Market	15	VFP
		Fast-Food w/ DT	6.3	TSF
		Quality Restaurant	5	TSF
		Retail	6.3	TSF
		Medical Office	9.6	TSF
		Hotel	120	RM
		Attached Senior Housing	114	DU
SJ42	Luiseno Village Retail Center	Specialty Retail Ctr.	23.94	TSF
		Fast-Food w/ DT	6.35	TSF
		Serv. Station w/ CarWash	24	VFP

TABLE 2: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project Name	Land Use[1]	Quantity	Units[2]
City of San Jacinto (Continued)				
SJ43	Soboba Service Center	Drive-Thru Retail	1	TSF
		Super Conv. Market/Gas Station	23	VFP
		Retail	8.5	TSF
		Car Wash	3.59	TSF
SJ44	NEC Sanderson Av./7th St.	Fast-Food w/ DT	5.4	TSF
		Gas Station/Conv. Market	12	VFP
		Retail	45.7	
SJ45	NWC Sanderson at Esplanade Av	Free-Standing Discount Store	10.266	TSF
		Fast-Food w/ DT	2.9	TSF
SJ46	TR33716	Single Family Residential	49	DU
SJ47	TR30603	Single Family Residential	10	DU
SJ48	TR22665	Single Family Residential	79	DU
City of Hemet				
H10	The Boardwalk (CUP 06-4)	Commercial	94.00 (20.00 Built)	TSF
H11	TTM 29581 (Covenant)	Single Family Residential	71	DU
H12	Zanderson Plaza (CUP 16-006 + TPM 37196)	Commercial	68.000	TSF
H14	TTM 33707 (Devonshire Partners) CUP 03-16A	Single Family Residential	98 (25 Built)	DU
H17	Page Ranch Elementary School	Elementary School	750	STU
H20	St. Deminia Center (CUP 07-16)	Commercial	33.480	TSF
H22	Nelson (SDR 06-28)	Industrial	16.200	TSF
H23	CUP 17-002 Crossroads	Commercial	1.000	TSF
H29	Santa Fe Pointe SDR 15-001	Multi-Family Residential	241	DU
H32	Scripps West (CUP 08-14)	Commercial	5.300	TSF
H36	Les Schwab Tire Store	Automotive Retail	11.970	TSF
H37	Taco Bell (CUP 16-004)	Fast-Food Restaurant	2.090	TSF
H38	TTM 33858	Single Family Residential	37	DU
H39	TTM 34712	Multi-Family Residential	40	DU
H40	7 Days Market (CUP 13-005)	Service Station	6	VFP
H41	Downtown Hemet Specific Plan	Various	Various	
H42	TM 25225 (Copenhagen)	Multi-Family Residential	40	DU
H43	TTM 36929	Single Family Residential	21	DU
H45	TTM 37087	Single Family Residential	20	DU
H46	Circle K (CUP 16-005)	Gas Station w/ Convenience Store & Car Wash	20	VFP
H47	Clinca de Salud (SDR 16-003)	Medical Office	13.000	TSF
H48	Al For Show (CUP 16-002)	Retail	3.020	TSF
H49	Gas Mart Remodel	Gas Station w/ Convenience Store	6	VFP
H106	TR 33420A1	Single Family Residential	161	DU
H107	800 N. Girard St. (APN 439-230-005)	Single Family Residential	51	DU

[1] DU = Dwelling Units; STU = Students; TSF = Thousand Square Feet; VFP = Vehicle Fueling Position

F:\UXRjobs_14100-14500\14573\LOS\Excel\[14573-02 - Scope.xlsx]14573-Cumulative

APPENDIX 3.1:

EXISTING TRAFFIC COUNTS – (2022)

This Page Intentionally Left Blank

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

City of San Jacinto
N/S: N State Street
E/W: Ramona Expressway
Weather: Clear

File Name : 01_SJC_State_Ramona AM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 1

Groups Printed- Total Volume

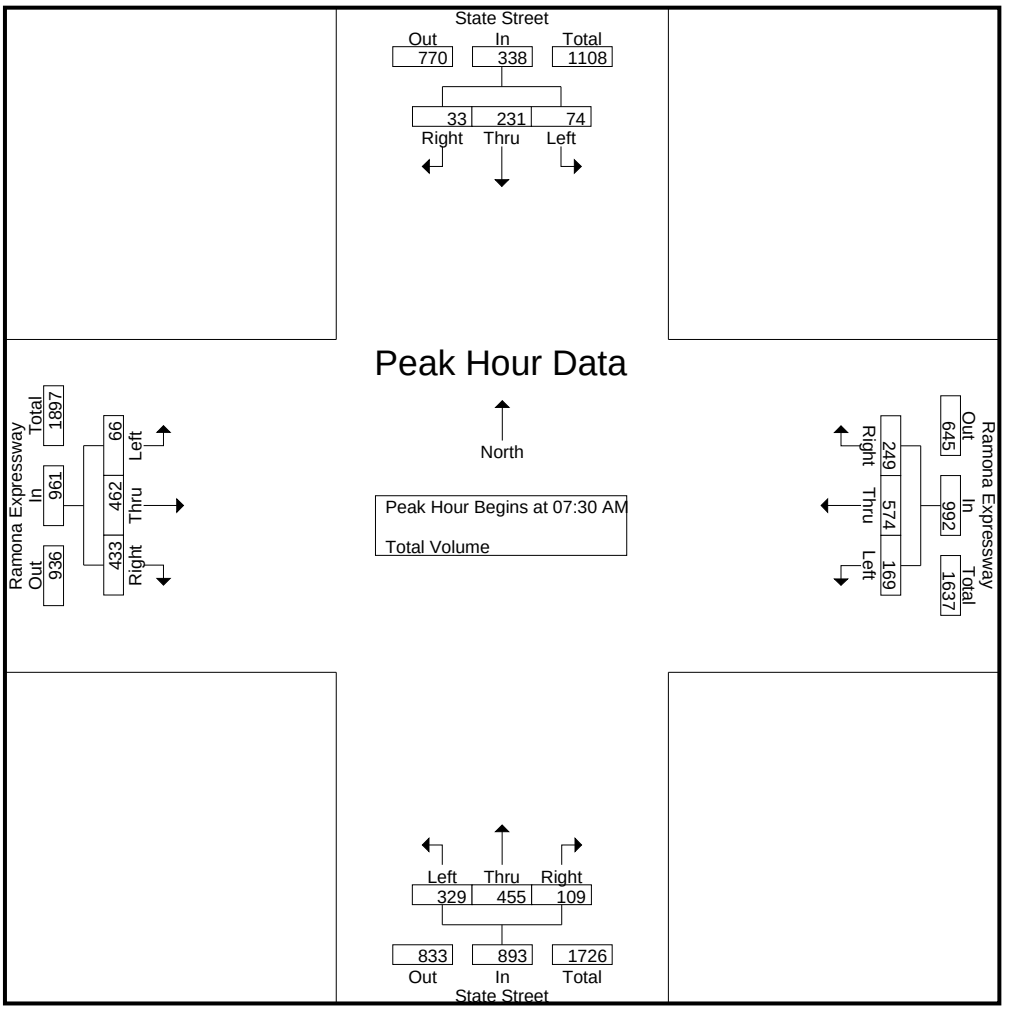
	State Street Southbound				Ramona Expressway Westbound				State Street Northbound				Ramona Expressway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	12	23	11	46	19	166	70	255	64	78	11	153	18	79	78	175	629
07:15 AM	6	52	10	68	27	169	52	248	104	114	12	230	10	103	86	199	745
07:30 AM	21	57	5	83	47	136	69	252	84	98	23	205	13	100	98	211	751
07:45 AM	16	78	9	103	38	132	62	232	74	124	37	235	27	131	141	299	869
Total	55	210	35	300	131	603	253	987	326	414	83	823	68	413	403	884	2994
08:00 AM	16	51	10	77	45	164	56	265	85	114	30	229	15	122	93	230	801
08:15 AM	21	45	9	75	39	142	62	243	86	119	19	224	11	109	101	221	763
08:30 AM	22	64	6	92	29	146	58	233	78	94	18	190	13	113	92	218	733
08:45 AM	26	72	6	104	26	104	45	175	47	76	17	140	24	76	84	184	603
Total	85	232	31	348	139	556	221	916	296	403	84	783	63	420	370	853	2900
Grand Total	140	442	66	648	270	1159	474	1903	622	817	167	1606	131	833	773	1737	5894
Apprch %	21.6	68.2	10.2		14.2	60.9	24.9		38.7	50.9	10.4		7.5	48	44.5		
Total %	2.4	7.5	1.1	11	4.6	19.7	8	32.3	10.6	13.9	2.8	27.2	2.2	14.1	13.1	29.5	

	State Street Southbound				Ramona Expressway Westbound				State Street Northbound				Ramona Expressway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**21**	57	5	83	**47**	136	**69**	252	84	98	23	205	13	100	98	211	751
07:45 AM	16	**78**	9	**103**	38	132	62	232	74	**124**	**37**	**235**	**27**	**131**	**141**	**299**	**869**
08:00 AM	16	51	**10**	77	45	**164**	56	**265**	85	114	30	229	15	122	93	230	801
08:15 AM	21	45	9	75	39	142	62	243	**86**	119	19	224	11	109	101	221	763
Total Volume	74	231	33	338	169	574	249	992	329	455	109	893	66	462	433	961	3184
% App. Total	21.9	68.3	9.8		17	57.9	25.1		36.8	51	12.2		6.9	48.1	45.1		
PHF	.881	.740	.825	.820	.899	.875	.902	.936	.956	.917	.736	.950	.611	.882	.768	.804	.916

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

City of San Jacinto
N/S: N State Street
E/W: Ramona Expressway
Weather: Clear

File Name : 01_SJC_State_Ramona AM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 2



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

	08:00 AM				07:15 AM				07:15 AM				07:45 AM			
+0 mins.	16	51	**10**	77	27	**169**	52	248	**104**	114	12	230	**27**	**131**	**141**	**299**
+15 mins.	21	45	9	75	**47**	136	**69**	252	84	98	23	205	15	122	93	230
+30 mins.	22	64	6	92	38	132	62	232	74	**124**	**37**	**235**	11	109	101	221
+45 mins.	**26**	**72**	6	**104**	45	164	56	**265**	85	114	30	229	13	113	92	218
Total Volume	85	232	31	348	157	601	239	997	347	450	102	899	66	475	427	968
% App. Total	24.4	66.7	8.9		15.7	60.3	24		38.6	50.1	11.3		6.8	49.1	44.1	
PHF	.817	.806	.775	.837	.835	.889	.866	.941	.834	.907	.689	.956	.611	.906	.757	.809

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

City of San Jacinto
N/S: N State Street
E/W: Ramona Expressway
Weather: Clear

File Name : 01_SJC_State_Ramona PM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 1

Groups Printed- Total Volume

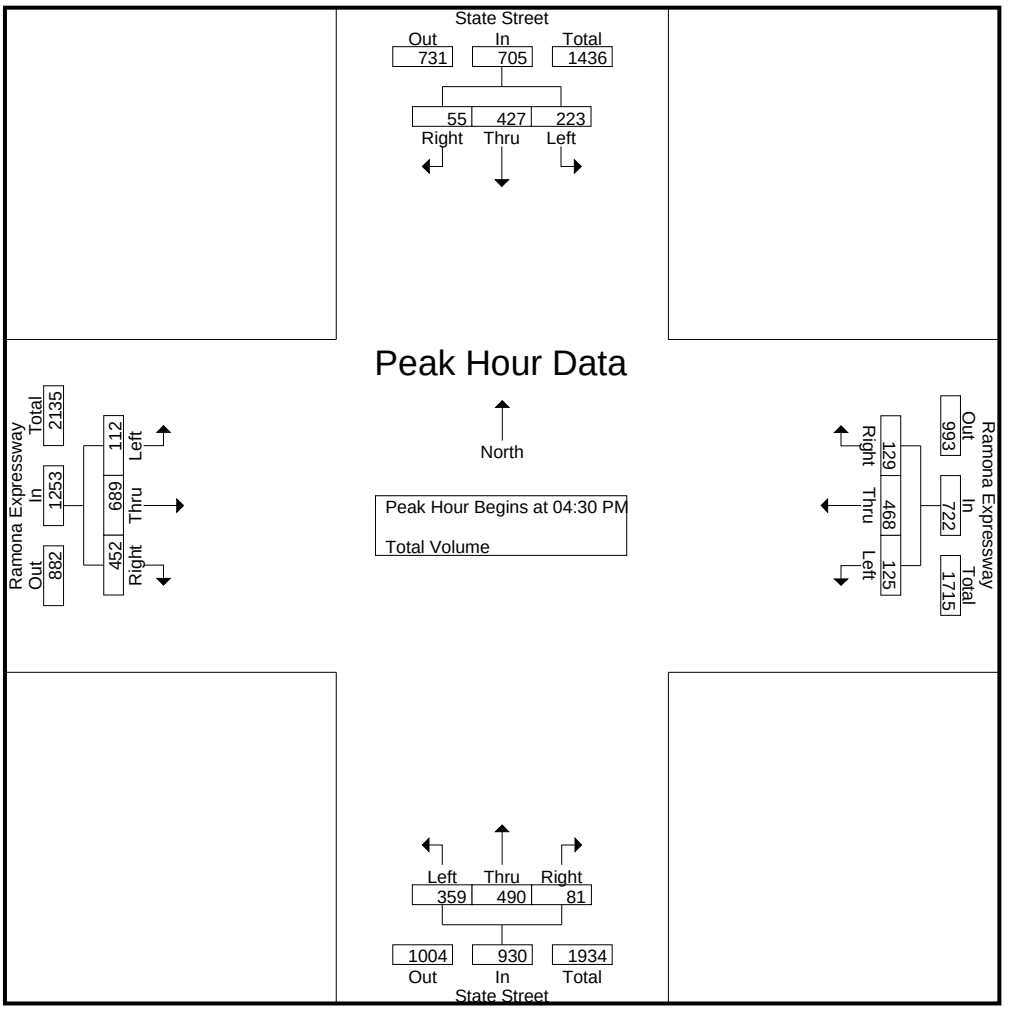
	State Street Southbound				Ramona Expressway Westbound				State Street Northbound				Ramona Expressway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	41	86	10	137	44	120	37	201	87	106	18	211	25	152	110	287	836
04:15 PM	63	110	22	195	23	120	42	185	78	113	20	211	26	175	118	319	910
04:30 PM	39	121	13	173	32	99	32	163	84	112	19	215	29	164	112	305	856
04:45 PM	60	101	16	177	32	130	35	197	85	123	18	226	21	188	105	314	914
Total	203	418	61	682	131	469	146	746	334	454	75	863	101	679	445	1225	3516
05:00 PM	58	115	14	187	34	96	32	162	93	124	26	243	32	156	107	295	887
05:15 PM	66	90	12	168	27	143	30	200	97	131	18	246	30	181	128	339	953
05:30 PM	44	94	17	155	27	105	33	165	87	122	22	231	27	150	104	281	832
05:45 PM	64	103	16	183	21	80	33	134	78	84	20	182	24	142	89	255	754
Total	232	402	59	693	109	424	128	661	355	461	86	902	113	629	428	1170	3426
Grand Total	435	820	120	1375	240	893	274	1407	689	915	161	1765	214	1308	873	2395	6942
Apprch %	31.6	59.6	8.7		17.1	63.5	19.5		39	51.8	9.1		8.9	54.6	36.5		
Total %	6.3	11.8	1.7	19.8	3.5	12.9	3.9	20.3	9.9	13.2	2.3	25.4	3.1	18.8	12.6	34.5	

	State Street Southbound				Ramona Expressway Westbound				State Street Northbound				Ramona Expressway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	39	**121**	13	173	32	99	32	163	84	112	19	215	29	164	112	305	856
04:45 PM	60	101	**16**	177	32	130	**35**	197	85	123	18	226	21	**188**	105	314	914
05:00 PM	58	115	14	**187**	**34**	96	32	162	93	124	**26**	243	**32**	156	107	295	887
05:15 PM	**66**	90	12	168	27	**143**	30	**200**	**97**	**131**	18	**246**	30	181	**128**	**339**	**953**
Total Volume	223	427	55	705	125	468	129	722	359	490	81	930	112	689	452	1253	3610
% App. Total	31.6	60.6	7.8		17.3	64.8	17.9		38.6	52.7	8.7		8.9	55	36.1		
PHF	.845	.882	.859	.943	.919	.818	.921	.903	.925	.935	.779	.945	.875	.916	.883	.924	.947

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

City of San Jacinto
N/S: N State Street
E/W: Ramona Expressway
Weather: Clear

File Name : 01_SJC_State_Ramona PM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 2



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

	04:15 PM				04:00 PM				04:45 PM				04:30 PM			
+0 mins.	**63**	110	**22**	**195**	**44**	120	37	**201**	85	123	18	226	29	164	112	305
+15 mins.	39	**121**	13	173	23	120	**42**	185	93	124	**26**	243	21	**188**	105	314
+30 mins.	60	101	16	177	32	99	32	163	**97**	**131**	18	**246**	**32**	156	107	295
+45 mins.	58	115	14	187	32	**130**	35	197	87	122	22	231	30	181	**128**	**339**
Total Volume	220	447	65	732	131	469	146	746	362	500	84	946	112	689	452	1253
% App. Total	30.1	61.1	8.9		17.6	62.9	19.6		38.3	52.9	8.9		8.9	55	36.1	
PHF	.873	.924	.739	.938	.744	.902	.869	.928	.933	.954	.808	.961	.875	.916	.883	.924

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

City of San Jacinto
N/S: Alessandro Avenue
E/W: Ramona Expressway
Weather: Clear

File Name : 02_SJC_Aless_Ramona AM
Site Code : 05122054
Start Date : 1/26/2022

Groups Printed- Total Volume

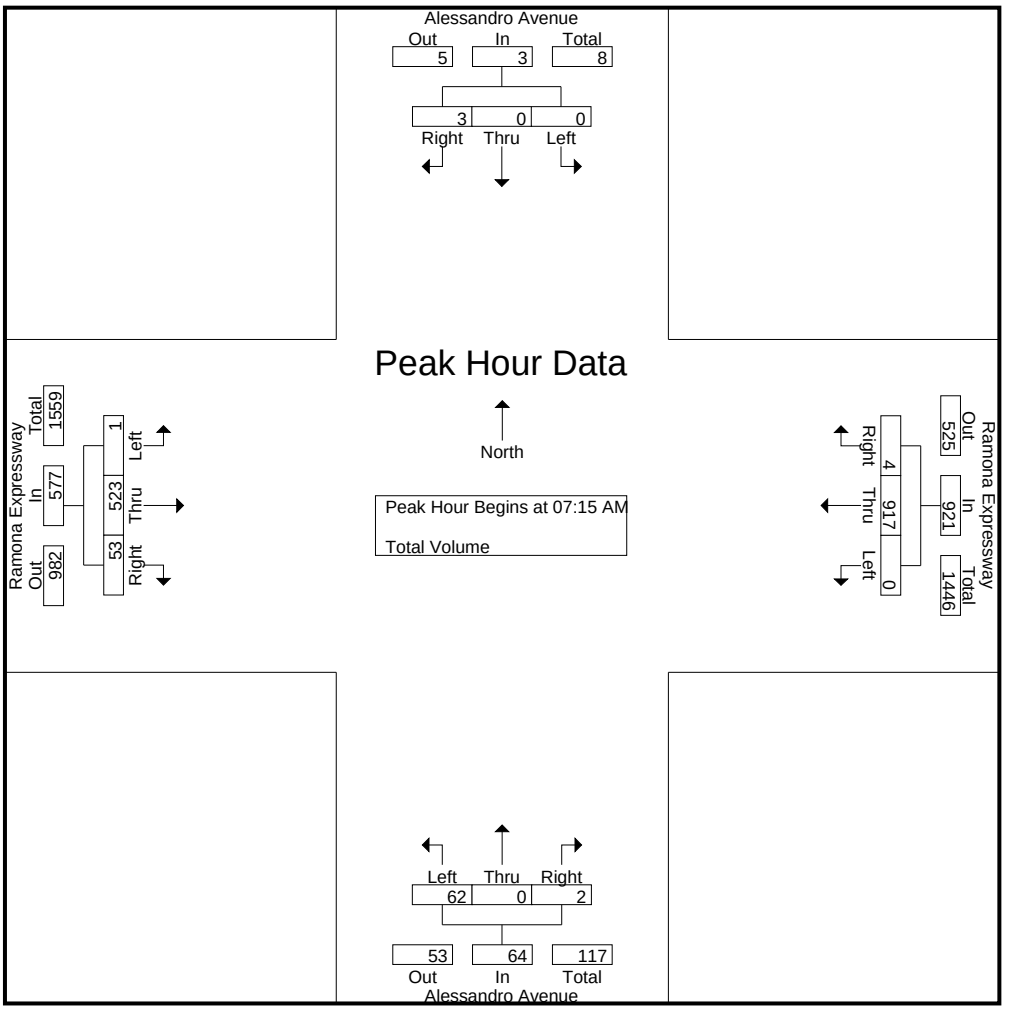
	Alessandro Avenue Southbound				Ramona Expressway Westbound				Alessandro Avenue Northbound				Ramona Expressway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	1	231	1	233	12	0	0	12	0	84	3	87	332
07:15 AM	0	0	0	0	0	243	1	244	16	0	2	18	1	118	2	121	383
07:30 AM	0	0	1	1	0	261	1	262	16	0	0	16	0	100	14	114	393
07:45 AM	0	0	0	0	0	207	0	207	17	0	0	17	0	177	29	206	430
Total	0	0	1	1	1	942	3	946	61	0	2	63	1	479	48	528	1538
08:00 AM	0	0	2	2	0	206	2	208	13	0	0	13	0	128	8	136	359
08:15 AM	0	0	2	2	0	204	1	205	8	1	1	10	2	130	19	151	368
08:30 AM	0	0	1	1	0	145	0	145	10	1	1	12	0	125	4	129	287
08:45 AM	0	0	3	3	0	131	0	131	4	0	1	5	1	95	7	103	242
Total	0	0	8	8	0	686	3	689	35	2	3	40	3	478	38	519	1256
Grand Total	0	0	9	9	1	1628	6	1635	96	2	5	103	4	957	86	1047	2794
Apprch %	0	0	100		0.1	99.6	0.4		93.2	1.9	4.9		0.4	91.4	8.2		
Total %	0	0	0.3	0.3	0	58.3	0.2	58.5	3.4	0.1	0.2	3.7	0.1	34.3	3.1	37.5	

	Alessandro Avenue Southbound				Ramona Expressway Westbound				Alessandro Avenue Northbound				Ramona Expressway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	243	1	244	16	0	**2**	**18**	**1**	118	2	121	383
07:30 AM	0	0	1	1	0	**261**	1	**262**	16	0	0	16	0	100	14	114	393
07:45 AM	0	0	0	0	0	207	0	207	**17**	0	0	17	0	**177**	**29**	**206**	**430**
08:00 AM	0	0	**2**	**2**	0	206	**2**	208	13	0	0	13	0	128	8	136	359
Total Volume	0	0	3	3	0	917	4	921	62	0	2	64	1	523	53	577	1565
% App. Total	0	0	100		0	99.6	0.4		96.9	0	3.1		0.2	90.6	9.2		
PHF	.000	.000	.375	.375	.000	.878	.500	.879	.912	.000	.250	.889	.250	.739	.457	.700	.910

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

City of San Jacinto
N/S: Alessandro Avenue
E/W: Ramona Expressway
Weather: Clear

File Name : 02_SJC_Aless_Ramona AM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 2



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

	08:00 AM				07:00 AM				07:15 AM				07:45 AM			
+0 mins.	0	0	2	2	**1**	231	**1**	233	16	0	**2**	**18**	0	**177**	**29**	**206**
+15 mins.	0	0	2	2	0	243	1	244	16	0	0	16	0	128	8	136
+30 mins.	0	0	1	1	0	**261**	1	**262**	**17**	0	0	17	**2**	130	19	151
+45 mins.	0	0	**3**	**3**	0	207	0	207	13	0	0	13	0	125	4	129
Total Volume	0	0	8	8	1	942	3	946	62	0	2	64	2	560	60	622
% App. Total	0	0	100		0.1	99.6	0.3		96.9	0	3.1		0.3	90	9.6	
PHF	.000	.000	.667	.667	.250	.902	.750	.903	.912	.000	.250	.889	.250	.791	.517	.755

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

City of San Jacinto
N/S: Alessandro Avenue
E/W: Ramona Expressway
Weather: Clear

File Name : 02_SJC_Aless_Ramona PM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 1

Groups Printed- Total Volume

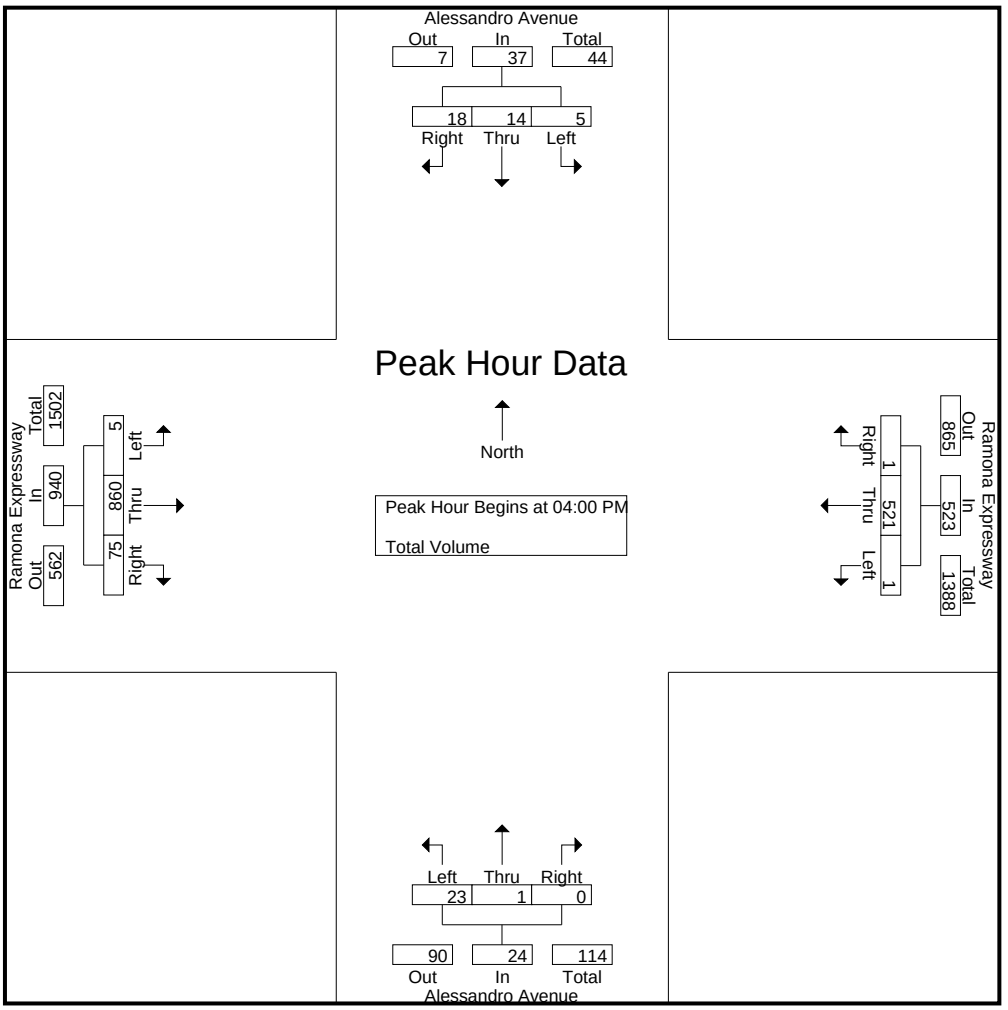
	Alessandro Avenue Southbound				Ramona Expressway Westbound				Alessandro Avenue Northbound				Ramona Expressway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	3	14	16	33	0	133	1	134	7	1	0	8	0	198	18	216	391
04:15 PM	2	0	1	3	0	128	0	128	5	0	0	5	3	226	23	252	388
04:30 PM	0	0	1	1	1	137	0	138	4	0	0	4	0	211	15	226	369
04:45 PM	0	0	0	0	0	123	0	123	7	0	0	7	2	225	19	246	376
Total	5	14	18	37	1	521	1	523	23	1	0	24	5	860	75	940	1524
05:00 PM	1	0	0	1	0	112	0	112	10	1	1	12	1	209	13	223	348
05:15 PM	0	0	1	1	0	140	0	140	11	0	1	12	1	177	17	195	348
05:30 PM	0	0	1	1	0	117	0	117	9	0	1	10	0	215	16	231	359
05:45 PM	0	0	1	1	0	113	0	113	9	0	1	10	0	217	13	230	354
Total	1	0	3	4	0	482	0	482	39	1	4	44	2	818	59	879	1409
Grand Total	6	14	21	41	1	1003	1	1005	62	2	4	68	7	1678	134	1819	2933
Apprch %	14.6	34.1	51.2		0.1	99.8	0.1		91.2	2.9	5.9		0.4	92.2	7.4		
Total %	0.2	0.5	0.7	1.4	0	34.2	0	34.3	2.1	0.1	0.1	2.3	0.2	57.2	4.6	62	

	Alessandro Avenue Southbound				Ramona Expressway Westbound				Alessandro Avenue Northbound				Ramona Expressway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**3**	**14**	**16**	**33**	0	133	**1**	134	**7**	**1**	0	**8**	0	198	18	216	**391**
04:15 PM	2	0	1	3	0	128	0	128	5	0	0	5	**3**	**226**	**23**	**252**	388
04:30 PM	0	0	1	1	**1**	**137**	0	**138**	4	0	0	4	0	211	15	226	369
04:45 PM	0	0	0	0	0	123	0	123	7	0	0	7	2	225	19	246	376
Total Volume	5	14	18	37	1	521	1	523	23	1	0	24	5	860	75	940	1524
% App. Total	13.5	37.8	48.6		0.2	99.6	0.2		95.8	4.2	0		0.5	91.5	8		
PHF	.417	.250	.281	.280	.250	.951	.250	.947	.821	.250	.000	.750	.417	.951	.815	.933	.974

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

City of San Jacinto
N/S: Alessandro Avenue
E/W: Ramona Expressway
Weather: Clear

File Name : 02_SJC_Aless_Ramona PM
Site Code : 05122054
Start Date : 1/26/2022



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				05:00 PM				04:15 PM			
+0 mins.	**3**	**14**	**16**	**33**	0	133	**1**	134	10	**1**	**1**	**12**	**3**	**226**	**23**	**252**
+15 mins.	2	0	1	3	0	128	0	128	**11**	0	1	12	0	211	15	226
+30 mins.	0	0	1	1	**1**	**137**	0	**138**	9	0	1	10	2	225	19	246
+45 mins.	0	0	0	0	0	123	0	123	9	0	1	10	1	209	13	223
Total Volume	5	14	18	37	1	521	1	523	39	1	4	44	6	871	70	947
% App. Total	13.5	37.8	48.6		0.2	99.6	0.2		88.6	2.3	9.1		0.6	92	7.4	
PHF	.417	.250	.281	.280	.250	.951	.250	.947	.886	.250	1.000	.917	.500	.963	.761	.939

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

City of San Jacinto
N/S: Vernon Avenue
E/W: Ramona Expressway
Weather: Clear

File Name : 03_SJC_Vernon_Ramona AM
Site Code : 05122054
Start Date : 1/26/2022

Groups Printed- Total Volume

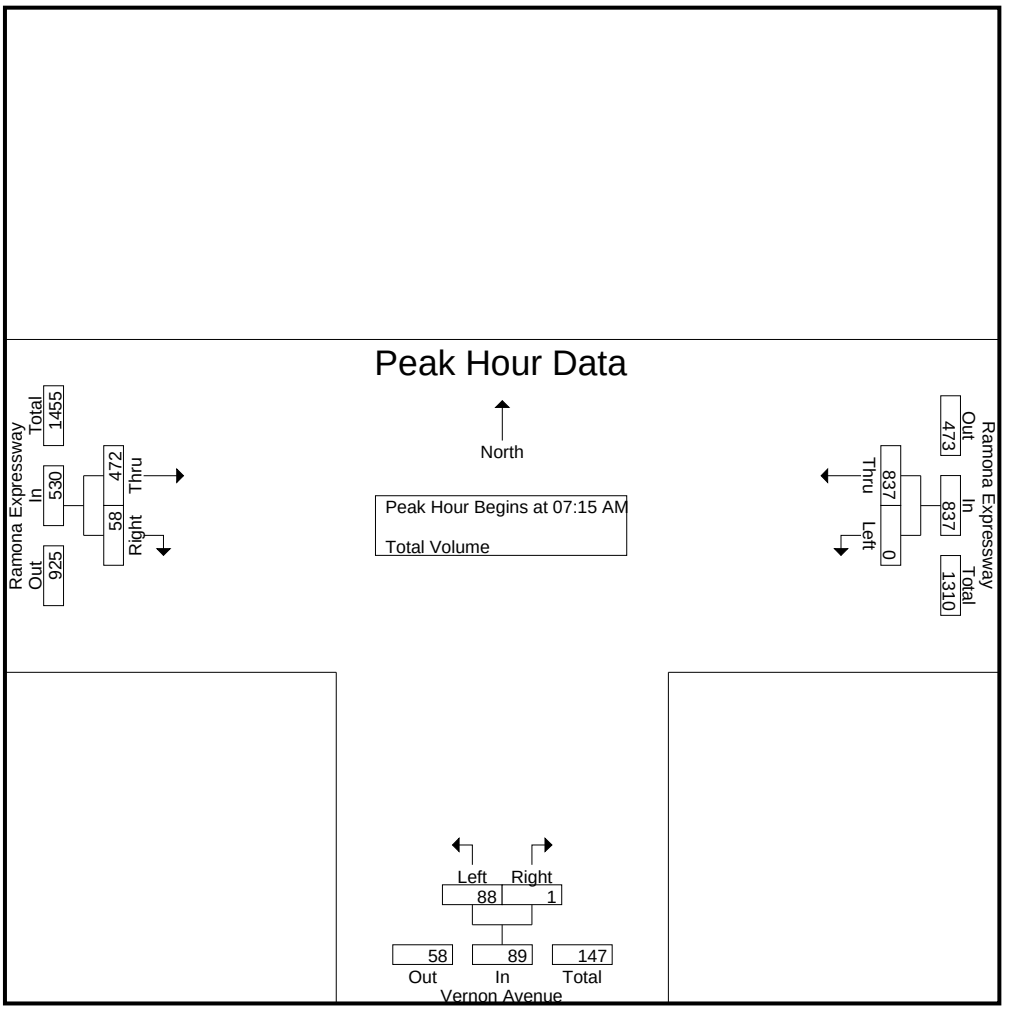
	Ramona Expressway Westbound			Vernon Avenue Northbound			Ramona Expressway Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	213	213	18	0	18	70	15	85	316
07:15 AM	0	228	228	20	0	20	104	12	116	364
07:30 AM	0	237	237	18	0	18	95	11	106	361
07:45 AM	0	180	180	30	1	31	159	19	178	389
Total	0	858	858	86	1	87	428	57	485	1430
08:00 AM	0	192	192	20	0	20	114	16	130	342
08:15 AM	0	179	179	25	0	25	112	20	132	336
08:30 AM	0	139	139	17	0	17	118	9	127	283
08:45 AM	0	103	103	18	0	18	88	14	102	223
Total	0	613	613	80	0	80	432	59	491	1184
Grand Total	0	1471	1471	166	1	167	860	116	976	2614
Apprch %	0	100		99.4	0.6		88.1	11.9		
Total %	0	56.3	56.3	6.4	0	6.4	32.9	4.4	37.3	

	Ramona Expressway Westbound			Vernon Avenue Northbound			Ramona Expressway Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	228	228	20	0	20	104	12	116	364
07:30 AM	0	**237**	**237**	18	0	18	95	11	106	361
07:45 AM	0	180	180	**30**	**1**	**31**	**159**	**19**	**178**	**389**
08:00 AM	0	192	192	20	0	20	114	16	130	342
Total Volume	0	837	837	88	1	89	472	58	530	1456
% App. Total	0	100		98.9	1.1		89.1	10.9		
PHF	.000	.883	.883	.733	.250	.718	.742	.763	.744	.936

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

City of San Jacinto
N/S: Vernon Avenue
E/W: Ramona Expressway
Weather: Clear

File Name : 03_SJC_Vernon_Ramona AM
Site Code : 05122054
Start Date : 1/26/2022



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			07:30 AM			07:45 AM		
+0 mins.	0	213	213	18	0	18	**159**	19	**178**
+15 mins.	0	228	228	**30**	**1**	**31**	114	16	130
+30 mins.	0	**237**	**237**	20	0	20	112	**20**	132
+45 mins.	0	180	180	25	0	25	118	9	127
Total Volume	0	858	858	93	1	94	503	64	567
% App. Total	0	100		98.9	1.1		88.7	11.3	
PHF	.000	.905	.905	.775	.250	.758	.791	.800	.796

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

City of San Jacinto
N/S: Vernon Avenue
E/W: Ramona Expressway
Weather: Clear

File Name : 03_SJC_Vernon_Ramona PM
Site Code : 05122054
Start Date : 1/26/2022

Groups Printed- Total Volume

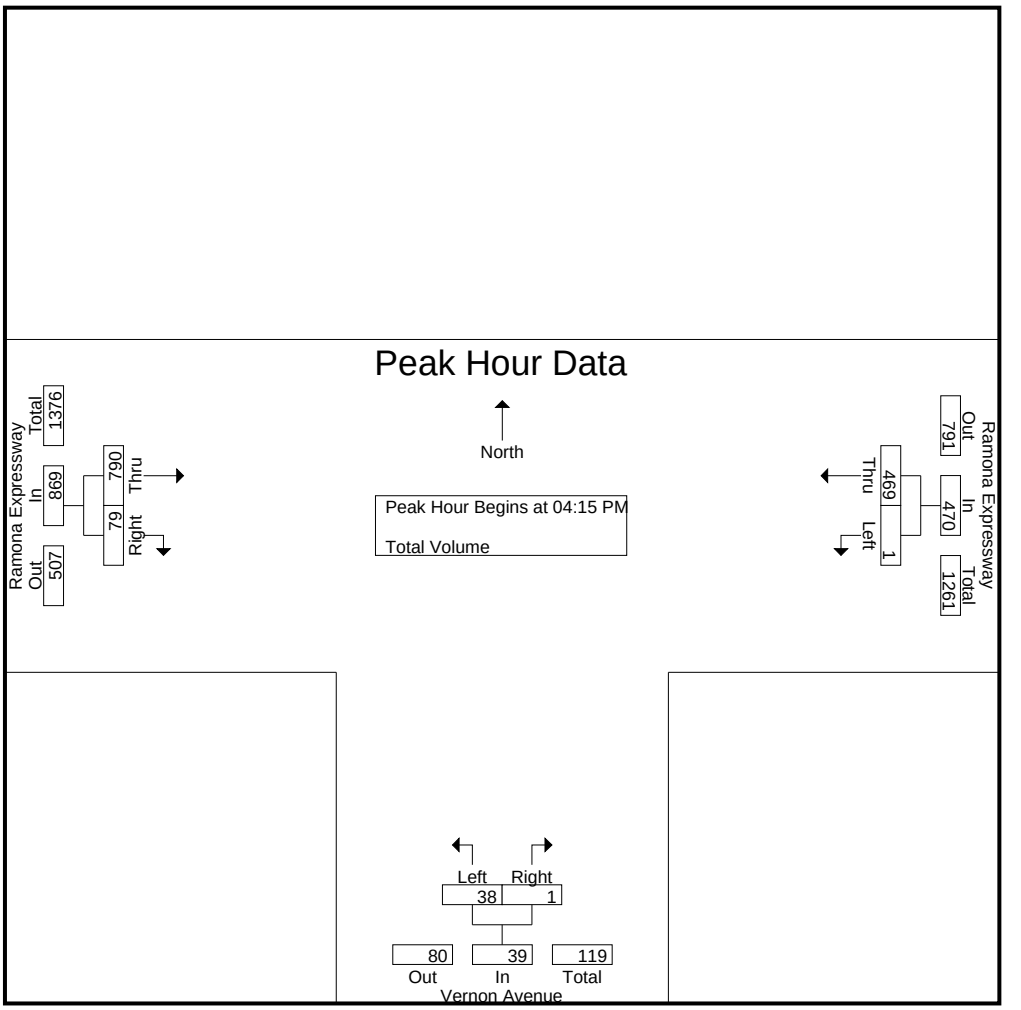
	Ramona Expressway Westbound			Vernon Avenue Northbound			Ramona Expressway Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	121	121	9	0	9	180	20	200	330
04:15 PM	0	127	127	8	0	8	203	20	223	358
04:30 PM	1	124	125	10	0	10	199	21	220	355
04:45 PM	0	104	104	12	0	12	200	18	218	334
Total	1	476	477	39	0	39	782	79	861	1377
05:00 PM	0	114	114	8	1	9	188	20	208	331
05:15 PM	0	122	122	12	0	12	162	16	178	312
05:30 PM	0	103	103	12	0	12	202	17	219	334
05:45 PM	1	108	109	6	0	6	198	16	214	329
Total	1	447	448	38	1	39	750	69	819	1306
Grand Total	2	923	925	77	1	78	1532	148	1680	2683
Apprch %	0.2	99.8		98.7	1.3		91.2	8.8		
Total %	0.1	34.4	34.5	2.9	0	2.9	57.1	5.5	62.6	

	Ramona Expressway Westbound			Vernon Avenue Northbound			Ramona Expressway Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	**127**	**127**	8	0	8	**203**	20	**223**	**358**
04:30 PM	**1**	124	125	10	0	10	199	**21**	220	355
04:45 PM	0	104	104	**12**	0	**12**	200	18	218	334
05:00 PM	0	114	114	8	**1**	9	188	20	208	331
Total Volume	1	469	470	38	1	39	790	79	869	1378
% App. Total	0.2	99.8		97.4	2.6		90.9	9.1		
PHF	.250	.923	.925	.792	.250	.813	.973	.940	.974	.962

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

City of San Jacinto
N/S: Vernon Avenue
E/W: Ramona Expressway
Weather: Clear

File Name : 03_SJC_Vernon_Ramona PM
Site Code : 05122054
Start Date : 1/26/2022



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

	04:00 PM			04:45 PM			04:15 PM		
+0 mins.	0	121	121	**12**	0	**12**	**203**	20	**223**
+15 mins.	0	**127**	**127**	8	**1**	9	199	**21**	220
+30 mins.	**1**	124	125	12	0	12	200	18	218
+45 mins.	0	104	104	12	0	12	188	20	208
Total Volume	1	476	477	44	1	45	790	79	869
% App. Total	0.2	99.8		97.8	2.2		90.9	9.1	
PHF	.250	.937	.939	.917	.250	.938	.973	.940	.974

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

City of San Jacinto
N/S: Alessandro Avenue
E/W: 1st Street
Weather: Clear

File Name : 04_SJC_Aless_1st AM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 1

Groups Printed- Total Volume

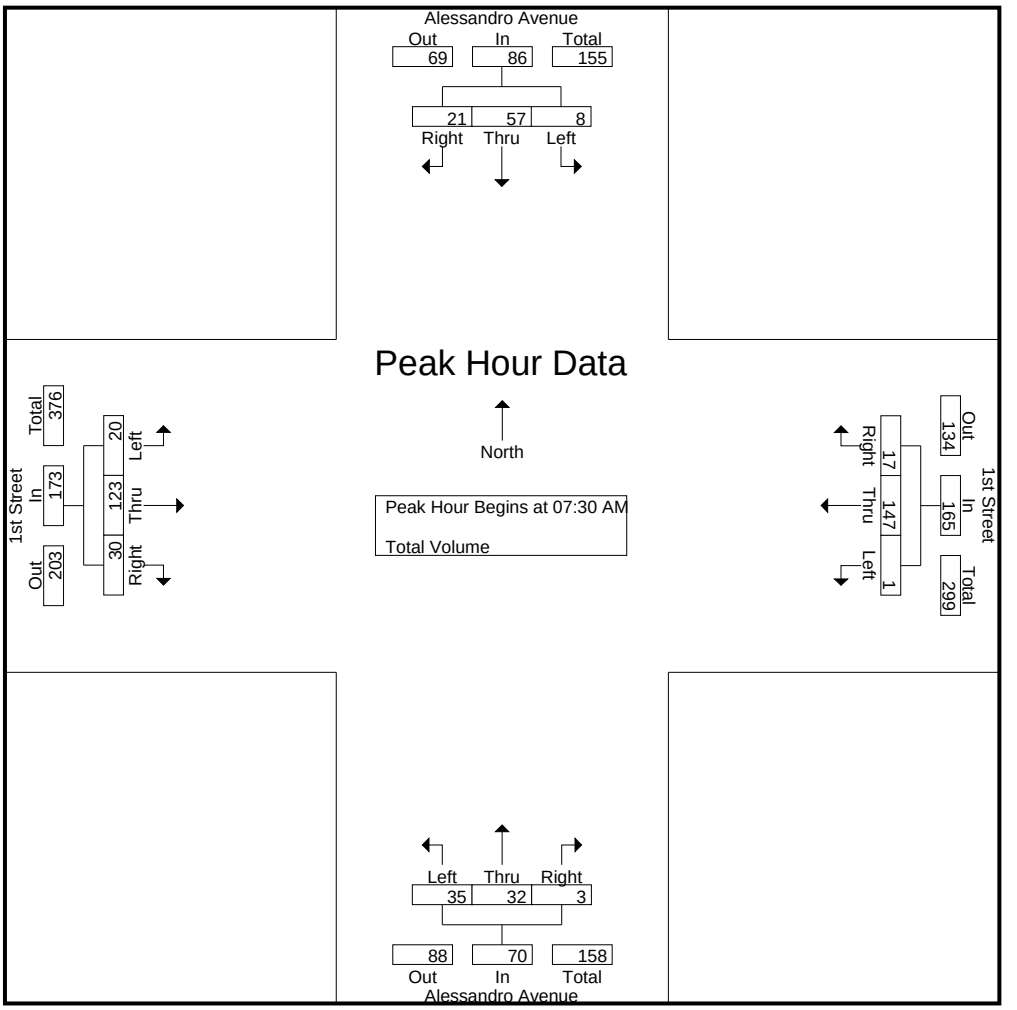
	Alessandro Avenue Southbound				1st Street Westbound				Alessandro Avenue Northbound				1st Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	4	3	7	1	27	3	31	1	7	1	9	2	16	1	19	66
07:15 AM	1	4	3	8	0	42	7	49	5	10	0	15	2	20	4	26	98
07:30 AM	1	14	4	19	0	51	4	55	18	10	0	28	1	30	5	36	138
07:45 AM	2	19	9	30	0	47	5	52	9	6	1	16	11	39	5	55	153
Total	4	41	19	64	1	167	19	187	33	33	2	68	16	105	15	136	455
08:00 AM	0	8	5	13	1	22	1	24	5	11	1	17	2	29	11	42	96
08:15 AM	5	16	3	24	0	27	7	34	3	5	1	9	6	25	9	40	107
08:30 AM	1	6	1	8	0	14	1	15	3	6	0	9	3	12	3	18	50
08:45 AM	2	7	0	9	0	9	0	9	1	5	0	6	1	8	0	9	33
Total	8	37	9	54	1	72	9	82	12	27	2	41	12	74	23	109	286
Grand Total	12	78	28	118	2	239	28	269	45	60	4	109	28	179	38	245	741
Apprch %	10.2	66.1	23.7		0.7	88.8	10.4		41.3	55	3.7		11.4	73.1	15.5		
Total %	1.6	10.5	3.8	15.9	0.3	32.3	3.8	36.3	6.1	8.1	0.5	14.7	3.8	24.2	5.1	33.1	

	Alessandro Avenue Southbound				1st Street Westbound				Alessandro Avenue Northbound				1st Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	14	4	19	0	**51**	4	**55**	**18**	10	0	**28**	1	30	5	36	138
07:45 AM	2	**19**	**9**	**30**	0	47	5	52	9	6	**1**	16	**11**	**39**	5	**55**	**153**
08:00 AM	0	8	5	13	**1**	22	1	24	5	**11**	1	17	2	29	**11**	42	96
08:15 AM	**5**	16	3	24	0	27	**7**	34	3	5	1	9	6	25	9	40	107
Total Volume	8	57	21	86	1	147	17	165	35	32	3	70	20	123	30	173	494
% App. Total	9.3	66.3	24.4		0.6	89.1	10.3		50	45.7	4.3		11.6	71.1	17.3		
PHF	.400	.750	.583	.717	.250	.721	.607	.750	.486	.727	.750	.625	.455	.788	.682	.786	.807

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

City of San Jacinto
N/S: Alessandro Avenue
E/W: 1st Street
Weather: Clear

File Name : 04_SJC_Aless_1st AM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 2



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

	07:30 AM				07:00 AM				07:15 AM				07:30 AM			
+0 mins.	1	14	4	19	**1**	27	3	31	5	10	0	15	1	30	5	36
+15 mins.	2	**19**	**9**	**30**	0	42	**7**	49	**18**	10	0	**28**	**11**	**39**	5	**55**
+30 mins.	0	8	5	13	0	**51**	4	**55**	9	6	**1**	16	2	29	**11**	42
+45 mins.	**5**	16	3	24	0	47	5	52	5	**11**	1	17	6	25	9	40
Total Volume	8	57	21	86	1	167	19	187	37	37	2	76	20	123	30	173
% App. Total	9.3	66.3	24.4		0.5	89.3	10.2		48.7	48.7	2.6		11.6	71.1	17.3	
PHF	.400	.750	.583	.717	.250	.819	.679	.850	.514	.841	.500	.679	.455	.788	.682	.786

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

City of San Jacinto
N/S: Alessandro Avenue
E/W: 1st Street
Weather: Clear

File Name : 04_SJC_Aless_1st PM
Site Code : 05122054
Start Date : 1/26/2022

Groups Printed- Total Volume

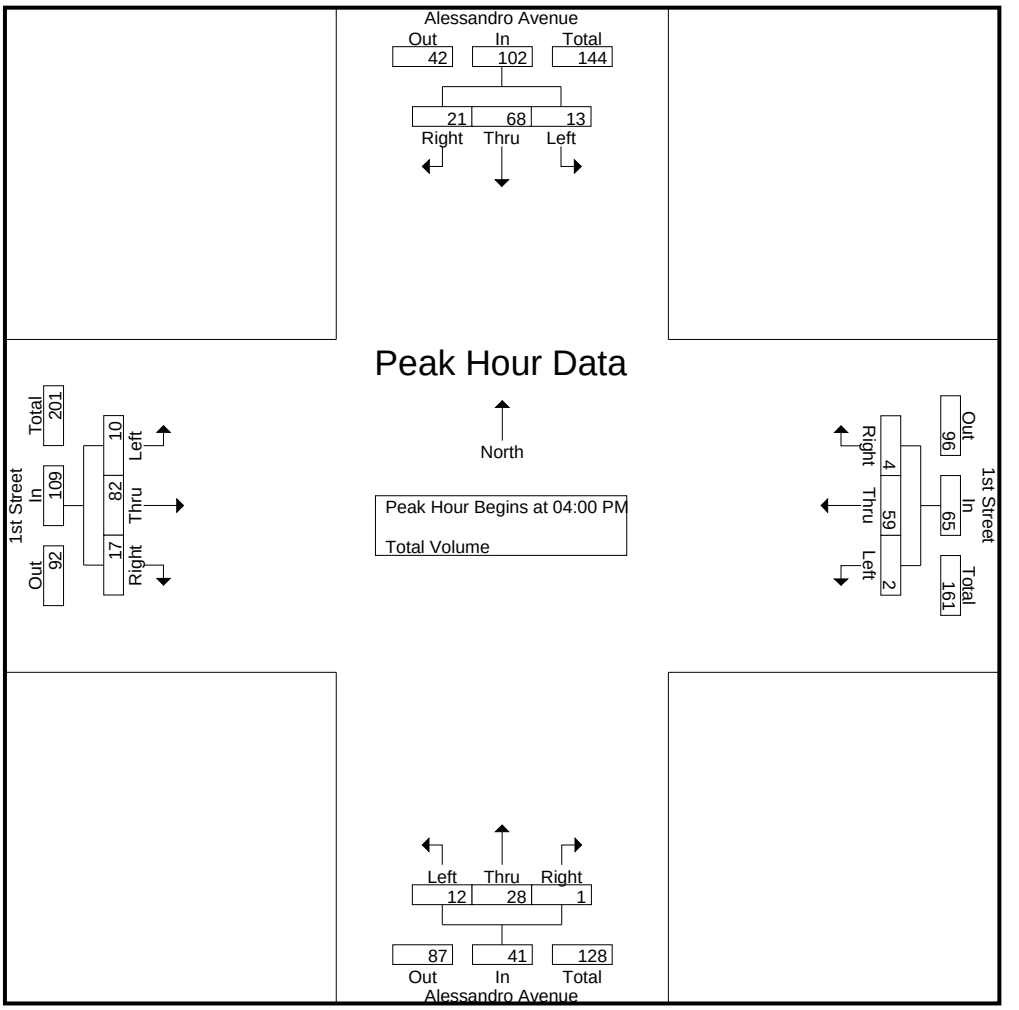
	Alessandro Avenue Southbound				1st Street Westbound				Alessandro Avenue Northbound				1st Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	5	22	6	33	0	16	2	18	6	6	0	12	2	19	5	26	89
04:15 PM	3	19	4	26	1	10	0	11	1	7	0	8	3	16	3	22	67
04:30 PM	2	16	5	23	1	13	1	15	4	7	0	11	2	30	3	35	84
04:45 PM	3	11	6	20	0	20	1	21	1	8	1	10	3	17	6	26	77
Total	13	68	21	102	2	59	4	65	12	28	1	41	10	82	17	109	317
05:00 PM	3	9	5	17	0	13	4	17	2	8	2	12	6	24	5	35	81
05:15 PM	6	9	2	17	0	7	4	11	2	9	1	12	3	21	5	29	69
05:30 PM	4	10	2	16	0	13	0	13	5	6	0	11	3	9	1	13	53
05:45 PM	2	14	2	18	1	11	3	15	5	6	0	11	3	14	4	21	65
Total	15	42	11	68	1	44	11	56	14	29	3	46	15	68	15	98	268
Grand Total	28	110	32	170	3	103	15	121	26	57	4	87	25	150	32	207	585
Apprch %	16.5	64.7	18.8		2.5	85.1	12.4		29.9	65.5	4.6		12.1	72.5	15.5		
Total %	4.8	18.8	5.5	29.1	0.5	17.6	2.6	20.7	4.4	9.7	0.7	14.9	4.3	25.6	5.5	35.4	

	Alessandro Avenue Southbound				1st Street Westbound				Alessandro Avenue Northbound				1st Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**5**	**22**	**6**	**33**	0	16	**2**	18	**6**	6	0	**12**	2	19	5	26	**89**
04:15 PM	3	19	4	26	**1**	10	0	11	1	7	0	8	**3**	16	3	22	67
04:30 PM	2	16	5	23	1	13	1	15	4	7	0	11	2	**30**	3	**35**	84
04:45 PM	3	11	6	20	0	**20**	1	**21**	1	**8**	**1**	10	3	17	**6**	26	77
Total Volume	13	68	21	102	2	59	4	65	12	28	1	41	10	82	17	109	317
% App. Total	12.7	66.7	20.6		3.1	90.8	6.2		29.3	68.3	2.4		9.2	75.2	15.6		
PHF	.650	.773	.875	.773	.500	.738	.500	.774	.500	.875	.250	.854	.833	.683	.708	.779	.890

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

City of San Jacinto
N/S: Alessandro Avenue
E/W: 1st Street
Weather: Clear

File Name : 04_SJC_Aless_1st PM
Site Code : 05122054
Start Date : 1/26/2022
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				05:00 PM				04:30 PM			
+0 mins.	**5**	**22**	**6**	**33**	0	16	**2**	18	2	8	**2**	**12**	2	**30**	3	**35**
+15 mins.	3	19	4	26	**1**	10	0	11	2	**9**	1	12	3	17	**6**	26
+30 mins.	2	16	5	23	1	13	1	15	**5**	6	0	11	**6**	24	5	35
+45 mins.	3	11	6	20	0	**20**	1	**21**	5	6	0	11	3	21	5	29
Total Volume	13	68	21	102	2	59	4	65	14	29	3	46	14	92	19	125
% App. Total	12.7	66.7	20.6		3.1	90.8	6.2		30.4	63	6.5		11.2	73.6	15.2	
PHF	.650	.773	.875	.773	.500	.738	.500	.774	.700	.806	.375	.958	.583	.767	.792	.893

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

City of San Jacinto
N/S: Vernon Avenue
E/W: 1st Street
Weather: Clear

File Name : 05_SJC_Vernon_1st AM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 1

Groups Printed- Total Volume

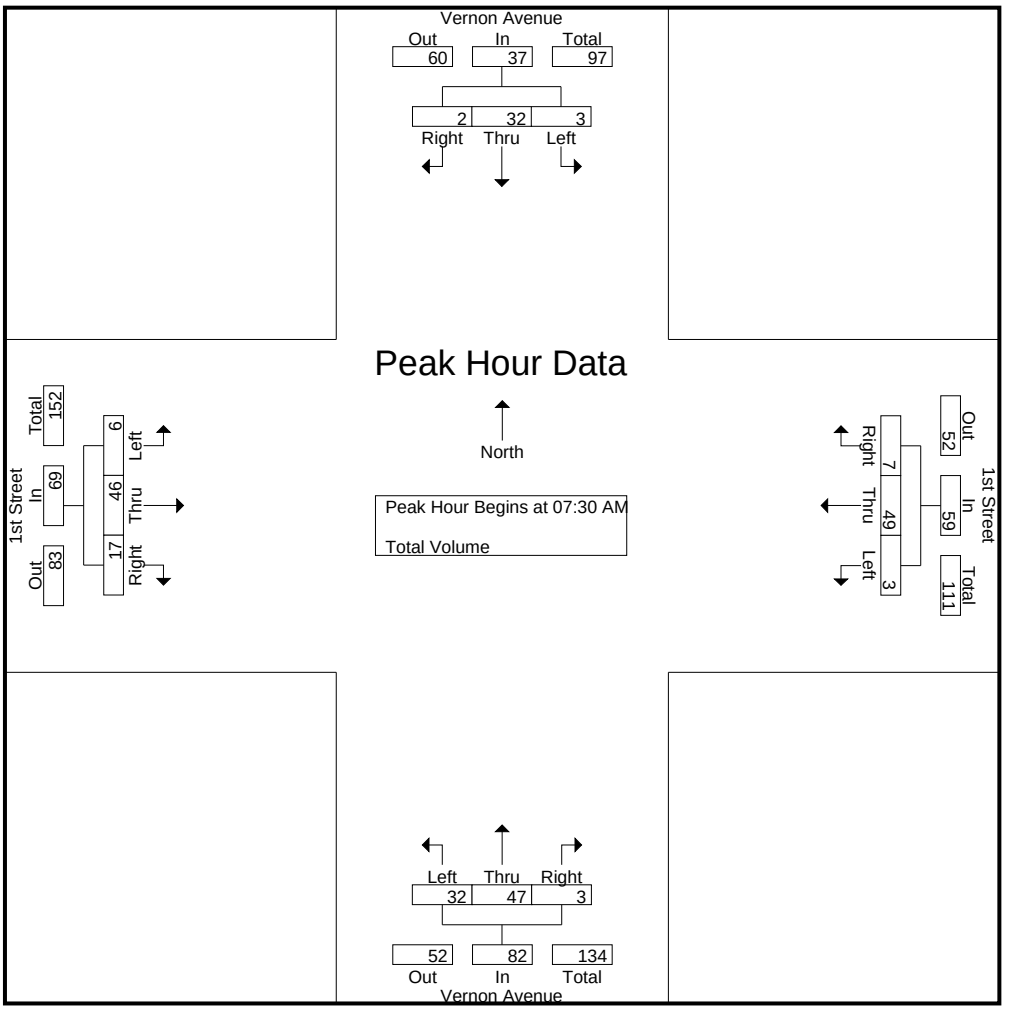
	Vernon Avenue Southbound				1st Street Westbound				Vernon Avenue Northbound				1st Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	3	1	5	0	10	4	14	5	7	3	15	1	6	0	7	41
07:15 AM	1	6	0	7	1	5	2	8	11	11	0	22	0	10	0	10	47
07:30 AM	0	6	0	6	0	21	1	22	9	9	0	18	2	10	3	15	61
07:45 AM	2	10	1	13	0	11	2	13	13	15	0	28	2	14	5	21	75
Total	4	25	2	31	1	47	9	57	38	42	3	83	5	40	8	53	224
08:00 AM	0	7	1	8	1	7	2	10	4	8	1	13	1	11	4	16	47
08:15 AM	1	9	0	10	2	10	2	14	6	15	2	23	1	11	5	17	64
08:30 AM	0	8	0	8	1	5	1	7	3	11	0	14	2	5	2	9	38
08:45 AM	0	5	0	5	2	3	1	6	1	6	1	8	0	4	0	4	23
Total	1	29	1	31	6	25	6	37	14	40	4	58	4	31	11	46	172
Grand Total	5	54	3	62	7	72	15	94	52	82	7	141	9	71	19	99	396
Apprch %	8.1	87.1	4.8		7.4	76.6	16		36.9	58.2	5		9.1	71.7	19.2		
Total %	1.3	13.6	0.8	15.7	1.8	18.2	3.8	23.7	13.1	20.7	1.8	35.6	2.3	17.9	4.8	25	

	Vernon Avenue Southbound				1st Street Westbound				Vernon Avenue Northbound				1st Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	6	0	6	0	**21**	1	**22**	9	9	0	18	**2**	10	3	15	61
07:45 AM	**2**	**10**	**1**	**13**	0	11	**2**	13	**13**	**15**	0	**28**	2	**14**	**5**	**21**	**75**
08:00 AM	0	7	1	8	1	7	2	10	4	8	1	13	1	11	4	16	47
08:15 AM	1	9	0	10	**2**	10	2	14	6	15	**2**	23	1	11	5	17	64
Total Volume	3	32	2	37	3	49	7	59	32	47	3	82	6	46	17	69	247
% App. Total	8.1	86.5	5.4		5.1	83.1	11.9		39	57.3	3.7		8.7	66.7	24.6		
PHF	.375	.800	.500	.712	.375	.583	.875	.670	.615	.783	.375	.732	.750	.821	.850	.821	.823

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

City of San Jacinto
N/S: Vernon Avenue
E/W: 1st Street
Weather: Clear

File Name : 05_SJC_Vernon_1st AM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 2



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

	07:45 AM				07:30 AM				07:00 AM				07:30 AM			
+0 mins.	**2**	**10**	**1**	**13**	0	**21**	1	**22**	5	7	**3**	15	**2**	10	3	15
+15 mins.	0	7	1	8	0	11	**2**	13	11	11	0	22	2	**14**	**5**	**21**
+30 mins.	1	9	0	10	1	7	2	10	9	9	0	18	1	11	4	16
+45 mins.	0	8	0	8	**2**	10	2	14	**13**	**15**	0	**28**	1	11	5	17
Total Volume	3	34	2	39	3	49	7	59	38	42	3	83	6	46	17	69
% App. Total	7.7	87.2	5.1		5.1	83.1	11.9		45.8	50.6	3.6		8.7	66.7	24.6	
PHF	.375	.850	.500	.750	.375	.583	.875	.670	.731	.700	.250	.741	.750	.821	.850	.821

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

City of San Jacinto
N/S: Vernon Avenue
E/W: 1st Street
Weather: Clear

File Name : 05_SJC_Vernon_1st PM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 1

Groups Printed- Total Volume

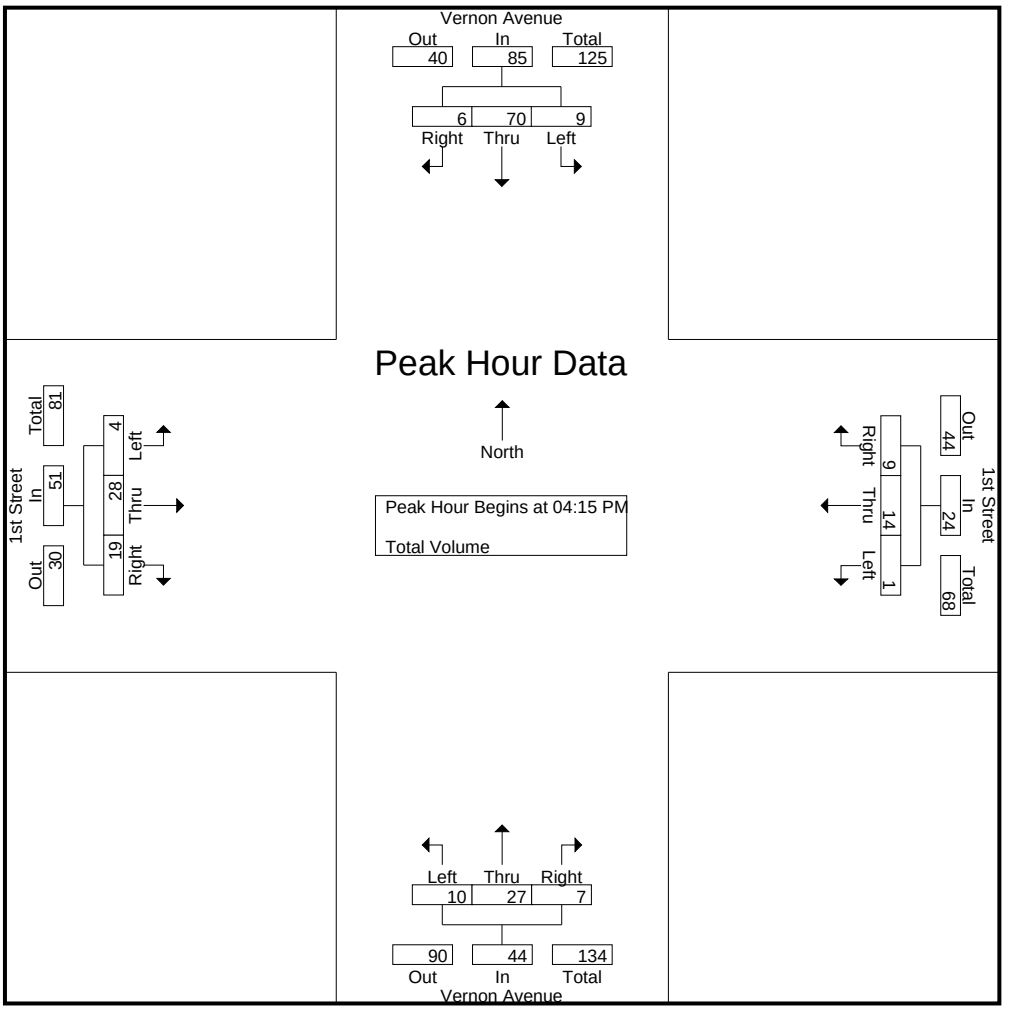
	Vernon Avenue Southbound				1st Street Westbound				Vernon Avenue Northbound				1st Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	5	12	2	19	1	9	1	11	1	7	2	10	0	10	2	12	52
04:15 PM	2	24	0	26	0	0	1	1	2	2	0	4	0	6	5	11	42
04:30 PM	1	18	3	22	0	7	2	9	3	10	3	16	3	8	2	13	60
04:45 PM	2	13	3	18	1	3	4	8	3	7	2	12	0	5	3	8	46
Total	10	67	8	85	2	19	8	29	9	26	7	42	3	29	12	44	200
05:00 PM	4	15	0	19	0	4	2	6	2	8	2	12	1	9	9	19	56
05:15 PM	1	12	0	13	0	1	1	2	4	11	3	18	1	6	2	9	42
05:30 PM	5	12	1	18	2	4	0	6	3	9	0	12	2	3	3	8	44
05:45 PM	1	14	0	15	0	2	2	4	2	6	1	9	0	8	2	10	38
Total	11	53	1	65	2	11	5	18	11	34	6	51	4	26	16	46	180
Grand Total	21	120	9	150	4	30	13	47	20	60	13	93	7	55	28	90	380
Apprch %	14	80	6		8.5	63.8	27.7		21.5	64.5	14		7.8	61.1	31.1		
Total %	5.5	31.6	2.4	39.5	1.1	7.9	3.4	12.4	5.3	15.8	3.4	24.5	1.8	14.5	7.4	23.7	

	Vernon Avenue Southbound				1st Street Westbound				Vernon Avenue Northbound				1st Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	2	**24**	0	**26**	0	0	1	1	2	2	0	4	0	6	5	11	42
04:30 PM	1	18	**3**	22	0	**7**	2	**9**	**3**	**10**	**3**	**16**	**3**	8	2	13	**60**
04:45 PM	2	13	3	18	**1**	3	**4**	8	3	7	2	12	0	5	3	8	46
05:00 PM	**4**	15	0	19	0	4	2	6	2	8	2	12	1	**9**	**9**	**19**	56
Total Volume	9	70	6	85	1	14	9	24	10	27	7	44	4	28	19	51	204
% App. Total	10.6	82.4	7.1		4.2	58.3	37.5		22.7	61.4	15.9		7.8	54.9	37.3		
PHF	.563	.729	.500	.817	.250	.500	.563	.667	.833	.675	.583	.688	.333	.778	.528	.671	.850

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

City of San Jacinto
N/S: Vernon Avenue
E/W: 1st Street
Weather: Clear

File Name : 05_SJC_Vernon_1st PM
Site Code : 05122054
Start Date : 1/26/2022
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				04:30 PM				04:15 PM			
+0 mins.	**5**	12	2	19	**1**	**9**	1	**11**	3	10	**3**	16	0	6	5	11
+15 mins.	2	**24**	0	**26**	0	0	1	1	3	7	2	12	**3**	8	2	13
+30 mins.	1	18	**3**	22	0	7	2	9	2	8	2	12	0	5	3	8
+45 mins.	2	13	3	18	1	3	**4**	8	**4**	**11**	3	**18**	1	**9**	**9**	**19**
Total Volume	10	67	8	85	2	19	8	29	12	36	10	58	4	28	19	51
% App. Total	11.8	78.8	9.4		6.9	65.5	27.6		20.7	62.1	17.2		7.8	54.9	37.3	
PHF	.500	.698	.667	.817	.500	.528	.500	.659	.750	.818	.833	.806	.333	.778	.528	.671

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

City of San Jacinto
N/S: Alessandro Avenue
E/W: Main Street
Weather: Clear

File Name : 06_SJC_Aless_Main AM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 1

Groups Printed- Total Volume

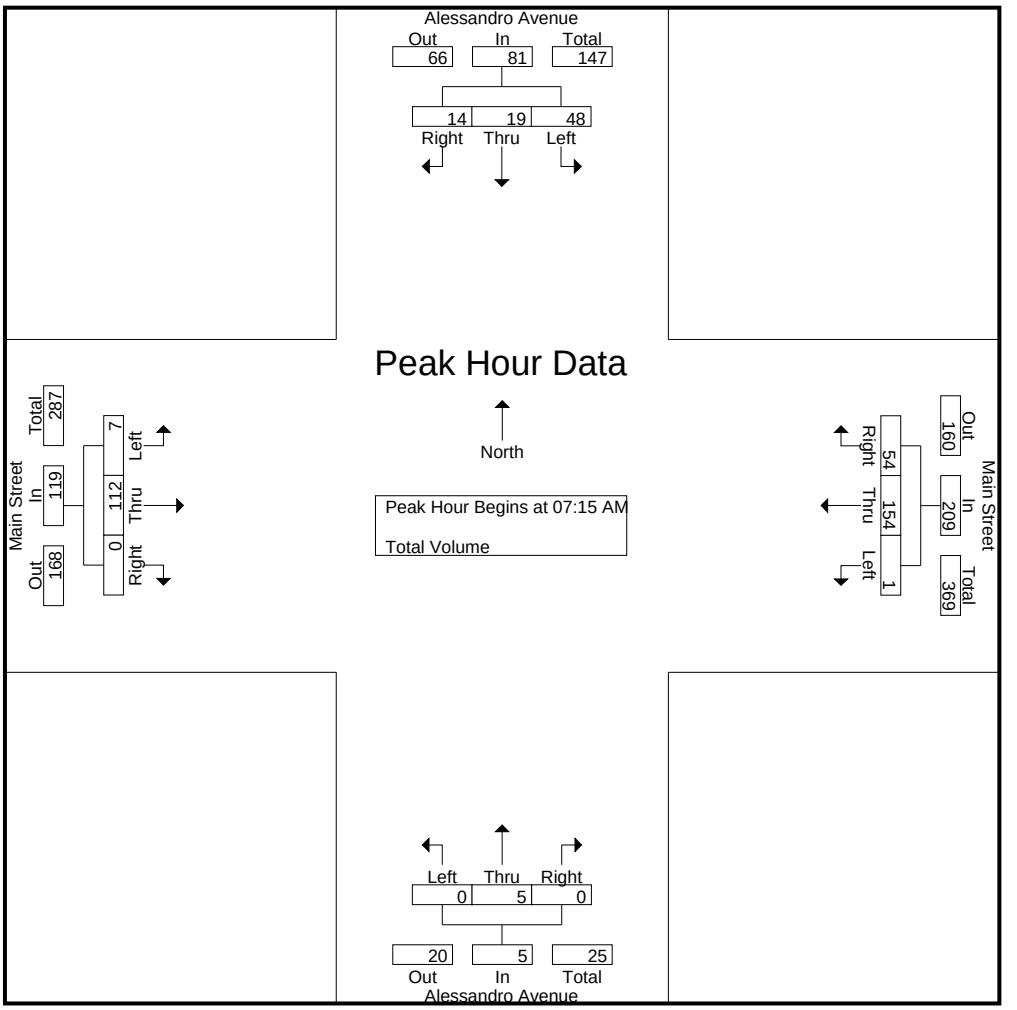
	Alessandro Avenue Southbound				Main Street Westbound				Alessandro Avenue Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	1	1	5	0	32	4	36	0	2	0	2	3	12	0	15	58
07:15 AM	5	1	4	10	1	36	9	46	0	1	0	1	1	28	0	29	86
07:30 AM	15	7	1	23	0	55	22	77	0	2	0	2	2	25	0	27	129
07:45 AM	13	6	7	26	0	34	14	48	0	0	0	0	1	25	0	26	100
Total	36	15	13	64	1	157	49	207	0	5	0	5	7	90	0	97	373
08:00 AM	15	5	2	22	0	29	9	38	0	2	0	2	3	34	0	37	99
08:15 AM	16	5	1	22	0	28	4	32	0	3	1	4	1	26	0	27	85
08:30 AM	12	1	1	14	1	26	4	31	0	2	1	3	1	21	0	22	70
08:45 AM	4	1	3	8	0	25	2	27	0	2	0	2	1	24	0	25	62
Total	47	12	7	66	1	108	19	128	0	9	2	11	6	105	0	111	316
Grand Total	83	27	20	130	2	265	68	335	0	14	2	16	13	195	0	208	689
Apprch %	63.8	20.8	15.4		0.6	79.1	20.3		0	87.5	12.5		6.2	93.8	0		
Total %	12	3.9	2.9	18.9	0.3	38.5	9.9	48.6	0	2	0.3	2.3	1.9	28.3	0	30.2	

	Alessandro Avenue Southbound				Main Street Westbound				Alessandro Avenue Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	5	1	4	10	**1**	36	9	46	0	1	0	1	1	28	0	29	86
07:30 AM	**15**	**7**	1	23	0	**55**	**22**	**77**	0	**2**	0	**2**	2	25	0	27	**129**
07:45 AM	13	6	**7**	**26**	0	34	14	48	0	0	0	0	1	25	0	26	100
08:00 AM	15	5	2	22	0	29	9	38	0	2	0	2	**3**	**34**	0	**37**	99
Total Volume	48	19	14	81	1	154	54	209	0	5	0	5	7	112	0	119	414
% App. Total	59.3	23.5	17.3		0.5	73.7	25.8		0	100	0		5.9	94.1	0		
PHF	.800	.679	.500	.779	.250	.700	.614	.679	.000	.625	.000	.625	.583	.824	.000	.804	.802

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

City of San Jacinto
N/S: Alessandro Avenue
E/W: Main Street
Weather: Clear

File Name : 06_SJC_Aless_Main AM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 2



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

	07:30 AM				07:15 AM				08:00 AM				07:15 AM			
+0 mins.	15	**7**	1	23	**1**	36	9	46	0	2	0	2	1	28	0	29
+15 mins.	13	6	**7**	**26**	0	**55**	**22**	**77**	0	**3**	**1**	**4**	2	25	0	27
+30 mins.	15	5	2	22	0	34	14	48	0	2	1	3	1	25	0	26
+45 mins.	**16**	5	1	22	0	29	9	38	0	2	0	2	**3**	**34**	0	**37**
Total Volume	59	23	11	93	1	154	54	209	0	9	2	11	7	112	0	119
% App. Total	63.4	24.7	11.8		0.5	73.7	25.8		0	81.8	18.2		5.9	94.1	0	
PHF	.922	.821	.393	.894	.250	.700	.614	.679	.000	.750	.500	.688	.583	.824	.000	.804

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

City of San Jacinto
N/S: Alessandro Avenue
E/W: Main Street
Weather: Clear

File Name : 06_SJC_Aless_Main PM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 1

Groups Printed- Total Volume

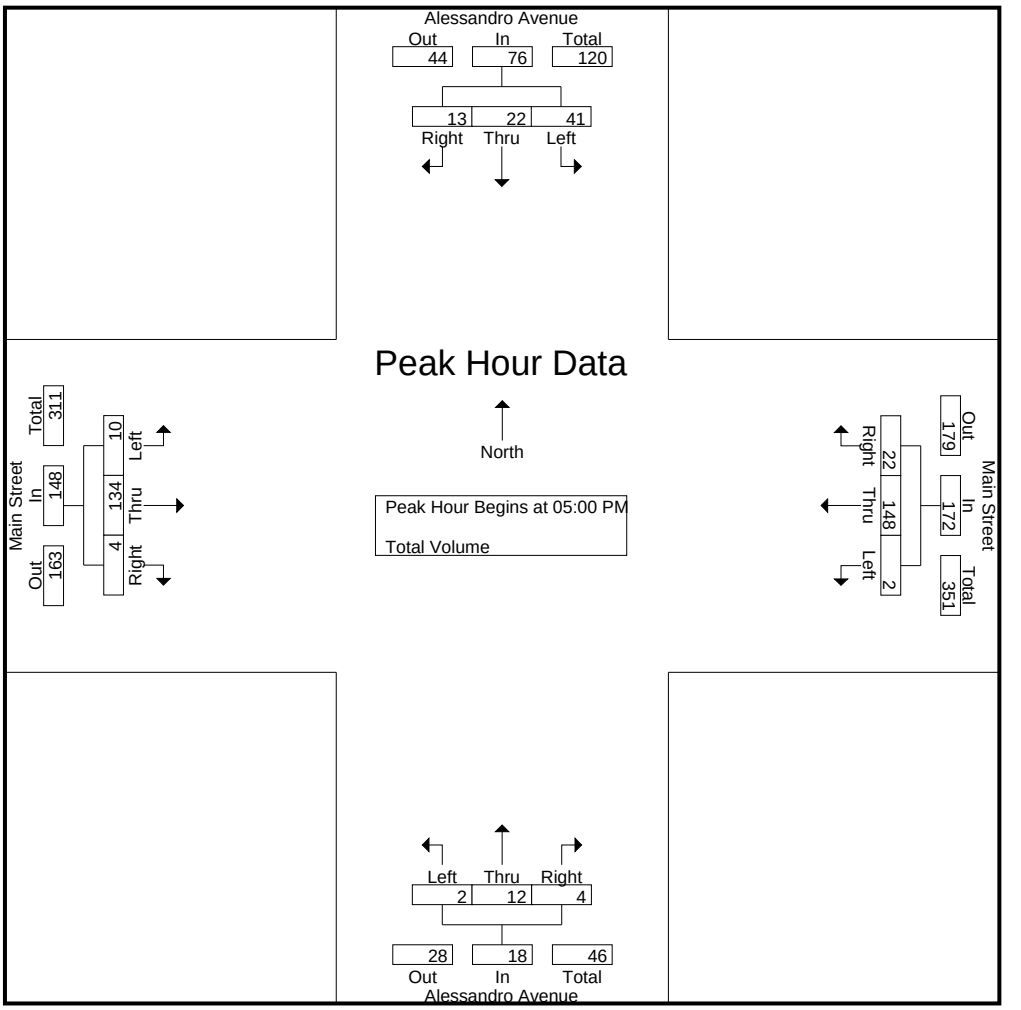
	Alessandro Avenue Southbound				Main Street Westbound				Alessandro Avenue Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	13	5	5	23	0	35	8	43	0	4	1	5	3	39	1	43	114
04:15 PM	20	4	4	28	1	34	7	42	1	2	1	4	5	32	1	38	112
04:30 PM	8	2	2	12	0	35	9	44	0	0	0	0	2	19	0	21	77
04:45 PM	9	7	2	18	0	34	2	36	0	2	0	2	5	27	1	33	89
Total	50	18	13	81	1	138	26	165	1	8	2	11	15	117	3	135	392
05:00 PM	9	12	1	22	1	46	6	53	0	2	1	3	2	27	2	31	109
05:15 PM	13	3	1	17	1	42	6	49	1	5	0	6	3	33	1	37	109
05:30 PM	9	5	4	18	0	34	3	37	0	4	3	7	3	35	1	39	101
05:45 PM	10	2	7	19	0	26	7	33	1	1	0	2	2	39	0	41	95
Total	41	22	13	76	2	148	22	172	2	12	4	18	10	134	4	148	414
Grand Total	91	40	26	157	3	286	48	337	3	20	6	29	25	251	7	283	806
Apprch %	58	25.5	16.6		0.9	84.9	14.2		10.3	69	20.7		8.8	88.7	2.5		
Total %	11.3	5	3.2	19.5	0.4	35.5	6	41.8	0.4	2.5	0.7	3.6	3.1	31.1	0.9	35.1	

	Alessandro Avenue Southbound				Main Street Westbound				Alessandro Avenue Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	9	**12**	1	**22**	**1**	**46**	6	**53**	0	2	1	3	2	27	**2**	31	**109**
05:15 PM	**13**	3	1	17	1	42	6	49	**1**	**5**	0	6	**3**	33	1	37	109
05:30 PM	9	5	4	18	0	34	3	37	0	4	**3**	**7**	3	35	1	39	101
05:45 PM	10	2	**7**	19	0	26	**7**	33	1	1	0	2	2	**39**	0	**41**	95
Total Volume	41	22	13	76	2	148	22	172	2	12	4	18	10	134	4	148	414
% App. Total	53.9	28.9	17.1		1.2	86	12.8		11.1	66.7	22.2		6.8	90.5	2.7		
PHF	.788	.458	.464	.864	.500	.804	.786	.811	.500	.600	.333	.643	.833	.859	.500	.902	.950

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

City of San Jacinto
N/S: Alessandro Avenue
E/W: Main Street
Weather: Clear

File Name : 06_SJC_Aless_Main PM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 2



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

	04:00 PM				04:30 PM				04:45 PM				05:00 PM			
+0 mins.	13	5	**5**	23	0	35	**9**	44	0	2	0	2	2	27	**2**	31
+15 mins.	**20**	4	4	**28**	0	34	2	36	0	2	1	3	**3**	33	1	37
+30 mins.	8	2	2	12	**1**	**46**	6	**53**	**1**	**5**	0	6	3	35	1	39
+45 mins.	9	**7**	2	18	1	42	6	49	0	4	**3**	**7**	2	**39**	0	**41**
Total Volume	50	18	13	81	2	157	23	182	1	13	4	18	10	134	4	148
% App. Total	61.7	22.2	16		1.1	86.3	12.6		5.6	72.2	22.2		6.8	90.5	2.7	
PHF	.625	.643	.650	.723	.500	.853	.639	.858	.250	.650	.333	.643	.833	.859	.500	.902

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

City of San Jacinto
N/S: Vernon Avenue
E/W: Main Street
Weather: Clear

File Name : 07_SJC_Vernon_Main AM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 1

Groups Printed- Total Volume

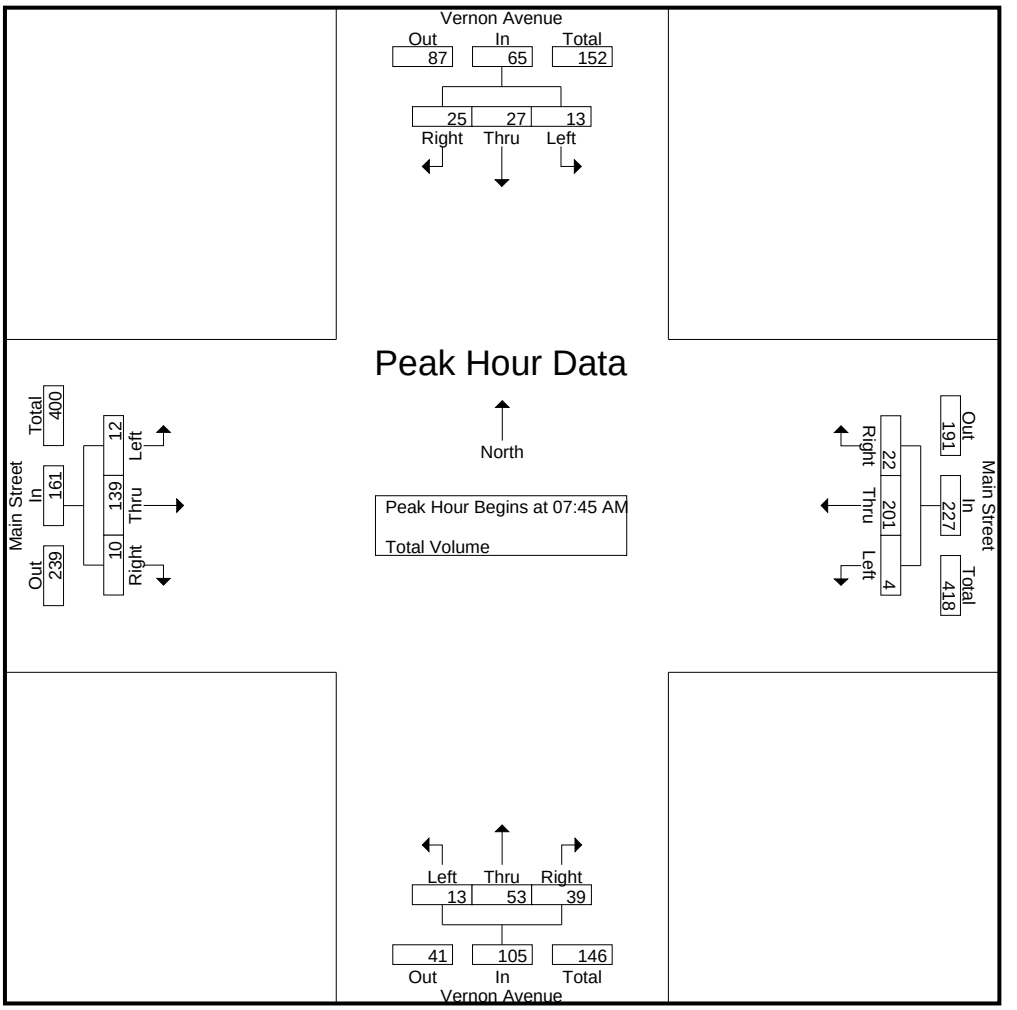
	Vernon Avenue Southbound				Main Street Westbound				Vernon Avenue Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	2	5	9	1	31	2	34	0	11	0	11	4	16	1	21	75
07:15 AM	1	4	4	9	1	45	5	51	3	9	0	12	8	41	1	50	122
07:30 AM	2	3	9	14	0	42	2	44	2	9	1	12	8	34	2	44	114
07:45 AM	2	7	7	16	0	50	3	53	4	15	2	21	10	38	2	50	140
Total	7	16	25	48	2	168	12	182	9	44	3	56	30	129	6	165	451
08:00 AM	2	4	6	12	1	51	5	57	3	12	9	24	0	34	5	39	132
08:15 AM	5	10	5	20	1	58	9	68	3	16	10	29	1	38	3	42	159
08:30 AM	4	6	7	17	2	42	5	49	3	10	18	31	1	29	0	30	127
08:45 AM	0	2	6	8	3	55	0	58	2	9	13	24	3	22	0	25	115
Total	11	22	24	57	7	206	19	232	11	47	50	108	5	123	8	136	533
Grand Total	18	38	49	105	9	374	31	414	20	91	53	164	35	252	14	301	984
Apprch %	17.1	36.2	46.7		2.2	90.3	7.5		12.2	55.5	32.3		11.6	83.7	4.7		
Total %	1.8	3.9	5	10.7	0.9	38	3.2	42.1	2	9.2	5.4	16.7	3.6	25.6	1.4	30.6	

	Vernon Avenue Southbound				Main Street Westbound				Vernon Avenue Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	2	7	**7**	16	0	50	3	53	**4**	15	2	21	**10**	**38**	2	**50**	140
08:00 AM	2	4	6	12	1	51	5	57	3	12	9	24	0	34	**5**	39	132
08:15 AM	**5**	**10**	5	**20**	1	**58**	**9**	**68**	3	**16**	10	29	1	38	3	42	**159**
08:30 AM	4	6	7	17	**2**	42	5	49	3	10	**18**	**31**	1	29	0	30	127
Total Volume	13	27	25	65	4	201	22	227	13	53	39	105	12	139	10	161	558
% App. Total	20	41.5	38.5		1.8	88.5	9.7		12.4	50.5	37.1		7.5	86.3	6.2		
PHF	.650	.675	.893	.813	.500	.866	.611	.835	.813	.828	.542	.847	.300	.914	.500	.805	.877

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

City of San Jacinto
N/S: Vernon Avenue
E/W: Main Street
Weather: Clear

File Name : 07_SJC_Vernon_Main AM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 2



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

	07:45 AM				08:00 AM				08:00 AM				07:15 AM			
+0 mins.	2	7	**7**	16	1	51	5	57	**3**	12	9	24	8	**41**	1	**50**
+15 mins.	2	4	6	12	1	**58**	**9**	**68**	3	**16**	10	29	8	34	2	44
+30 mins.	**5**	**10**	5	**20**	2	42	5	49	3	10	**18**	**31**	**10**	38	2	50
+45 mins.	4	6	7	17	**3**	55	0	58	2	9	13	24	0	34	**5**	39
Total Volume	13	27	25	65	7	206	19	232	11	47	50	108	26	147	10	183
% App. Total	20	41.5	38.5		3	88.8	8.2		10.2	43.5	46.3		14.2	80.3	5.5	
PHF	.650	.675	.893	.813	.583	.888	.528	.853	.917	.734	.694	.871	.650	.896	.500	.915

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

City of San Jacinto
N/S: Vernon Avenue
E/W: Main Street
Weather: Clear

File Name : 07_SJC_Vernon_Main PM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 1

Groups Printed- Total Volume

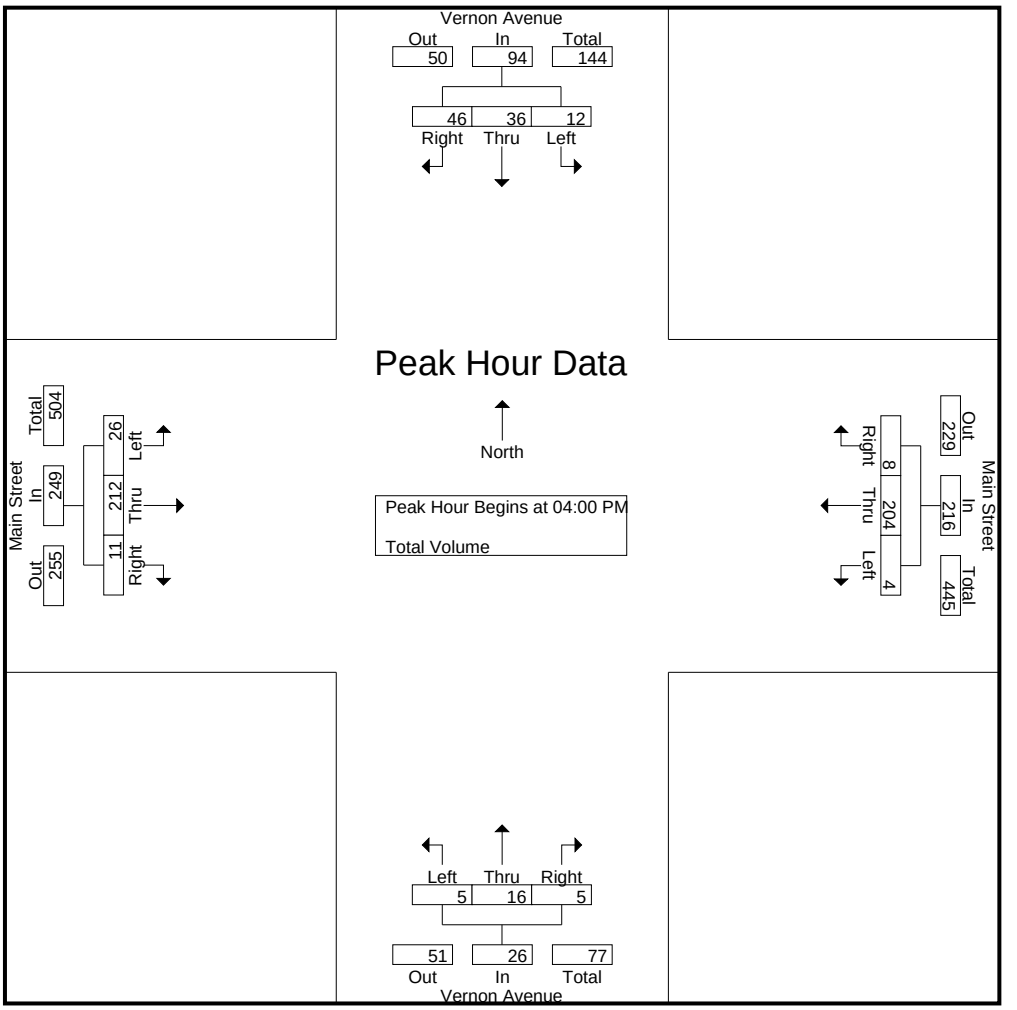
	Vernon Avenue Southbound				Main Street Westbound				Vernon Avenue Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	5	11	18	3	61	3	67	1	2	2	5	5	64	5	74	164
04:15 PM	5	10	13	28	0	47	2	49	2	0	1	3	5	58	1	64	144
04:30 PM	2	14	13	29	0	57	2	59	2	8	1	11	12	47	3	62	161
04:45 PM	3	7	9	19	1	39	1	41	0	6	1	7	4	43	2	49	116
Total	12	36	46	94	4	204	8	216	5	16	5	26	26	212	11	249	585
05:00 PM	2	8	8	18	0	57	1	58	1	5	4	10	12	50	1	63	149
05:15 PM	6	6	4	16	0	49	4	53	1	9	0	10	9	40	2	51	130
05:30 PM	2	5	13	20	2	61	2	65	3	3	0	6	8	55	3	66	157
05:45 PM	5	4	6	15	3	41	0	44	0	4	0	4	7	47	2	56	119
Total	15	23	31	69	5	208	7	220	5	21	4	30	36	192	8	236	555
Grand Total	27	59	77	163	9	412	15	436	10	37	9	56	62	404	19	485	1140
Apprch %	16.6	36.2	47.2		2.1	94.5	3.4		17.9	66.1	16.1		12.8	83.3	3.9		
Total %	2.4	5.2	6.8	14.3	0.8	36.1	1.3	38.2	0.9	3.2	0.8	4.9	5.4	35.4	1.7	42.5	

	Vernon Avenue Southbound				Main Street Westbound				Vernon Avenue Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	2	5	11	18	**3**	**61**	**3**	**67**	1	2	**2**	5	5	**64**	**5**	**74**	**164**
04:15 PM	**5**	10	**13**	28	0	47	2	49	**2**	0	1	3	5	58	1	64	144
04:30 PM	2	**14**	13	**29**	0	57	2	59	2	**8**	1	**11**	**12**	47	3	62	161
04:45 PM	3	7	9	19	1	39	1	41	0	6	1	7	4	43	2	49	116
Total Volume	12	36	46	94	4	204	8	216	5	16	5	26	26	212	11	249	585
% App. Total	12.8	38.3	48.9		1.9	94.4	3.7		19.2	61.5	19.2		10.4	85.1	4.4		
PHF	.600	.643	.885	.810	.333	.836	.667	.806	.625	.500	.625	.591	.542	.828	.550	.841	.892

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

City of San Jacinto
N/S: Vernon Avenue
E/W: Main Street
Weather: Clear

File Name : 07_SJC_Vernon_Main PM
Site Code : 05122054
Start Date : 1/26/2022
Page No : 2



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

	04:00 PM				05:00 PM				04:30 PM				04:00 PM			
+0 mins.	2	5	11	18	0	57	1	58	**2**	8	1	**11**	5	**64**	**5**	**74**
+15 mins.	**5**	10	**13**	28	0	49	**4**	53	0	6	1	7	5	58	1	64
+30 mins.	2	**14**	13	**29**	2	**61**	2	**65**	1	5	**4**	10	**12**	47	3	62
+45 mins.	3	7	9	19	**3**	41	0	44	1	**9**	0	10	4	43	2	49
Total Volume	12	36	46	94	5	208	7	220	4	28	6	38	26	212	11	249
% App. Total	12.8	38.3	48.9		2.3	94.5	3.2		10.5	73.7	15.8		10.4	85.1	4.4	
PHF	.600	.643	.885	.810	.417	.852	.438	.846	.500	.778	.375	.864	.542	.828	.550	.841

Counts Unlimited, Inc.

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

City of San Jacinto
Ramona Expressway
W/ Alessandro Avenue
24 Hour Directional Volume Count

SJC001
Site Code: 051-22054

Start Time	26-Jan-22 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		59	126			11	126				
12:15		31	126			25	154				
12:30		35	135			16	107				
12:45		37	135	162	522	24	130	76	517	238	1039
01:00		24	144			16	131				
01:15		19	133			16	132				
01:30		25	137			28	146				
01:45		27	154	95	568	16	140	76	549	171	1117
02:00		15	185			25	148				
02:15		24	170			46	127				
02:30		27	190			19	**164**				
02:45		51	**257**	117	802	38	**179**	128	618	245	1420
03:00		29	**275**			51	**170**				
03:15		24	**284**			66	**188**				
03:30		25	**263**			83	157				
03:45		17	246	95	1068	84	153	284	668	379	1736
04:00		22	216			127	156				
04:15		25	252			163	134				
04:30		13	226			142	142				
04:45		26	246	86	940	141	130	573	562	659	1502
05:00		39	223			177	122				
05:15		34	195			215	152				
05:30		46	231			187	127				
05:45		45	230	164	879	156	123	735	524	899	1403
06:00		34	215			190	83				
06:15		63	147			216	101				
06:30		67	160			189	93				
06:45		100	167	264	689	207	74	802	351	1066	1040
07:00		87	133			**243**	65				
07:15		121	167			**259**	66				
07:30		114	123			**278**	53				
07:45		**206**	119	528	542	**224**	65	1004	249	1532	791
08:00		**136**	112			221	60				
08:15		**151**	104			214	60				
08:30		**129**	88			156	55				
08:45		103	76	519	380	138	50	729	225	1248	605
09:00		93	83			115	47				
09:15		86	90			137	60				
09:30		68	87			106	52				
09:45		88	66	335	326	107	39	465	198	800	524
10:00		107	86			109	43				
10:15		93	81			95	36				
10:30		94	60			107	29				
10:45		99	66	393	293	103	39	414	147	807	440
11:00		102	60			111	34				
11:15		110	41			108	33				
11:30		119	71			133	38				
11:45		121	39	452	211	110	25	462	130	914	341
Total		3210	7220	3210	7220	5748	4738	5748	4738	8958	11958
Combined Total		10430		10430		10486		10486		20916	
AM Peak	-	07:45	-	-	-	07:00	-	-	-	-	-
Vol.	-	622	-	-	-	1004	-	-	-	-	-
P.H.F.		0.755				0.903					
PM Peak	-	-	02:45	-	-	-	02:30	-	-	-	-
Vol.	-	-	1079	-	-	-	701	-	-	-	-
P.H.F.			0.950				0.932				
Percentage		30.8%	69.2%			54.8%	45.2%				
ADT/AADT		ADT 20,916		AADT 20,916							

Counts Unlimited, Inc.

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

City of San Jacinto
Alessandro Avenue
S/ Ramona Expressway
24 Hour Directional Volume Count

SJC002
Site Code: 051-22054

Start Time	26-Jan-22 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		1	8			4	12				
12:15		2	14			0	5				
12:30		0	11			1	9				
12:45		1	10	4	43	2	10	7	36	11	79
01:00		0	6			6	12				
01:15		0	8			0	12				
01:30		3	12			2	16				
01:45		1	10	4	36	2	18	10	58	14	94
02:00		2	6			3	17				
02:15		4	10			2	14				
02:30		0	6			1	20				
02:45		3	11	9	33	3	**31**	9	82	18	115
03:00		3	14			3	**32**				
03:15		4	11			0	**34**				
03:30		4	7			2	**28**				
03:45		7	6	18	38	1	24	6	118	24	156
04:00		7	8			4	32				
04:15		12	5			5	23				
04:30		4	4			3	16				
04:45		11	7	34	24	4	19	16	90	50	114
05:00		10	**12**			4	13				
05:15		14	**12**			4	17				
05:30		12	**10**			2	16				
05:45		8	**10**	44	44	0	13	10	59	54	103
06:00		11	6			3	10				
06:15		**19**	10			3	11				
06:30		**19**	4			5	14				
06:45		**21**	3	70	23	1	13	12	48	82	71
07:00		**12**	2			4	10				
07:15		18	4			2	16				
07:30		16	7			**14**	7				
07:45		17	6	63	19	**29**	7	49	40	112	59
08:00		13	2			**8**	6				
08:15		10	4			**19**	7				
08:30		12	3			4	9				
08:45		5	2	40	11	7	5	38	27	78	38
09:00		8	2			6	2				
09:15		12	4			5	4				
09:30		2	2			4	12				
09:45		6	1	28	9	4	0	19	18	47	27
10:00		7	0			9	6				
10:15		5	2			4	7				
10:30		2	1			5	6				
10:45		5	6	19	9	9	3	27	22	46	31
11:00		2	0			4	6				
11:15		6	1			4	1				
11:30		5	1			12	3				
11:45		12	1	25	3	12	5	32	15	57	18
Total		358	292	358	292	235	613	235	613	593	905
Combined Total		650		650		848		848		1498	
AM Peak	-	06:15	-	-	-	07:30	-	-	-	-	-
Vol.	-	71	-	-	-	70	-	-	-	-	-
P.H.F.		0.845				0.603					
PM Peak	-	-	05:00	-	-	-	02:45	-	-	-	-
Vol.	-	-	44	-	-	-	125	-	-	-	-
P.H.F.			0.786				0.919				
Percentage		55.1%	44.9%			27.7%	72.3%				
ADT/AADT		ADT 1,498		AADT 1,498							

Counts Unlimited, Inc.

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

City of San Jacinto
Vernon Avenue
N/ Main Street
24 Hour Directional Volume Count

SJC004
Site Code: 051-22054

Start Time	26-Jan-22 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		3	8			5	12				
12:15		2	13			3	11				
12:30		3	9			2	8				
12:45		2	10	10	40	2	10	12	41	22	81
01:00		1	13			0	10				
01:15		0	6			0	8				
01:30		1	7			1	9				
01:45		2	9	4	35	0	19	1	46	5	81
02:00		2	19			1	8				
02:15		1	18			3	17				
02:30		0	**17**			0	10				
02:45		1	**21**	4	75	1	**27**	5	62	9	137
03:00		2	**24**			3	**26**				
03:15		0	**25**			0	**21**				
03:30		1	11			2	**30**				
03:45		7	14	10	74	1	21	6	98	16	172
04:00		7	10			2	18				
04:15		6	7			1	28				
04:30		4	22			4	29				
04:45		7	11	24	50	3	19	10	94	34	144
05:00		7	18			4	18				
05:15		2	22			6	16				
05:30		8	13			5	20				
05:45		9	11	26	64	6	15	21	69	47	133
06:00		5	11			2	14				
06:15		12	7			4	12				
06:30		8	12			1	6				
06:45		17	11	42	41	10	12	17	44	59	85
07:00		17	14			9	20				
07:15		22	8			9	10				
07:30		**19**	5			14	7				
07:45		**28**	5	86	32	**16**	11	48	48	134	80
08:00		**17**	3			**12**	6				
08:15		**26**	8			**20**	16				
08:30		16	5			**17**	9				
08:45		12	7	71	23	8	10	57	41	128	64
09:00		11	7			11	5				
09:15		7	4			7	4				
09:30		7	4			7	5				
09:45		12	2	37	17	10	4	35	18	72	35
10:00		6	6			6	6				
10:15		6	5			7	7				
10:30		4	6			5	4				
10:45		8	3	24	20	11	2	29	19	53	39
11:00		13	2			5	5				
11:15		7	4			9	2				
11:30		12	3			6	6				
11:45		11	1	43	10	9	3	29	16	72	26
Total		381	481	381	481	270	596	270	596	651	1077
Combined Total		862		862		866		866		1728	
AM Peak	-	07:30	-	-	-	07:45	-	-	-	-	-
Vol.	-	90	-	-	-	65	-	-	-	-	-
P.H.F.		0.804				0.813					
PM Peak	-	-	02:30	-	-	-	02:45	-	-	-	-
Vol.	-	-	87	-	-	-	104	-	-	-	-
P.H.F.			0.870				0.867				
Percentage		44.2%	55.8%			31.2%	68.8%				
ADT/AADT		ADT 1,728		AADT 1,728							

Counts Unlimited, Inc.

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

City of San Jacinto
Vernon Avenue
S/ Ramona Expressway
24 Hour Directional Volume Count

SJC003
Site Code: 051-22054

Start Time	26-Jan-22 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		2	13			5	12				
12:15		3	18			0	21				
12:30		0	13			5	13				
12:45		2	16	7	60	1	20	11	66	18	126
01:00		1	15			0	20				
01:15		1	14			1	17				
01:30		0	18			3	15				
01:45		1	17	3	64	0	18	4	70	7	134
02:00		3	19			0	19				
02:15		3	15			2	23				
02:30		0	**16**			1	13				
02:45		0	**16**	6	66	2	**27**	5	82	11	148
03:00		4	**18**			0	**29**				
03:15		2	**20**			0	**16**				
03:30		2	14			0	**24**				
03:45		6	10	14	62	2	20	2	89	16	151
04:00		12	9			1	20				
04:15		11	8			2	20				
04:30		8	10			0	22				
04:45		7	12	38	39	3	18	6	80	44	119
05:00		13	9			2	20				
05:15		5	12			3	16				
05:30		13	12			4	17				
05:45		14	6	45	39	5	17	14	70	59	109
06:00		10	7			5	16				
06:15		16	7			2	8				
06:30		11	6			4	10				
06:45		17	7	54	27	10	19	21	53	75	80
07:00		18	4			15	15				
07:15		20	4			12	9				
07:30		**18**	7			**11**	8				
07:45		**31**	4	87	19	**19**	11	57	43	144	62
08:00		**20**	3			**16**	10				
08:15		**25**	2			**20**	13				
08:30		17	2			9	13				
08:45		18	3	80	10	14	7	59	43	139	53
09:00		16	2			17	3				
09:15		15	4			11	6				
09:30		12	2			12	5				
09:45		16	0	59	8	15	5	55	19	114	27
10:00		9	0			10	8				
10:15		14	3			10	6				
10:30		11	3			13	3				
10:45		12	2	46	8	14	6	47	23	93	31
11:00		13	1			15	5				
11:15		10	4			11	4				
11:30		19	3			13	8				
11:45		13	1	55	9	14	2	53	19	108	28
Total		494	411	494	411	334	657	334	657	828	1068
Combined Total		905		905		991		991		1896	
AM Peak	-	07:30	-	-	-	07:30	-	-	-	-	-
Vol.	-	94	-	-	-	66	-	-	-	-	-
P.H.F.		0.758				0.825					
PM Peak	-	-	02:30	-	-	-	02:45	-	-	-	-
Vol.	-	-	70	-	-	-	96	-	-	-	-
P.H.F.			0.875				0.828				
Percentage		54.6%	45.4%			33.7%	66.3%				
ADT/AADT		ADT 1,896		AADT 1,896							

Counts Unlimited, Inc.

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

City of San Jacinto
Main Street
W/ Alessandro Avenue
24 Hour Directional Volume Count

SJC005
Site Code: 051-22054

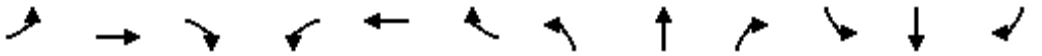
Start Time	26-Jan-22 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		4	23			8	39				
12:15		5	27			2	40				
12:30		2	27			6	33				
12:45		4	22	15	99	9	31	25	143	40	242
01:00		9	24			6	39				
01:15		1	25			7	37				
01:30		3	21			1	39				
01:45		3	29	16	99	5	35	19	150	35	249
02:00		4	34			4	45				
02:15		2	**50**			5	51				
02:30		5	**43**			2	47				
02:45		5	**36**	16	163	1	**70**	12	213	28	376
03:00		1	**36**			3	**53**				
03:15		4	45			4	**58**				
03:30		3	39			5	**55**				
03:45		1	31	9	151	9	38	21	204	30	355
04:00		4	43			6	40				
04:15		3	38			2	39				
04:30		3	21			4	37				
04:45		0	33	10	135	7	36	19	152	29	287
05:00		2	31			6	47				
05:15		6	37			5	44				
05:30		4	39			7	38				
05:45		2	41	14	148	10	34	28	163	42	311
06:00		6	34			15	31				
06:15		11	29			13	41				
06:30		11	31			14	27				
06:45		9	24	37	118	18	14	60	113	97	231
07:00		15	26			**33**	23				
07:15		**29**	21			**40**	18				
07:30		**27**	27			**56**	21				
07:45		**26**	22	97	96	**41**	15	170	77	267	173
08:00		**37**	20			31	17				
08:15		27	12			29	20				
08:30		22	18			27	19				
08:45		25	15	111	65	28	18	115	74	226	139
09:00		12	16			22	21				
09:15		13	12			24	14				
09:30		12	15			21	20				
09:45		12	9	49	52	20	16	87	71	136	123
10:00		14	12			17	23				
10:15		22	10			31	18				
10:30		31	8			20	14				
10:45		26	7	93	37	28	12	96	67	189	104
11:00		24	6			25	11				
11:15		25	2			20	14				
11:30		30	3			31	6				
11:45		35	8	114	19	21	8	97	39	211	58
Total		581	1182	581	1182	749	1466	749	1466	1330	2648
Combined Total		1763		1763		2215		2215		3978	
AM Peak	-	07:15	-	-	-	07:00	-	-	-	-	-
Vol.	-	119	-	-	-	170	-	-	-	-	-
P.H.F.		0.804				0.759					
PM Peak	-	-	02:15	-	-	-	02:45	-	-	-	-
Vol.	-	-	165	-	-	-	236	-	-	-	-
P.H.F.			0.825				0.843				
Percentage		33.0%	67.0%			33.8%	66.2%				
ADT/AADT		ADT 3,978		AADT 3,978							

This Page Intentionally Left Blank

APPENDIX 3.2:

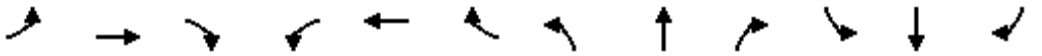
EXISTING (2022) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

This Page Intentionally Left Blank



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	462	433	169	574	249	329	455	109	74	231	33
Future Volume (vph)	66	462	433	169	574	249	329	455	109	74	231	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210		170	275		200	170		105	140		50
Storage Lanes	2		1	2		1	1		1	1		1
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			45	
Link Distance (ft)		596			1310			710			927	
Travel Time (s)		7.4			16.2			10.8			14.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												

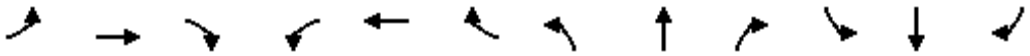
Intersection Summary	
Area Type:	Other



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	462	433	169	574	249	329	455	109	74	231	33
Future Volume (veh/h)	66	462	433	169	574	249	329	455	109	74	231	33
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		0.99
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	72	502	471	184	624	271	358	495	118	80	251	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	1613	498	250	1762	545	396	1329	590	103	744	329
Arrive On Green	0.04	0.32	0.32	0.07	0.35	0.35	0.22	0.37	0.37	0.06	0.21	0.21
Sat Flow, veh/h	3456	5106	1578	3456	5106	1578	1781	3554	1579	1781	3554	1574
Grp Volume(v), veh/h	72	502	471	184	624	271	358	495	118	80	251	36
Grp Sat Flow(s),veh/h/ln	1728	1702	1578	1728	1702	1578	1781	1777	1579	1781	1777	1574
Q Serve(g_s), s	2.0	7.5	29.1	5.2	9.1	13.6	19.6	10.1	5.1	4.4	6.0	1.9
Cycle Q Clear(g_c), s	2.0	7.5	29.1	5.2	9.1	13.6	19.6	10.1	5.1	4.4	6.0	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	149	1613	498	250	1762	545	396	1329	590	103	744	329
V/C Ratio(X)	0.48	0.31	0.95	0.74	0.35	0.50	0.90	0.37	0.20	0.78	0.34	0.11
Avail Cap(c_a), veh/h	190	1613	498	294	1762	545	525	1329	590	180	744	329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.7	26.0	33.4	45.4	24.4	25.9	37.8	22.8	21.2	46.5	33.6	32.0
Incr Delay (d2), s/veh	2.4	0.5	28.8	7.8	0.6	3.2	15.7	0.8	0.8	11.9	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.9	14.3	2.4	3.5	5.3	9.8	4.1	1.9	2.2	2.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.1	26.5	62.1	53.2	25.0	29.1	53.5	23.6	21.9	58.3	34.9	32.7
LnGrp LOS	D	C	E	D	C	C	D	C	C	E	C	C
Approach Vol, veh/h		1045			1079			971			367	
Approach Delay, s/veh		44.1			30.8			34.4			39.8	
Approach LOS		D			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	36.1	26.7	25.4	8.8	39.0	10.3	41.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	26.0	29.5	18.0	5.5	29.0	10.1	37.4
Max Q Clear Time (g_c+I1), s	7.2	31.1	21.6	8.0	4.0	15.6	6.4	12.1
Green Ext Time (p_c), s	0.1	0.0	0.7	1.0	0.0	3.9	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	36.8
HCM 6th LOS	D



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	528	53	1	921	4	62	1	2	1	1	3
Future Volume (vph)	1	528	53	1	921	4	62	1	2	1	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		100	300		0	35		0	35		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	90			90			60			60		
Link Speed (mph)		55			55			45			30	
Link Distance (ft)		2281			1381			545			687	
Travel Time (s)		28.3			17.1			8.3			15.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	528	53	1	921	4	62	1	2	1	1	3
Future Vol, veh/h	1	528	53	1	921	4	62	1	2	1	1	3
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	100	300	-	-	35	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	580	58	1	1012	4	68	1	2	1	1	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1021	0	0	643	0	0	1101	1610	300	1319	1666	518
Stage 1	-	-	-	-	-	-	587	587	-	1021	1021	-
Stage 2	-	-	-	-	-	-	514	1023	-	298	645	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	675	-	-	938	-	-	166	104	696	115	96	502
Stage 1	-	-	-	-	-	-	463	495	-	253	312	-
Stage 2	-	-	-	-	-	-	511	311	-	686	466	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	672	-	-	934	-	-	162	103	689	112	95	497
Mov Cap-2 Maneuver	-	-	-	-	-	-	162	103	-	112	95	-
Stage 1	-	-	-	-	-	-	460	492	-	251	310	-
Stage 2	-	-	-	-	-	-	503	309	-	678	463	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	41.5	23.7
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	162	238	672	-	-	934	-	-	112	242
HCM Lane V/C Ratio	0.421	0.014	0.002	-	-	0.001	-	-	0.01	0.018
HCM Control Delay (s)	42.5	20.3	10.4	-	-	8.9	-	-	37.5	20.2
HCM Lane LOS	E	C	B	-	-	A	-	-	E	C
HCM 95th %tile Q(veh)	1.9	0	0	-	-	0	-	-	0	0.1



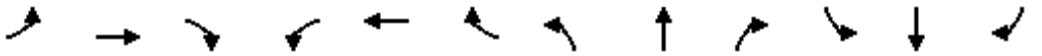
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	472	58	0	837	88	1
Future Volume (vph)	472	58	0	837	88	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300	200		175	0
Storage Lanes		1	1		1	1
Taper Length (ft)			90		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	55			55	30	
Link Distance (ft)	1381			386	451	
Travel Time (s)	17.1			4.8	10.3	
Confl. Peds. (#/hr)		5	5		5	5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						

Intersection Summary	
Area Type:	Other

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	472	58	0	837	88	1
Future Volume (veh/h)	472	58	0	837	88	1
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	502	62	0	890	94	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1866	828	3	1866	579	515
Arrive On Green	0.53	0.53	0.00	0.53	0.32	0.32
Sat Flow, veh/h	3647	1578	1781	3647	1781	1585
Grp Volume(v), veh/h	502	62	0	890	94	1
Grp Sat Flow(s),veh/h/ln	1777	1578	1781	1777	1781	1585
Q Serve(g_s), s	4.7	1.2	0.0	9.5	2.3	0.0
Cycle Q Clear(g_c), s	4.7	1.2	0.0	9.5	2.3	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1866	828	3	1866	579	515
V/C Ratio(X)	0.27	0.07	0.00	0.48	0.16	0.00
Avail Cap(c_a), veh/h	1866	828	148	1866	579	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.9	7.0	0.0	9.0	14.4	13.7
Incr Delay (d2), s/veh	0.4	0.2	0.0	0.9	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.3	0.0	2.5	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.2	7.2	0.0	9.9	15.0	13.7
LnGrp LOS	A	A	A	A	B	B
Approach Vol, veh/h	564			890	95	
Approach Delay, s/veh	8.1			9.9	15.0	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	0.0	36.0				36.0	24.0
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	5.0	22.0				31.5	19.5
Max Q Clear Time (g_c+I1), s	0.0	6.7				11.5	4.3
Green Ext Time (p_c), s	0.0	2.7				5.3	0.2

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	123	30	1	147	17	35	32	3	8	57	21
Future Volume (vph)	20	123	30	1	147	17	35	32	3	8	57	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		50	0		50	0		50	0		50
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		799			1333			1318			3757	
Travel Time (s)		18.2			30.3			20.0			56.9	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Shared Lane Traffic (%)												

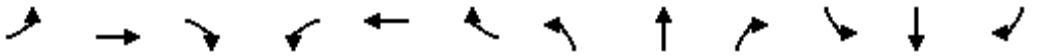
Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	123	30	1	147	17	35	32	3	8	57	21
Future Vol, veh/h	20	123	30	1	147	17	35	32	3	8	57	21
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	25	152	37	1	181	21	43	40	4	10	70	26
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	9.6	9.7	9.6	9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	52%	0%	14%	0%	1%	0%	12%	0%
Vol Thru, %	48%	0%	86%	0%	99%	0%	88%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	67	3	143	30	148	17	65	21
LT Vol	35	0	20	0	1	0	8	0
Through Vol	32	0	123	0	147	0	57	0
RT Vol	0	3	0	30	0	17	0	21
Lane Flow Rate	83	4	177	37	183	21	80	26
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.137	0.005	0.262	0.047	0.268	0.027	0.128	0.036
Departure Headway (Hd)	5.97	5	5.343	4.568	5.287	4.579	5.751	4.983
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	597	710	669	779	676	777	620	713
Service Time	3.742	2.772	3.098	2.323	3.042	2.334	3.52	2.751
HCM Lane V/C Ratio	0.139	0.006	0.265	0.047	0.271	0.027	0.129	0.036
HCM Control Delay	9.7	7.8	10	7.6	10	7.5	9.4	7.9
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.5	0	1	0.1	1.1	0.1	0.4	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	46	17	3	49	7	32	47	3	3	32	2
Future Volume (vph)	6	46	17	3	49	7	32	47	3	3	32	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		50	0		50
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1333			785			1313			4316	
Travel Time (s)		30.3			17.8			29.8			98.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

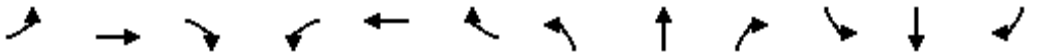
Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑	↱		↑	↱
Traffic Vol, veh/h	6	46	17	3	49	7	32	47	3	3	32	2
Future Vol, veh/h	6	46	17	3	49	7	32	47	3	3	32	2
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	50	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	56	21	4	60	9	39	57	4	4	39	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	74	0	0	82	0	0	173	157	66	189	169	70
Stage 1	-	-	-	-	-	-	75	75	-	73	73	-
Stage 2	-	-	-	-	-	-	98	82	-	116	96	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1526	-	-	1515	-	-	790	735	998	771	724	993
Stage 1	-	-	-	-	-	-	934	833	-	937	834	-
Stage 2	-	-	-	-	-	-	908	827	-	889	815	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1519	-	-	1508	-	-	743	722	989	710	711	984
Mov Cap-2 Maneuver	-	-	-	-	-	-	743	722	-	710	711	-
Stage 1	-	-	-	-	-	-	925	825	-	928	827	-
Stage 2	-	-	-	-	-	-	856	820	-	816	807	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.4	10.6	10.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	730	989	1519	-	-	1508	-	-	711	984
HCM Lane V/C Ratio	0.132	0.004	0.005	-	-	0.002	-	-	0.06	0.002
HCM Control Delay (s)	10.7	8.7	7.4	0	-	7.4	0	-	10.4	8.7
HCM Lane LOS	B	A	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0.5	0	0	-	-	0	-	-	0.2	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	112	1	1	154	54	1	5	1	48	19	14
Future Volume (vph)	7	112	1	1	154	54	1	5	1	48	19	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		721			1329			455			1318	
Travel Time (s)		16.4			30.2			6.9			20.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

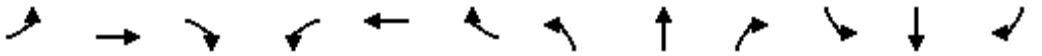
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	112	1	1	154	54	1	5	1	48	19	14
Future Vol, veh/h	7	112	1	1	154	54	1	5	1	48	19	14
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	124	1	1	171	60	1	6	1	53	21	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	236	0	0	130	0	0	373	384	135	357	354	211
Stage 1	-	-	-	-	-	-	146	146	-	208	208	-
Stage 2	-	-	-	-	-	-	227	238	-	149	146	-
Critical Hdwy	4.12	-	-	4.12	-	-	7	6.52	6.22	7	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1331	-	-	1455	-	-	591	550	914	605	571	829
Stage 1	-	-	-	-	-	-	857	776	-	794	730	-
Stage 2	-	-	-	-	-	-	776	708	-	854	776	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1325	-	-	1448	-	-	555	541	905	591	561	821
Mov Cap-2 Maneuver	-	-	-	-	-	-	555	541	-	591	561	-
Stage 1	-	-	-	-	-	-	848	767	-	785	726	-
Stage 2	-	-	-	-	-	-	735	704	-	838	767	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	11.3	11.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	543	905	1325	-	-	1448	-	-	582	821
HCM Lane V/C Ratio	0.012	0.001	0.006	-	-	0.001	-	-	0.128	0.019
HCM Control Delay (s)	11.7	9	7.7	-	-	7.5	-	-	12.1	9.5
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	0	0	-	-	0	-	-	0.4	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	139	10	4	201	22	13	53	39	13	27	25
Future Volume (vph)	12	139	10	4	201	22	13	53	39	13	27	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1329			729			417			1313	
Travel Time (s)		30.2			16.6			9.5			29.8	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

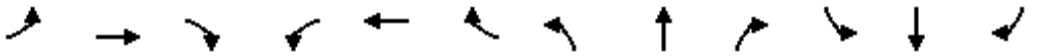
Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	139	10	4	201	22	13	53	39	13	27	25
Future Vol, veh/h	12	139	10	4	201	22	13	53	39	13	27	25
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	154	11	4	223	24	14	59	43	14	30	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	252	0	0	170	0	0	468	451	170	490	444	245
Stage 1	-	-	-	-	-	-	191	191	-	248	248	-
Stage 2	-	-	-	-	-	-	277	260	-	242	196	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1313	-	-	1407	-	-	505	504	874	489	508	794
Stage 1	-	-	-	-	-	-	811	742	-	756	701	-
Stage 2	-	-	-	-	-	-	729	693	-	762	739	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1307	-	-	1400	-	-	456	492	866	414	496	786
Mov Cap-2 Maneuver	-	-	-	-	-	-	456	492	-	414	496	-
Stage 1	-	-	-	-	-	-	799	731	-	745	695	-
Stage 2	-	-	-	-	-	-	668	687	-	656	728	-

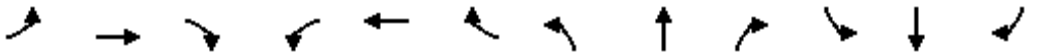
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.1	12.2	12
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	484	866	1307	-	-	1400	-	-	466	786
HCM Lane V/C Ratio	0.152	0.05	0.01	-	-	0.003	-	-	0.095	0.035
HCM Control Delay (s)	13.8	9.4	7.8	-	-	7.6	-	-	13.5	9.7
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.5	0.2	0	-	-	0	-	-	0.3	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	689	452	125	468	129	359	490	81	223	427	55
Future Volume (vph)	112	689	452	125	468	129	359	490	81	223	427	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210		170	275		200	170		105	140		50
Storage Lanes	2		1	2		1	1		1	1		1
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			45	
Link Distance (ft)		596			1310			710			927	
Travel Time (s)		7.4			16.2			10.8			14.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	689	452	125	468	129	359	490	81	223	427	55
Future Volume (veh/h)	112	689	452	125	468	129	359	490	81	223	427	55
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		0.99	1.00		0.99
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	118	725	476	132	493	136	378	516	85	235	449	58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	1760	544	195	1784	551	416	946	420	272	657	291
Arrive On Green	0.05	0.34	0.34	0.06	0.35	0.35	0.23	0.27	0.27	0.15	0.19	0.19
Sat Flow, veh/h	3456	5106	1578	3456	5106	1578	1781	3554	1576	1781	3554	1572
Grp Volume(v), veh/h	118	725	476	132	493	136	378	516	85	235	449	58
Grp Sat Flow(s),veh/h/ln	1728	1702	1578	1728	1702	1578	1781	1777	1576	1781	1777	1572
Q Serve(g_s), s	3.4	10.8	28.3	3.7	7.0	6.1	20.6	12.5	4.2	12.9	11.8	3.1
Cycle Q Clear(g_c), s	3.4	10.8	28.3	3.7	7.0	6.1	20.6	12.5	4.2	12.9	11.8	3.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	1760	544	195	1784	551	416	946	420	272	657	291
V/C Ratio(X)	0.66	0.41	0.87	0.68	0.28	0.25	0.91	0.55	0.20	0.87	0.68	0.20
Avail Cap(c_a), veh/h	252	1760	544	259	1784	551	543	946	420	406	657	291
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	25.0	30.7	46.3	23.4	23.2	37.3	31.5	28.5	41.4	38.0	34.5
Incr Delay (d2), s/veh	4.0	0.7	17.6	4.3	0.4	1.1	16.1	2.3	1.1	12.1	5.7	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	4.1	12.6	1.6	2.6	2.3	10.4	5.4	1.6	6.3	5.4	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.6	25.7	48.3	50.6	23.8	24.2	53.4	33.8	29.5	53.4	43.7	36.0
LnGrp LOS	D	C	D	D	C	C	D	C	C	D	D	D
Approach Vol, veh/h		1319			761			979			742	
Approach Delay, s/veh		36.1			28.5			41.0			46.2	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	39.0	27.9	23.0	9.7	39.4	19.7	31.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	25.5	30.5	18.5	7.3	25.7	22.8	26.2
Max Q Clear Time (g_c+I1), s	5.7	30.3	22.6	13.8	5.4	9.0	14.9	14.5
Green Ext Time (p_c), s	0.1	0.0	0.7	1.2	0.1	3.0	0.4	2.6

Intersection Summary	
HCM 6th Ctrl Delay	37.8
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	864	75	1	521	1	23	1	1	5	14	18
Future Volume (vph)	5	864	75	1	521	1	23	1	1	5	14	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		100	300		0	35		0	35		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	90			90			60			60		
Link Speed (mph)		55			55			45			30	
Link Distance (ft)		2281			1381			545			687	
Travel Time (s)		28.3			17.1			8.3			15.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	864	75	1	521	1	23	1	1	5	14	18
Future Vol, veh/h	5	864	75	1	521	1	23	1	1	5	14	18
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	100	300	-	-	35	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	891	77	1	537	1	24	1	1	5	14	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	543	0	0	973	0	0	1189	1451	456	1006	1528	279
Stage 1	-	-	-	-	-	-	906	906	-	545	545	-
Stage 2	-	-	-	-	-	-	283	545	-	461	983	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1022	-	-	704	-	-	143	130	551	195	116	718
Stage 1	-	-	-	-	-	-	297	353	-	490	517	-
Stage 2	-	-	-	-	-	-	700	517	-	550	325	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1017	-	-	701	-	-	124	128	546	191	114	711
Mov Cap-2 Maneuver	-	-	-	-	-	-	124	128	-	191	114	-
Stage 1	-	-	-	-	-	-	294	349	-	485	514	-
Stage 2	-	-	-	-	-	-	658	514	-	542	322	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	39.3	24.6
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	124	207	1017	-	-	701	-	-	191	216
HCM Lane V/C Ratio	0.191	0.01	0.005	-	-	0.001	-	-	0.027	0.153
HCM Control Delay (s)	40.8	22.6	8.6	-	-	10.1	-	-	24.4	24.6
HCM Lane LOS	E	C	A	-	-	B	-	-	C	C
HCM 95th %tile Q(veh)	0.7	0	0	-	-	0	-	-	0.1	0.5



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	790	79	1	485	38	1
Future Volume (vph)	790	79	1	485	38	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300	200		175	0
Storage Lanes		1	1		1	1
Taper Length (ft)			90		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	55			55	30	
Link Distance (ft)	1381			386	451	
Travel Time (s)	17.1			4.8	10.3	
Confl. Peds. (#/hr)		5	5		5	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)						

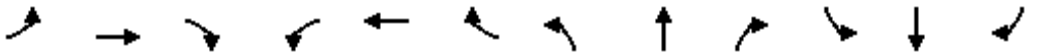
Intersection Summary	
Area Type:	Other



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	790	79	1	485	38	1
Future Volume (veh/h)	790	79	1	485	38	1
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	823	82	1	505	40	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1683	747	3	1955	534	476
Arrive On Green	0.47	0.47	0.00	0.55	0.30	0.30
Sat Flow, veh/h	3647	1577	1781	3647	1781	1585
Grp Volume(v), veh/h	823	82	1	505	40	1
Grp Sat Flow(s),veh/h/ln	1777	1577	1781	1777	1781	1585
Q Serve(g_s), s	9.5	1.7	0.0	4.5	1.0	0.0
Cycle Q Clear(g_c), s	9.5	1.7	0.0	4.5	1.0	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1683	747	3	1955	534	476
V/C Ratio(X)	0.49	0.11	0.34	0.26	0.07	0.00
Avail Cap(c_a), veh/h	1683	747	148	1955	534	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.8	8.8	29.9	7.1	15.0	14.7
Incr Delay (d2), s/veh	1.0	0.3	56.0	0.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.5	0.1	1.1	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.8	9.1	85.9	7.4	15.3	14.7
LnGrp LOS	B	A	F	A	B	B
Approach Vol, veh/h	905			506	41	
Approach Delay, s/veh	11.6			7.6	15.3	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	4.6	32.9				37.5	22.5
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	5.0	23.5				33.0	18.0
Max Q Clear Time (g_c+I1), s	2.0	11.5				6.5	3.0
Green Ext Time (p_c), s	0.0	4.1				2.9	0.1

Intersection Summary			
HCM 6th Ctrl Delay		10.3	
HCM 6th LOS		B	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	82	17	2	59	4	12	28	1	13	68	21
Future Volume (vph)	10	82	17	2	59	4	12	28	1	13	68	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		50	0		50	0		50	0		50
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		799			1333			1318			3757	
Travel Time (s)		18.2			30.3			20.0			56.9	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												

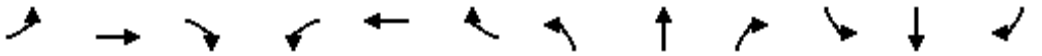
Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	82	17	2	59	4	12	28	1	13	68	21
Future Vol, veh/h	10	82	17	2	59	4	12	28	1	13	68	21
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	92	19	2	66	4	13	31	1	15	76	24
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	8.4	8.2	8.4	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	30%	0%	11%	0%	3%	0%	16%	0%
Vol Thru, %	70%	0%	89%	0%	97%	0%	84%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	1	92	17	61	4	81	21
LT Vol	12	0	10	0	2	0	13	0
Through Vol	28	0	82	0	59	0	68	0
RT Vol	0	1	0	17	0	4	0	21
Lane Flow Rate	45	1	103	19	69	4	91	24
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.066	0.001	0.145	0.023	0.097	0.005	0.13	0.029
Departure Headway (Hd)	5.285	4.431	5.064	4.307	5.072	4.352	5.15	4.367
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	679	808	710	832	708	823	698	821
Service Time	3.007	2.153	2.784	2.027	2.793	2.073	2.869	2.086
HCM Lane V/C Ratio	0.066	0.001	0.145	0.023	0.097	0.005	0.13	0.029
HCM Control Delay	8.4	7.2	8.6	7.1	8.3	7.1	8.6	7.2
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0	0.5	0.1	0.3	0	0.4	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	28	19	1	14	9	10	27	7	9	70	6
Future Volume (vph)	4	28	19	1	14	9	10	27	7	9	70	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		50	0		50
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1333			785			1313			4316	
Travel Time (s)		30.3			17.8			29.8			98.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

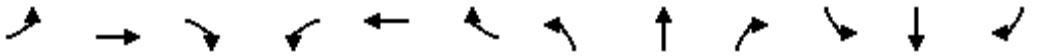
Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑	↱		↑	↱
Traffic Vol, veh/h	4	28	19	1	14	9	10	27	7	9	70	6
Future Vol, veh/h	4	28	19	1	14	9	10	27	7	9	70	6
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	50	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	33	22	1	16	11	12	32	8	11	82	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	32	0	0	60	0	0	121	82	43	102	93	26
Stage 1	-	-	-	-	-	-	48	48	-	23	23	-
Stage 2	-	-	-	-	-	-	73	34	-	79	70	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1580	-	-	1544	-	-	854	808	1027	879	797	1050
Stage 1	-	-	-	-	-	-	965	855	-	995	876	-
Stage 2	-	-	-	-	-	-	937	867	-	930	837	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1572	-	-	1537	-	-	770	797	1017	835	786	1040
Mov Cap-2 Maneuver	-	-	-	-	-	-	770	797	-	835	786	-
Stage 1	-	-	-	-	-	-	957	848	-	987	871	-
Stage 2	-	-	-	-	-	-	838	862	-	881	830	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.3	9.6	10.1
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	790	1017	1572	-	-	1537	-	-	791	1040
HCM Lane V/C Ratio	0.055	0.008	0.003	-	-	0.001	-	-	0.117	0.007
HCM Control Delay (s)	9.8	8.6	7.3	0	-	7.3	0	-	10.2	8.5
HCM Lane LOS	A	A	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0.2	0	0	-	-	0	-	-	0.4	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	134	4	2	148	22	2	12	4	41	22	13
Future Volume (vph)	10	134	4	2	148	22	2	12	4	41	22	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		721			1329			455			1318	
Travel Time (s)		16.4			30.2			6.9			20.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

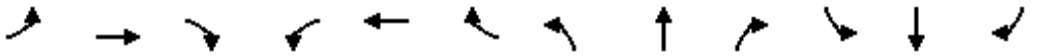
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	134	4	2	148	22	2	12	4	41	22	13
Future Vol, veh/h	10	134	4	2	148	22	2	12	4	41	22	13
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	141	4	2	156	23	2	13	4	43	23	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	184	0	0	150	0	0	365	358	153	356	349	178
Stage 1	-	-	-	-	-	-	170	170	-	177	177	-
Stage 2	-	-	-	-	-	-	195	188	-	179	172	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.8	6.52	6.22	6.8	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1391	-	-	1431	-	-	611	568	893	618	575	865
Stage 1	-	-	-	-	-	-	832	758	-	825	753	-
Stage 2	-	-	-	-	-	-	807	745	-	823	756	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1384	-	-	1424	-	-	573	557	885	595	564	857
Mov Cap-2 Maneuver	-	-	-	-	-	-	573	557	-	595	564	-
Stage 1	-	-	-	-	-	-	821	748	-	814	748	-
Stage 2	-	-	-	-	-	-	765	741	-	795	746	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.1	11	11.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	559	885	1384	-	-	1424	-	-	584	857
HCM Lane V/C Ratio	0.026	0.005	0.008	-	-	0.001	-	-	0.114	0.016
HCM Control Delay (s)	11.6	9.1	7.6	-	-	7.5	-	-	12	9.3
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.1	0	0	-	-	0	-	-	0.4	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	212	11	4	204	8	5	16	5	12	36	46
Future Volume (vph)	26	212	11	4	204	8	5	16	5	12	36	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1329			729			417			1313	
Travel Time (s)		30.2			16.6			9.5			29.8	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	212	11	4	204	8	5	16	5	12	36	46
Future Vol, veh/h	26	212	11	4	204	8	5	16	5	12	36	46
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	238	12	4	229	9	6	18	6	13	40	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	243	0	0	255	0	0	600	558	254	566	560	244
Stage 1	-	-	-	-	-	-	307	307	-	247	247	-
Stage 2	-	-	-	-	-	-	293	251	-	319	313	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1323	-	-	1310	-	-	413	438	785	435	437	795
Stage 1	-	-	-	-	-	-	703	661	-	757	702	-
Stage 2	-	-	-	-	-	-	715	699	-	693	657	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1317	-	-	1304	-	-	347	423	778	406	422	787
Mov Cap-2 Maneuver	-	-	-	-	-	-	347	423	-	406	422	-
Stage 1	-	-	-	-	-	-	684	643	-	737	696	-
Stage 2	-	-	-	-	-	-	624	693	-	651	639	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.1	13.6	12.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	402	778	1317	-	-	1304	-	-	418	787
HCM Lane V/C Ratio	0.059	0.007	0.022	-	-	0.003	-	-	0.129	0.066
HCM Control Delay (s)	14.5	9.7	7.8	-	-	7.8	-	-	14.9	9.9
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.2	0	0.1	-	-	0	-	-	0.4	0.2

APPENDIX 3.3:

TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

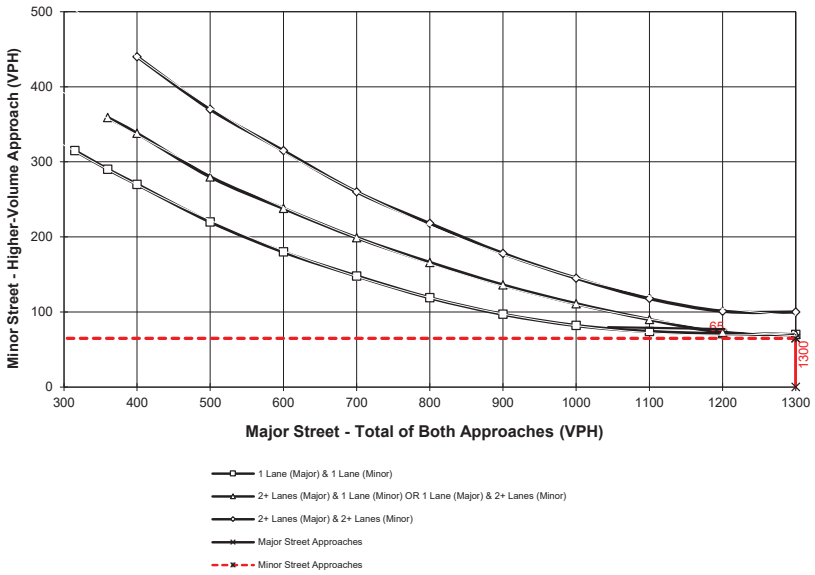
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2022) AM PEAK HOUR WARRANTS**

Major Street Name = **Ramona Exwy.** Total of Both Approaches (VPH) = **1,508**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Alessandro Av.** High Volume Approach (VPH) = **65**
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

Intersection ID: #2

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\01 - Existing\02R_AM\Fig 4C-4 (Rural Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

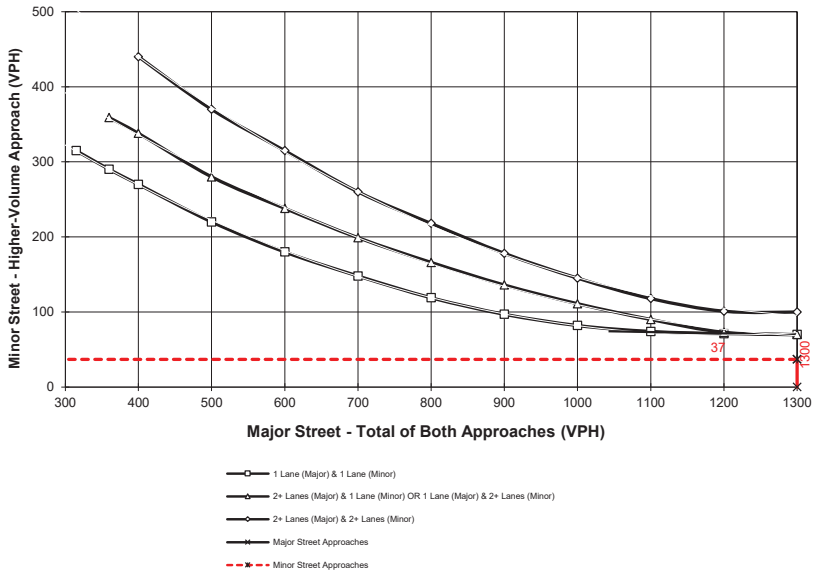
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2022) PM PEAK HOUR WARRANTS**

Major Street Name = **Ramona Exwy.** Total of Both Approaches (VPH) = **1,467**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Alessandro Av.** High Volume Approach (VPH) = **37**
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

Intersection ID: #2

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\01 - Existing\02R_PM\Fig 4C-4 (Rural Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

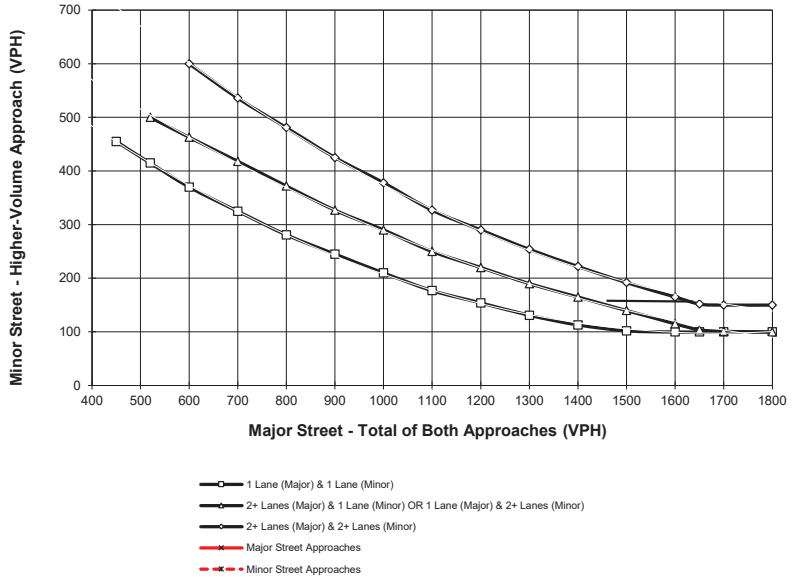
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EXISTING (2022) AM PEAK HOUR WARRANTS**

Major Street Name = **1st St.** Total of Both Approaches (VPH) = **338**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Alessandro Av.** High Volume Approach (VPH) = **86**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #4

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\01 - Existing\04U_AM\Fig 4C-3 (Urban Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

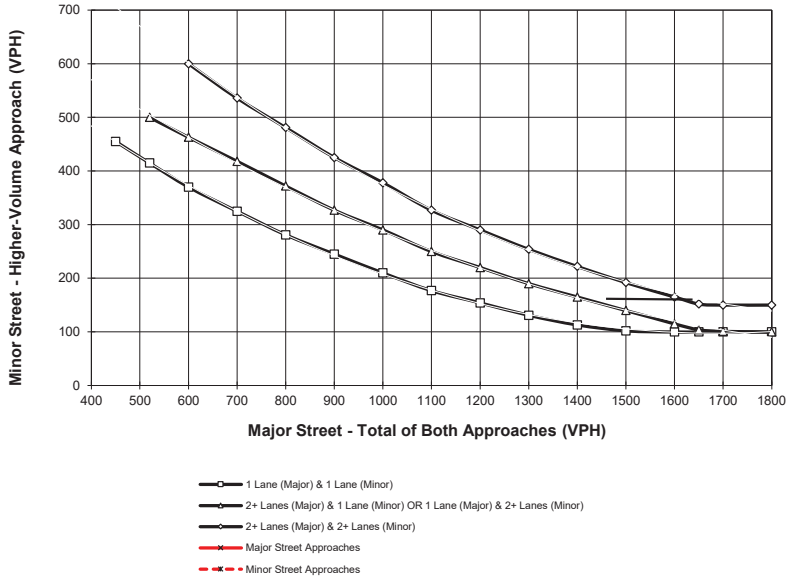
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EXISTING (2022) PM PEAK HOUR WARRANTS**

Major Street Name = **1st St.** Total of Both Approaches (VPH) = **174**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Alessandro Av.** High Volume Approach (VPH) = **102**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #4

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\01 - Existing\04U_PM\Fig 4C-3 (Urban Peak)

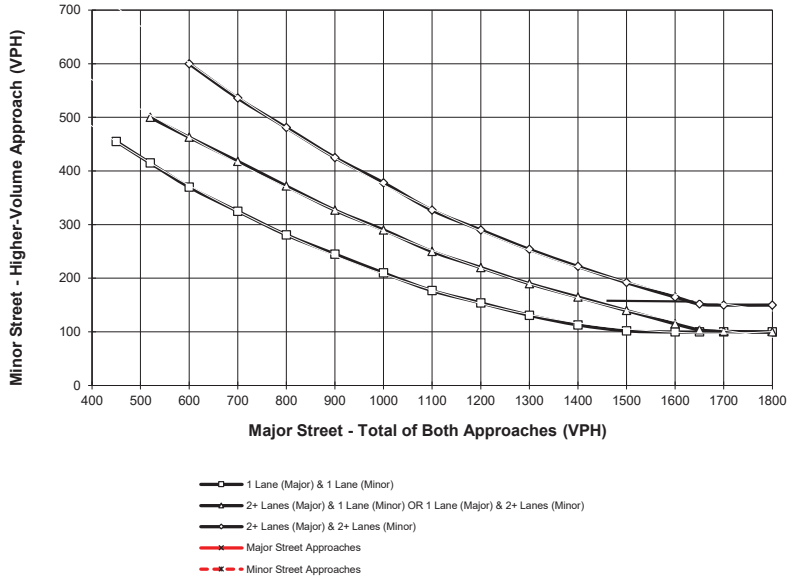
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EXISTING (2022) AM PEAK HOUR WARRANTS**

Major Street Name = **1st St.**
Total of Both Approaches (VPH) = **128**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Vernon Av.**
High Volume Approach (VPH) = **82**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #5

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\01 - Existing\05U_AM\Fig 4C-3 (Urban Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

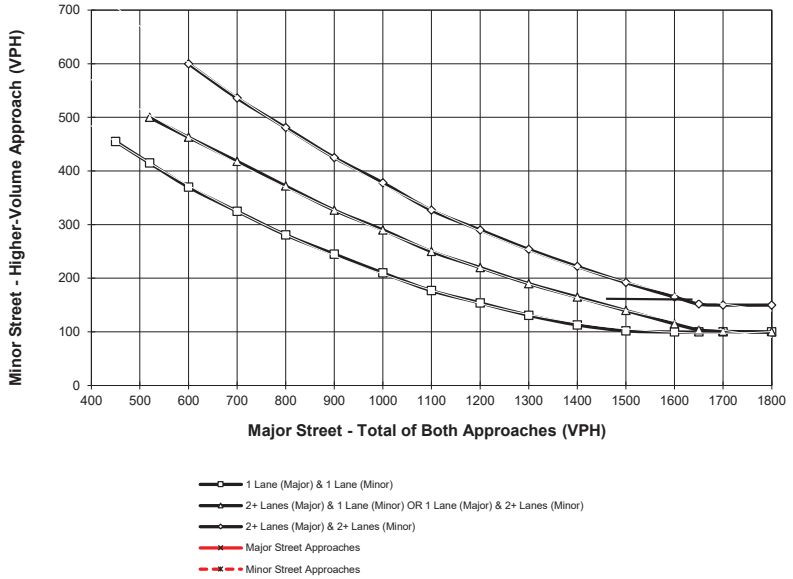
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EXISTING (2022) PM PEAK HOUR WARRANTS**

Major Street Name = **Vernon Av.**
Total of Both Approaches (VPH) = **129**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **1st St.**
High Volume Approach (VPH) = **51**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #5

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\01 - Existing\05U_PM\Fig 4C-3 (Urban Peak)

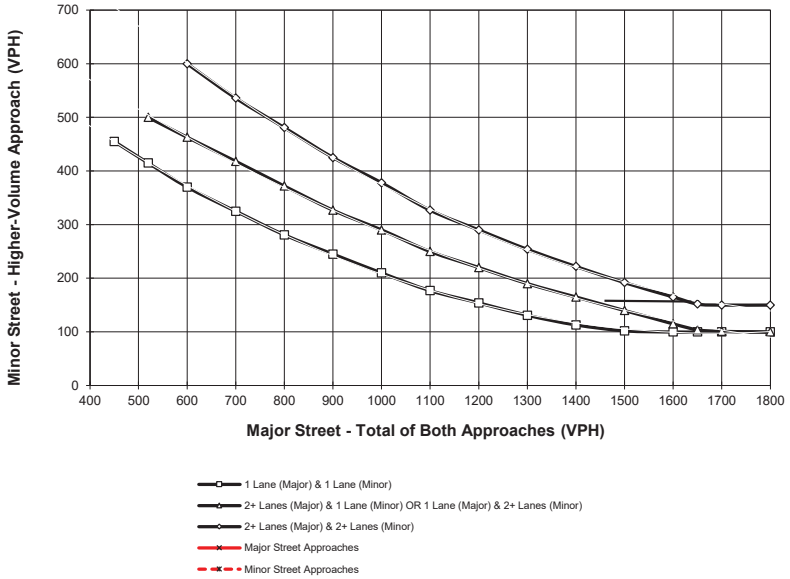
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EXISTING (2022) AM PEAK HOUR WARRANTS**

Major Street Name = **Main St.**
Total of Both Approaches (VPH) = **329**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Alessandro Av.**
High Volume Approach (VPH) = **81**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #6

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\01 - Existing\06U_AM\Fig 4C-3 (Urban Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

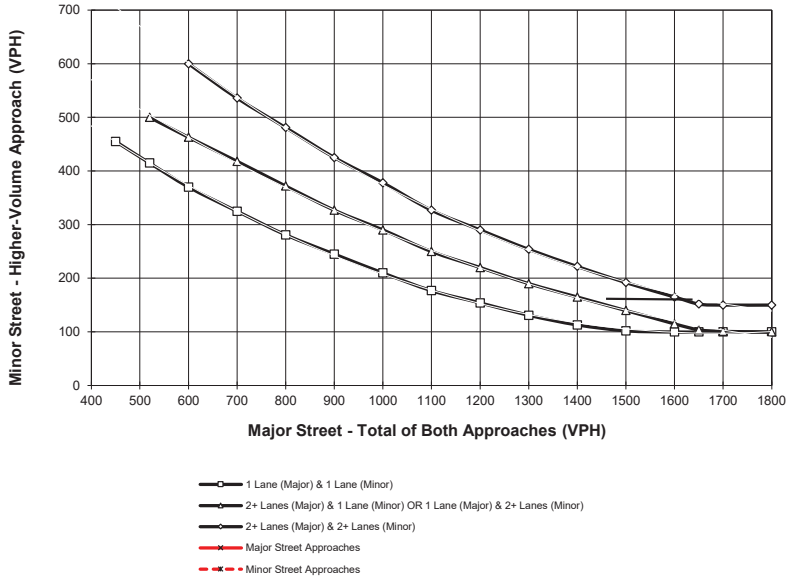
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EXISTING (2022) PM PEAK HOUR WARRANTS**

Major Street Name = **Main St.**
Total of Both Approaches (VPH) = **320**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Alessandro Av.**
High Volume Approach (VPH) = **76**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #6

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\01 - Existing\06U_PM\Fig 4C-3 (Urban Peak)

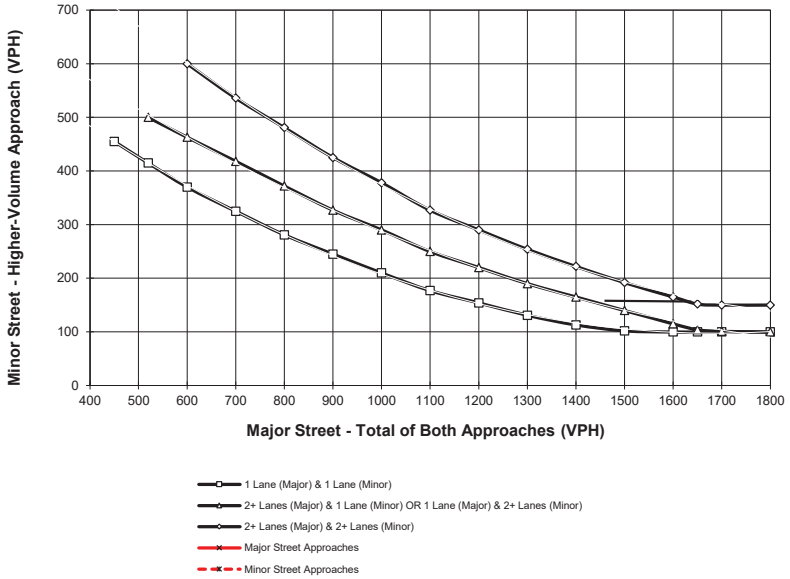
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EXISTING (2022) AM PEAK HOUR WARRANTS**

Major Street Name = **Main St.**
Total of Both Approaches (VPH) = **388**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Vernon Av.**
High Volume Approach (VPH) = **105**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #7

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\01 - Existing\07U_AM\Fig 4C-3 (Urban Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

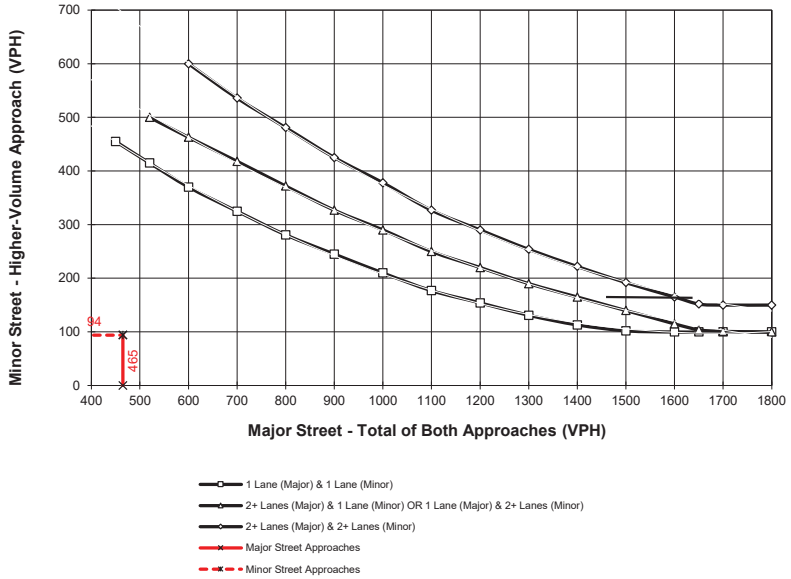
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EXISTING (2022) PM PEAK HOUR WARRANTS**

Major Street Name = **Main St.**
Total of Both Approaches (VPH) = **465**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Vernon Av.**
High Volume Approach (VPH) = **94**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #7

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\01 - Existing\07U_PM\Fig 4C-3 (Urban Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

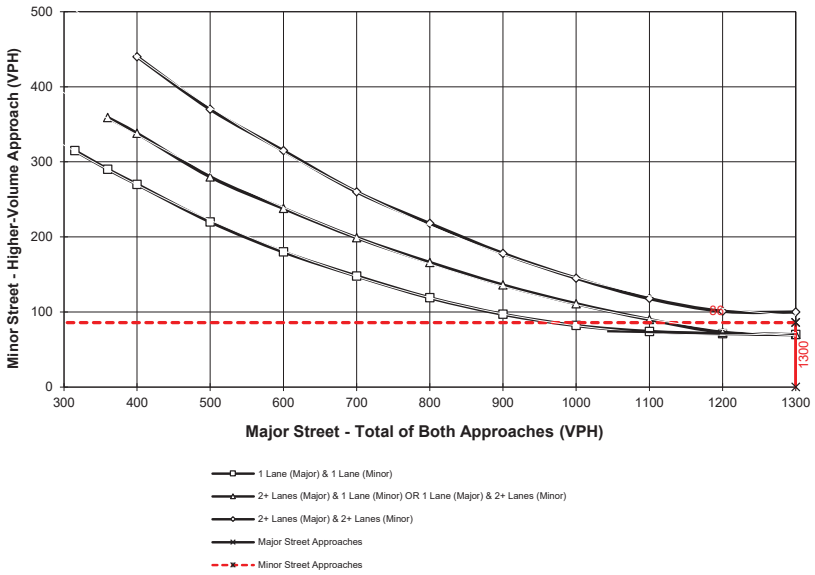
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2024) AM PEAK HOUR WARRANTS**

Major Street Name = **Ramona Exwy.** Total of Both Approaches (VPH) = **2,075**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Alessandro Av.** High Volume Approach (VPH) = **86**
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

Intersection ID: #2

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\02 - EAC\02R_AM\Fig 4C-4 (Rural Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

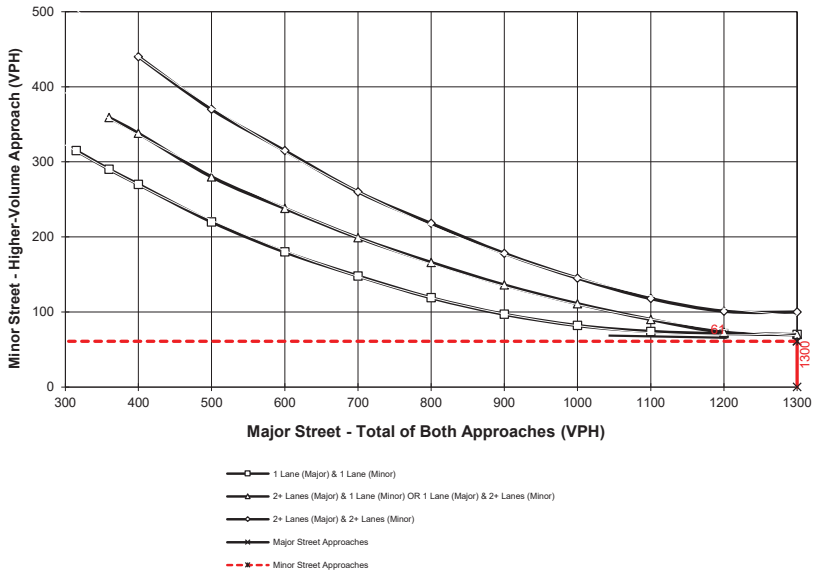
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2024) PM PEAK HOUR WARRANTS**

Major Street Name = **Ramona Exwy.** Total of Both Approaches (VPH) = **2,192**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Alessandro Av.** High Volume Approach (VPH) = **61**
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

Intersection ID: #2

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\02 - EAC\02R_PM\Fig 4C-4 (Rural Peak)

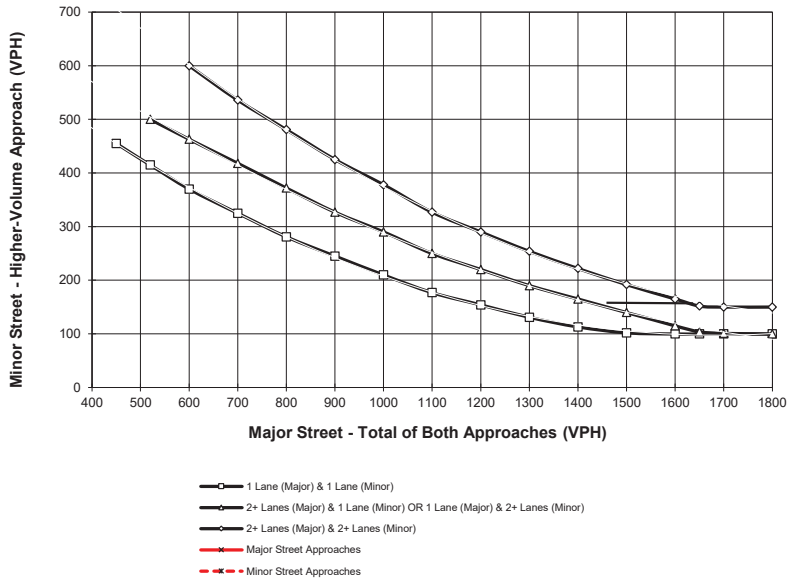
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2024) AM PEAK HOUR WARRANTS**

Major Street Name = **1st St.**
Total of Both Approaches (VPH) = **363**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Alessandro Av.**
High Volume Approach (VPH) = **106**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #4

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\02 - EAC\04U_AM\Fig 4C-3 (Urban Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

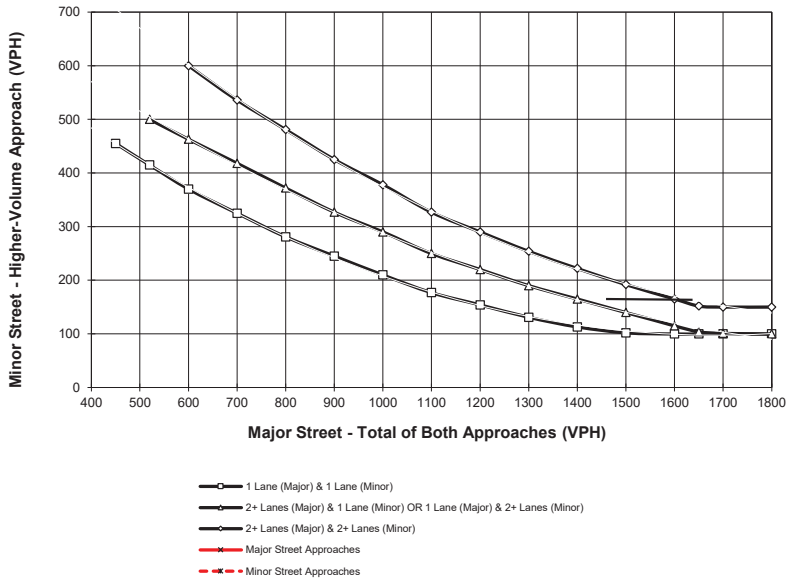
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2024) PM PEAK HOUR WARRANTS**

Major Street Name = **Alessandro Av.**
Total of Both Approaches (VPH) = **225**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **1st St.**
High Volume Approach (VPH) = **122**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #4

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\02 - EAC\04U_PM\Fig 4C-3 (Urban Peak)

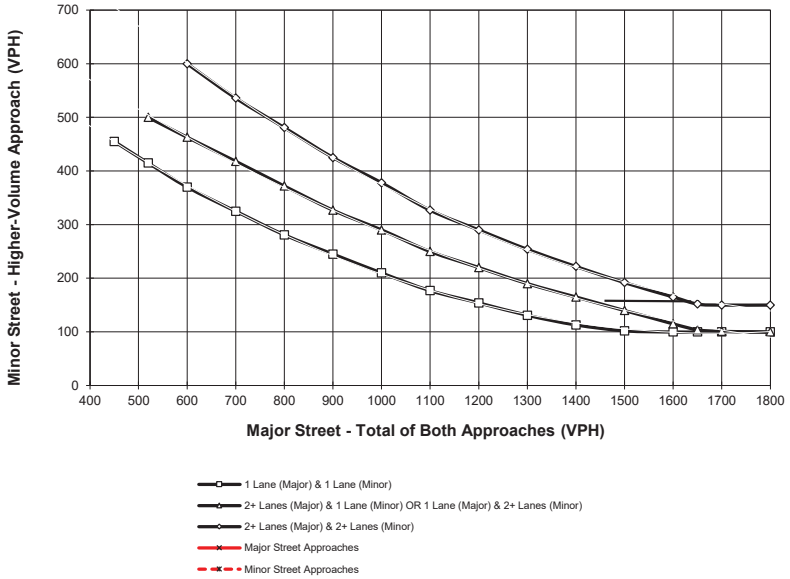
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2024) AM PEAK HOUR WARRANTS**

Major Street Name = **Vernon Av.**
Total of Both Approaches (VPH) = **330**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **1st St.**
High Volume Approach (VPH) = **75**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #5

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\02 - EAC\05U_AM\Fig 4C-3 (Urban Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

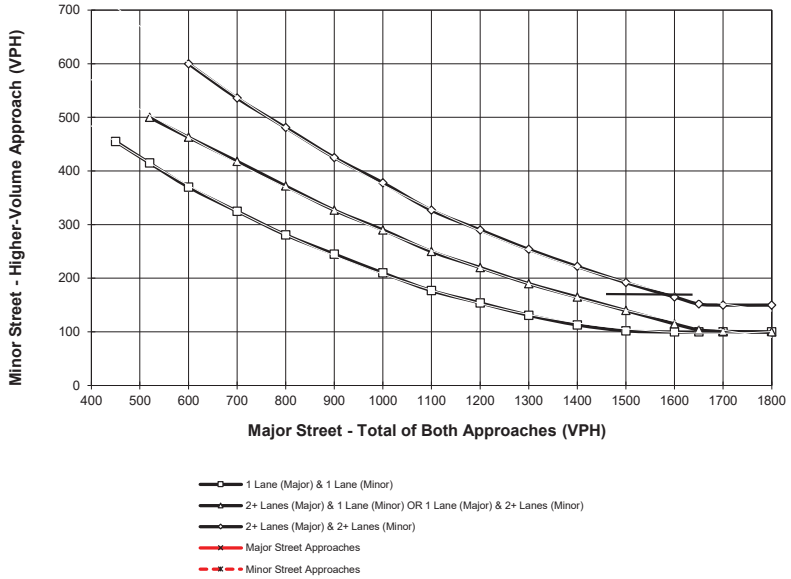
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2024) PM PEAK HOUR WARRANTS**

Major Street Name = **Vernon Av.**
Total of Both Approaches (VPH) = **354**
Number of Approach Lanes on Major Street = **1**

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

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #5

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\02 - EAC\05U_PM\Fig 4C-3 (Urban Peak)

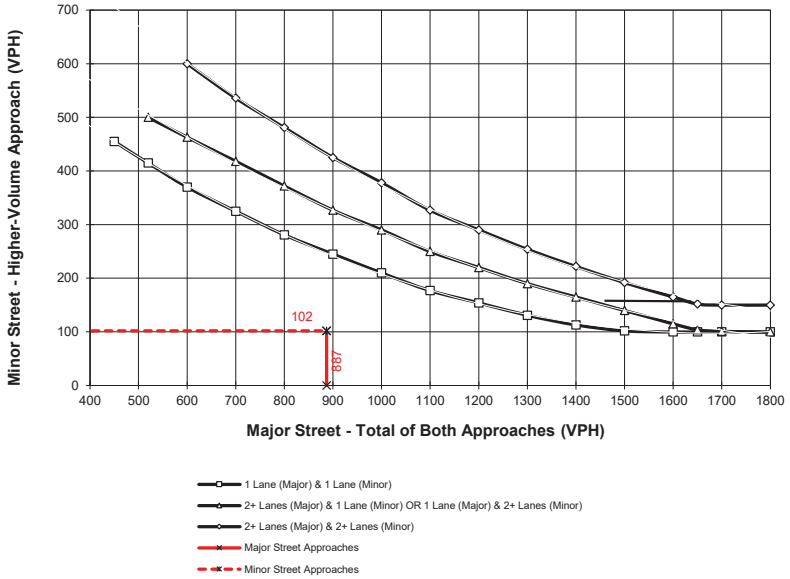
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2024) AM PEAK HOUR WARRANTS**

Major Street Name = **Main St.**
Total of Both Approaches (VPH) = **887**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Alessandro Av.**
High Volume Approach (VPH) = **102**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #6

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\02 - EAC\06U_AM\Fig 4C-3 (Urban Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

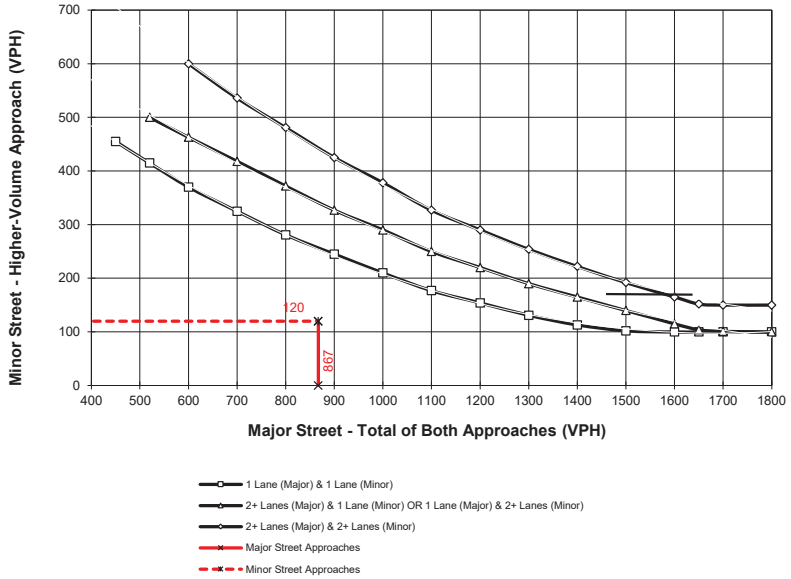
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2024) PM PEAK HOUR WARRANTS**

Major Street Name = **Main St.**
Total of Both Approaches (VPH) = **867**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Alessandro Av.**
High Volume Approach (VPH) = **120**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #6

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\02 - EAC\06U_PM\Fig 4C-3 (Urban Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

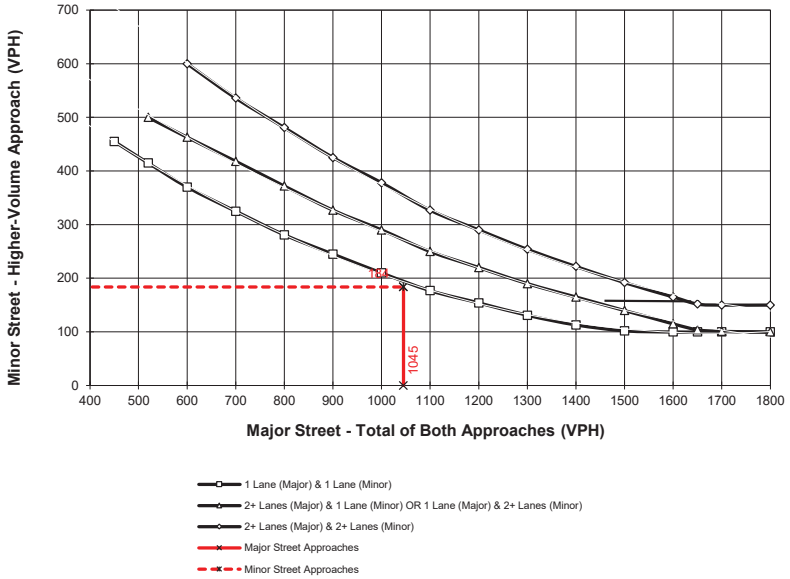
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2024) AM PEAK HOUR WARRANTS**

Major Street Name = **Main St.**
Total of Both Approaches (VPH) = **1,045**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Vernon Av.**
High Volume Approach (VPH) = **184**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #7

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\02 - EAC\07U_AM\Fig 4C-3 (Urban Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

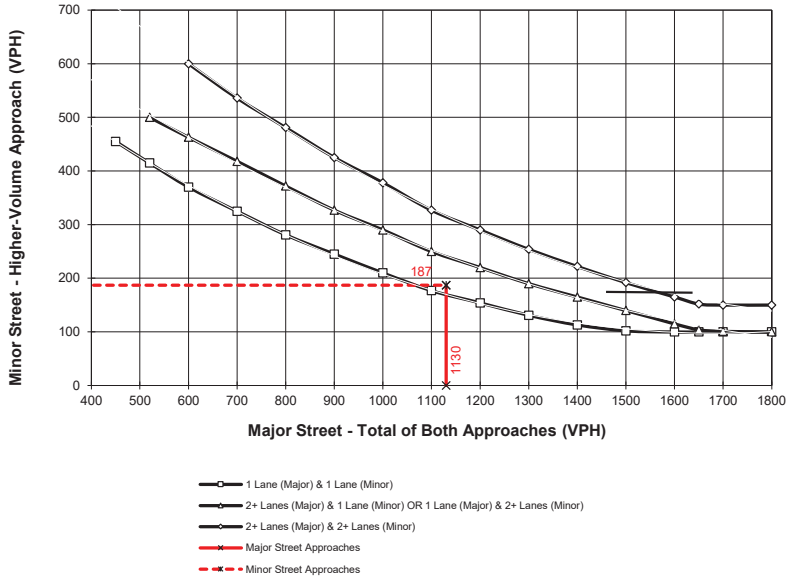
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2024) PM PEAK HOUR WARRANTS**

Major Street Name = **Main St.**
Total of Both Approaches (VPH) = **1,130**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Vernon Av.**
High Volume Approach (VPH) = **187**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*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

Intersection ID: #7

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\02 - EAC\07U_PM\Fig 4C-3 (Urban Peak)

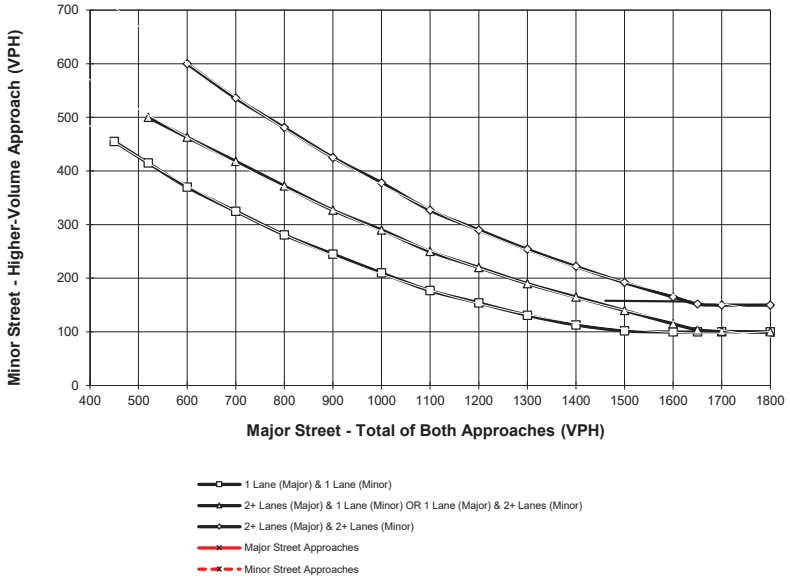
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC AM PEAK HOUR WARRANTS**

Major Street Name = **1st St.**
Total of Both Approaches (VPH) = **367**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Alessandro Av.**
High Volume Approach (VPH) = **126**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #4

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\03 - EAPC\04U_AM\Fig 4C-3 (Urban Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

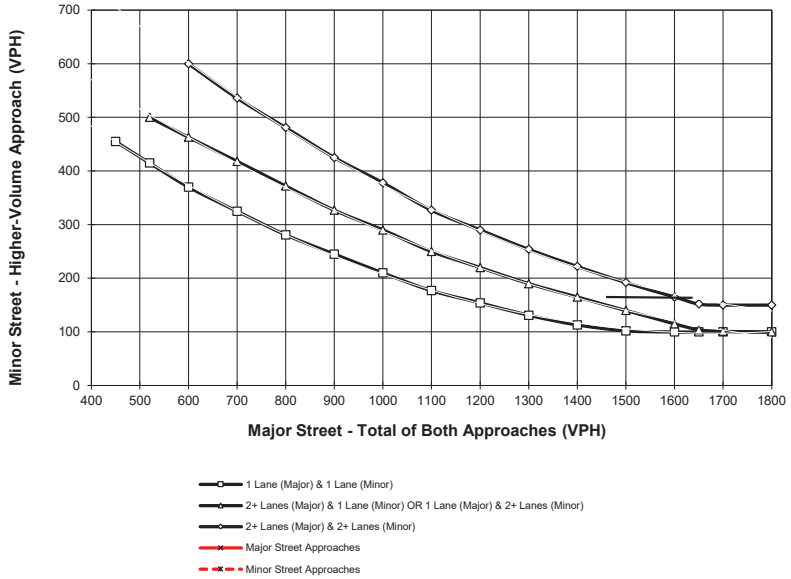
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC PM PEAK HOUR WARRANTS**

Major Street Name = **Alessandro Av.**
Total of Both Approaches (VPH) = **256**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **1st St.**
High Volume Approach (VPH) = **128**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #4

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\03 - EAPC\04U_PM\Fig 4C-3 (Urban Peak)

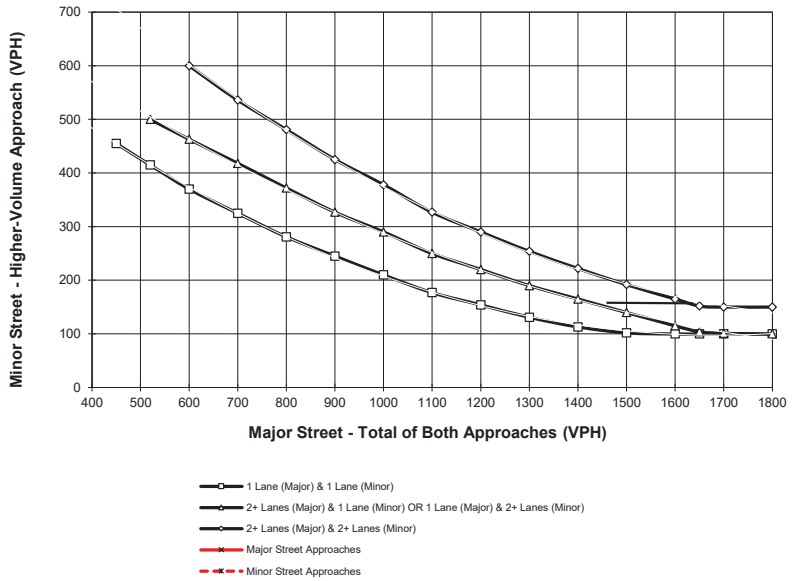
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC AM PEAK HOUR WARRANTS**

Major Street Name = **Vernon Av.**
Total of Both Approaches (VPH) = **362**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **1st St.**
High Volume Approach (VPH) = **76**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #5

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\03 - EAPC\05U_AM\Fig 4C-3 (Urban Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

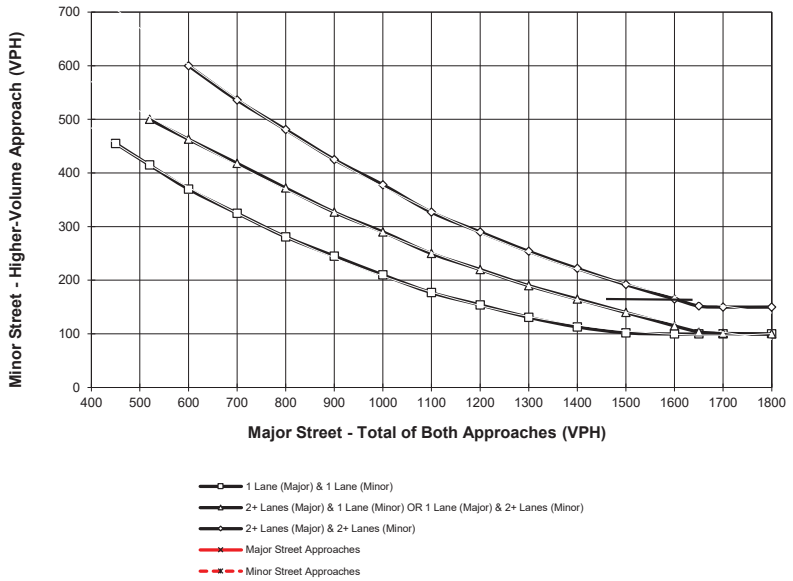
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC PM PEAK HOUR WARRANTS**

Major Street Name = **Vernon Av.**
Total of Both Approaches (VPH) = **394**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **1st St.**
High Volume Approach (VPH) = **64**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #5

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\03 - EAPC\05U_PM\Fig 4C-3 (Urban Peak)

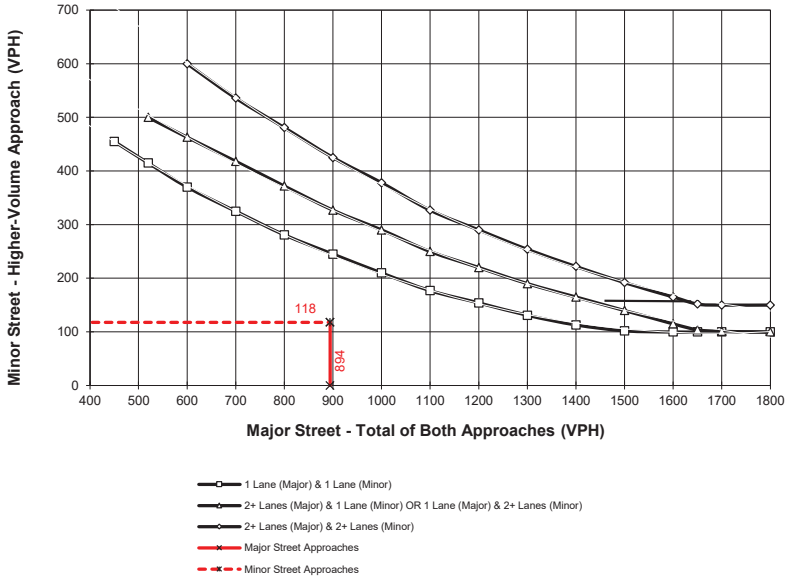
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC AM PEAK HOUR WARRANTS**

Major Street Name = **Main St.**
Total of Both Approaches (VPH) = **894**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Alessandro Av.**
High Volume Approach (VPH) = **118**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #6

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\03 - EAPC\06U_AM\Fig 4C-3 (Urban Peak)

California MUTCD 2014 Edition
(FHWA's MUTCD 2009, as amended for use in California)

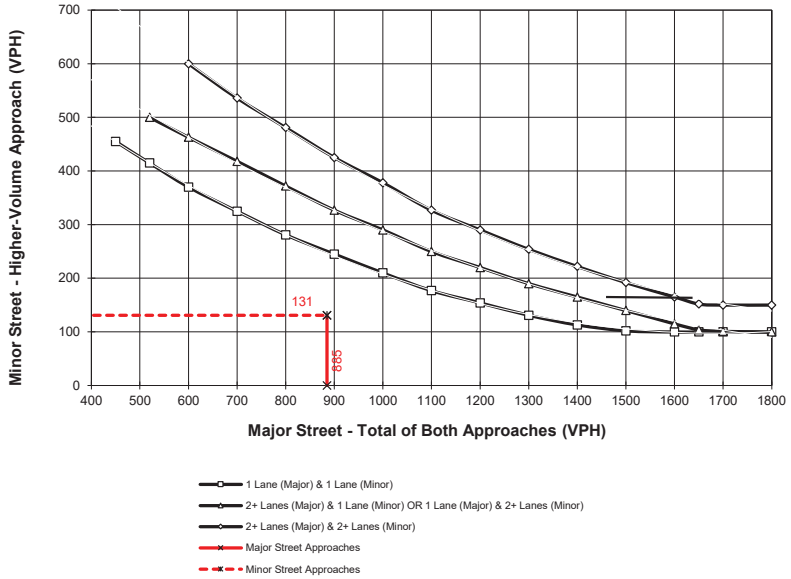
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC PM PEAK HOUR WARRANTS**

Major Street Name = **Main St.**
Total of Both Approaches (VPH) = **885**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Alessandro Av.**
High Volume Approach (VPH) = **131**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*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

Intersection ID: #6

F:\UXRjobs_14100-14500\14573\LOS\Signal Warrants\03 - EAPC\06U_PM\Fig 4C-3 (Urban Peak)

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

___ DIST	___ CO	___ RTE	___ PM	TRAFFIC CONDITIONS		EAPC
				CALC JC	DATE	02/18/22
Jurisdiction: **City of San Jacinto**				CHK	DATE	
Major Street: **Alessandro Av.**				Critical Approach Speed (Major)		35 mph
Minor Street: **St. 'A'**				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **2,850** vpd Minor Street Future ADT = **213** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements ADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements ADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
XX	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied **XX**				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **2,850** / *1* **213**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied **XX**				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **2,850** / *1* **213**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied **XX**				
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** **9%** **B** **18%**	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	EAPC
				CALC JC	DATE 02/18/22
				CHK	DATE

Jurisdiction: **City of San Jacinto**
Major Street: **Alessandro Av.**
Minor Street: **St. 'G'**

Critical Approach Speed (Major) 35 mph
Critical Approach Speed (Minor) 30 mph

Major Street Approach Lanes = **1** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **2,814** vpd
Minor Street Future ADT = **177** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..
or
In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX | RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied | Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements ADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **2,814**	1 **177**	8,000	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied | Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **2,814**	1 **177**	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied | Not Satisfied XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. A 7% B 15%

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

				TRAFFIC CONDITIONS			**EAPC**
DIST	CO	RTE	PM	CALC	JC	DATE	02/18/22
Jurisdiction:	**City of San Jacinto**			CHK		DATE	
Major Street:	**Vernon St.**			Critical Approach Speed (Major)			35 mph
Minor Street:	**St. 'E'**			Critical Approach Speed (Minor)			30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **3,268** vpd Minor Street Future ADT = **322** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements ADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **3,268**	*1* **322**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2 +*	9,600	6,720	3,200	2,240
1	*2 +*	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **3,268**	*1* **322**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2 +*	14,400	10,080	1,600	1,120
1	*2 +*	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 13% **B** 27%				

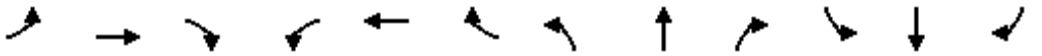
Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

APPENDIX 5.1:

EAC (2024) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

This Page Intentionally Left Blank



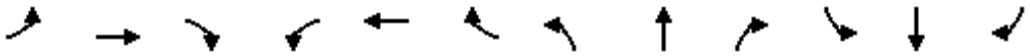
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	675	507	199	743	292	377	478	142	110	244	51
Future Volume (vph)	117	675	507	199	743	292	377	478	142	110	244	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210		170	275		200	170		105	140		50
Storage Lanes	2		1	2		1	1		1	1		1
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			45	
Link Distance (ft)		596			1310			710			927	
Travel Time (s)		7.4			16.2			10.8			14.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	675	507	199	743	292	377	478	142	110	244	51
Future Volume (veh/h)	117	675	507	199	743	292	377	478	142	110	244	51
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		0.99
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	127	734	551	216	808	317	410	520	154	120	265	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	1572	485	283	1709	528	446	1230	546	150	640	283
Arrive On Green	0.06	0.31	0.31	0.08	0.33	0.33	0.25	0.35	0.35	0.08	0.18	0.18
Sat Flow, veh/h	3456	5106	1577	3456	5106	1578	1781	3554	1578	1781	3554	1572
Grp Volume(v), veh/h	127	734	551	216	808	317	410	520	154	120	265	55
Grp Sat Flow(s),veh/h/ln	1728	1702	1577	1728	1702	1578	1781	1777	1578	1781	1777	1572
Q Serve(g_s), s	3.6	11.6	30.8	6.1	12.5	16.7	22.4	11.2	7.1	6.6	6.6	3.0
Cycle Q Clear(g_c), s	3.6	11.6	30.8	6.1	12.5	16.7	22.4	11.2	7.1	6.6	6.6	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	1572	485	283	1709	528	446	1230	546	150	640	283
V/C Ratio(X)	0.67	0.47	1.13	0.76	0.47	0.60	0.92	0.42	0.28	0.80	0.41	0.19
Avail Cap(c_a), veh/h	276	1572	485	328	1709	528	525	1230	546	237	640	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	28.0	34.6	45.0	26.3	27.7	36.5	25.0	23.7	45.0	36.3	34.8
Incr Delay (d2), s/veh	4.0	1.0	83.4	8.8	0.9	5.0	19.6	1.1	1.3	9.9	2.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.5	22.2	2.8	4.8	6.7	11.6	4.6	2.7	3.2	2.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.3	29.0	118.0	53.7	27.2	32.7	56.1	26.1	25.0	54.9	38.3	36.4
LnGrp LOS	D	C	F	D	C	C	E	C	C	D	D	D
Approach Vol, veh/h		1412			1341			1084			440	
Approach Delay, s/veh		65.7			32.8			37.3			42.6	
Approach LOS		E			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	35.3	29.5	22.5	10.0	38.0	12.9	39.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.5	25.0	29.5	18.0	8.0	26.5	13.3	34.2
Max Q Clear Time (g_c+I1), s	8.1	32.8	24.4	8.6	5.6	18.7	8.6	13.2
Green Ext Time (p_c), s	0.1	0.0	0.6	1.1	0.1	3.6	0.1	3.6

Intersection Summary	
HCM 6th Ctrl Delay	45.8
HCM 6th LOS	D



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	807	64	1	1198	4	83	1	2	1	1	3
Future Volume (vph)	1	807	64	1	1198	4	83	1	2	1	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		100	300		0	35		0	35		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	90			90			60			60		
Link Speed (mph)		55			55			45			30	
Link Distance (ft)		2281			1381			545			687	
Travel Time (s)		28.3			17.1			8.3			15.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	11.1

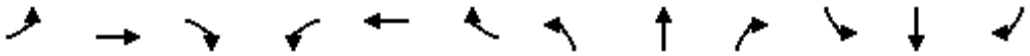
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	807	64	1	1198	4	83	1	2	1	1	3
Future Vol, veh/h	1	807	64	1	1198	4	83	1	2	1	1	3
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	100	300	-	-	35	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	887	70	1	1316	4	91	1	2	1	1	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1325	0	0	962	0	0	1560	2221	454	1776	2289	670
Stage 1	-	-	-	-	-	-	894	894	-	1325	1325	-
Stage 2	-	-	-	-	-	-	666	1327	-	451	964	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	517	-	-	711	-	-	~ 76	43	553	52	39	399
Stage 1	-	-	-	-	-	-	302	358	-	164	223	-
Stage 2	-	-	-	-	-	-	415	223	-	557	332	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	515	-	-	708	-	-	~ 73	42	548	50	38	395
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 73	42	-	50	38	-
Stage 1	-	-	-	-	-	-	300	355	-	163	222	-
Stage 2	-	-	-	-	-	-	407	222	-	549	330	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	277.6	45.1
HCM LOS			F	E

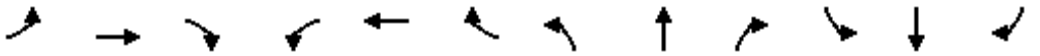
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	73	109	515	-	-	708	-	-	50	118
HCM Lane V/C Ratio	1.249	0.03	0.002	-	-	0.002	-	-	0.022	0.037
HCM Control Delay (s)	286.2	39.1	12	-	-	10.1	-	-	78.6	36.7
HCM Lane LOS	F	E	B	-	-	B	-	-	F	E
HCM 95th %tile Q(veh)	7.1	0.1	0	-	-	0	-	-	0.1	0.1

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	807	64	1	1198	4	83	1	2	1	1	3
Future Volume (vph)	1	807	64	1	1198	4	83	1	2	1	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		100	300		0	35		0	35		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	90			90			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			30	
Link Distance (ft)		2281			1381			545			687	
Travel Time (s)		28.3			17.1			8.3			15.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	807	64	1	1198	4	83	1	2	1	1	3
Future Volume (veh/h)	1	807	64	1	1198	4	83	1	2	1	1	3
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		0.99	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	1	887	70	1	1316	4	91	1	2	1	1	3
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	1683	747	3	1721	5	539	166	333	540	123	369
Arrive On Green	0.00	0.47	0.47	0.00	0.16	0.16	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	3554	1577	1781	3634	11	1405	555	1109	1407	410	1231
Grp Volume(v), veh/h	1	887	70	1	643	677	91	0	3	1	0	4
Grp Sat Flow(s),veh/h/ln	1781	1777	1577	1781	1777	1868	1405	0	1664	1407	0	1641
Q Serve(g_s), s	0.0	10.5	1.5	0.0	20.8	20.8	2.9	0.0	0.1	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	10.5	1.5	0.0	20.8	20.8	3.0	0.0	0.1	0.1	0.0	0.1
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.67	1.00		0.75
Lane Grp Cap(c), veh/h	3	1683	747	3	842	885	539	0	499	540	0	492
V/C Ratio(X)	0.34	0.53	0.09	0.34	0.76	0.76	0.17	0.00	0.01	0.00	0.00	0.01
Avail Cap(c_a), veh/h	148	1683	747	148	842	885	539	0	499	540	0	492
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.81	0.81	0.81	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.9	11.1	8.7	30.0	22.1	22.1	15.8	0.0	14.7	14.8	0.0	14.7
Incr Delay (d2), s/veh	56.0	1.2	0.2	46.6	5.4	5.1	0.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	3.1	0.4	0.1	10.6	11.0	0.9	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.9	12.3	8.9	76.6	27.5	27.2	16.5	0.0	14.8	14.8	0.0	14.8
LnGrp LOS	F	B	A	E	C	C	B	A	B	B	A	B
Approach Vol, veh/h		958			1321			94			5	
Approach Delay, s/veh		12.1			27.4			16.4			14.8	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.6	32.9		22.5	4.6	32.9		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.0	23.5		18.0				
Max Q Clear Time (g_c+I1), s	2.0	12.5		2.1	2.0	22.8		5.0				
Green Ext Time (p_c), s	0.0	4.2		0.0	0.0	0.5		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			20.8									
HCM 6th LOS			C									



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	732	77	2	1064	138	7
Future Volume (vph)	732	77	2	1064	138	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300	200		175	0
Storage Lanes		1	1		1	1
Taper Length (ft)			90		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	55			55	30	
Link Distance (ft)	1381			386	451	
Travel Time (s)	17.1			4.8	10.3	
Confl. Peds. (#/hr)		5	5		5	5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						

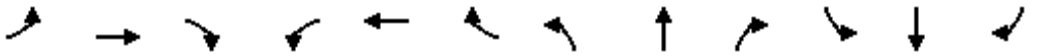
Intersection Summary	
Area Type:	Other



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	732	77	2	1064	138	7
Future Volume (veh/h)	732	77	2	1064	138	7
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	779	82	2	1132	147	7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1649	731	5	1925	549	489
Arrive On Green	0.46	0.46	0.00	0.54	0.31	0.31
Sat Flow, veh/h	3647	1577	1781	3647	1781	1585
Grp Volume(v), veh/h	779	82	2	1132	147	7
Grp Sat Flow(s),veh/h/ln	1777	1577	1781	1777	1781	1585
Q Serve(g_s), s	9.0	1.8	0.1	12.9	3.7	0.2
Cycle Q Clear(g_c), s	9.0	1.8	0.1	12.9	3.7	0.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1649	731	5	1925	549	489
V/C Ratio(X)	0.47	0.11	0.41	0.59	0.27	0.01
Avail Cap(c_a), veh/h	1649	731	163	1925	549	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.0	9.1	29.9	9.2	15.6	14.4
Incr Delay (d2), s/veh	1.0	0.3	47.3	1.3	1.2	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	2.7	0.5	0.1	3.4	1.6	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.0	9.4	77.2	10.6	16.8	14.5
LnGrp LOS	B	A	E	B	B	B
Approach Vol, veh/h	861			1134	154	
Approach Delay, s/veh	11.8			10.7	16.7	
Approach LOS	B			B	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	4.7	32.3				37.0	23.0
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	5.5	22.5				32.5	18.5
Max Q Clear Time (g_c+I1), s	2.1	11.0				14.9	5.7
Green Ext Time (p_c), s	0.0	3.8				6.7	0.3

Intersection Summary			
HCM 6th Ctrl Delay		11.6	
HCM 6th LOS		B	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	131	31	1	161	18	36	55	3	8	76	22
Future Volume (vph)	21	131	31	1	161	18	36	55	3	8	76	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		50	0		50	0		50	0		50
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		799			1333			1318			3757	
Travel Time (s)		18.2			30.3			20.0			56.9	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Shared Lane Traffic (%)												

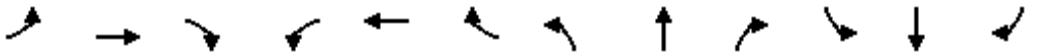
Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	131	31	1	161	18	36	55	3	8	76	22
Future Vol, veh/h	21	131	31	1	161	18	36	55	3	8	76	22
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	26	162	38	1	199	22	44	68	4	10	94	27
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	10.1	10.4	10.2	9.5
HCM LOS	B	B	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	40%	0%	14%	0%	1%	0%	10%	0%
Vol Thru, %	60%	0%	86%	0%	99%	0%	90%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	91	3	152	31	162	18	84	22
LT Vol	36	0	21	0	1	0	8	0
Through Vol	55	0	131	0	161	0	76	0
RT Vol	0	3	0	31	0	18	0	22
Lane Flow Rate	112	4	188	38	200	22	104	27
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.192	0.005	0.289	0.051	0.304	0.029	0.172	0.039
Departure Headway (Hd)	6.146	5.238	5.538	4.763	5.477	4.769	5.984	5.229
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	588	687	642	742	648	741	604	689
Service Time	3.849	2.941	3.333	2.558	3.273	2.563	3.684	2.929
HCM Lane V/C Ratio	0.19	0.006	0.293	0.051	0.309	0.03	0.172	0.039
HCM Control Delay	10.3	8	10.6	7.8	10.7	7.7	9.9	8.1
HCM Lane LOS	B	A	B	A	B	A	A	A
HCM 95th-tile Q	0.7	0	1.2	0.2	1.3	0.1	0.6	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	48	18	3	51	12	33	129	3	6	149	10
Future Volume (vph)	9	48	18	3	51	12	33	129	3	6	149	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		50	0		50
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1333			785			1313			4316	
Travel Time (s)		30.3			17.8			29.8			98.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

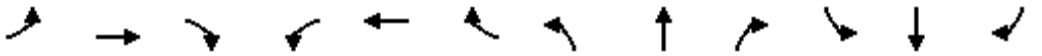
Intersection	
Int Delay, s/veh	8.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑	↱		↑	↱
Traffic Vol, veh/h	9	48	18	3	51	12	33	129	3	6	149	10
Future Vol, veh/h	9	48	18	3	51	12	33	129	3	6	149	10
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	50	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	59	22	4	62	15	40	157	4	7	182	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	82	0	0	86	0	0	266	176	69	253	183	72
Stage 1	-	-	-	-	-	-	86	86	-	75	75	-
Stage 2	-	-	-	-	-	-	180	90	-	178	108	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1515	-	-	1510	-	-	687	717	994	700	711	990
Stage 1	-	-	-	-	-	-	922	824	-	934	833	-
Stage 2	-	-	-	-	-	-	822	820	-	824	806	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1508	-	-	1503	-	-	532	702	985	567	696	981
Mov Cap-2 Maneuver	-	-	-	-	-	-	532	702	-	567	696	-
Stage 1	-	-	-	-	-	-	910	813	-	922	826	-
Stage 2	-	-	-	-	-	-	628	813	-	654	796	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.3	12.7	12
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	659	985	1508	-	-	1503	-	-	690	981
HCM Lane V/C Ratio	0.3	0.004	0.007	-	-	0.002	-	-	0.274	0.012
HCM Control Delay (s)	12.8	8.7	7.4	0	-	7.4	0	-	12.2	8.7
HCM Lane LOS	B	A	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	1.3	0	0	-	-	0	-	-	1.1	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	394	3	3	414	59	1	17	2	53	26	23
Future Volume (vph)	14	394	3	3	414	59	1	17	2	53	26	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		721			1329			455			1318	
Travel Time (s)		16.4			30.2			6.9			20.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

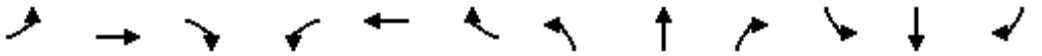
Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	394	3	3	414	59	1	17	2	53	26	23
Future Vol, veh/h	14	394	3	3	414	59	1	17	2	53	26	23
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	438	3	3	460	66	1	19	2	59	29	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	531	0	0	446	0	0	1009	1014	450	991	982	503
Stage 1	-	-	-	-	-	-	477	477	-	504	504	-
Stage 2	-	-	-	-	-	-	532	537	-	487	478	-
Critical Hdwy	4.12	-	-	4.12	-	-	7	6.52	6.22	7	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1036	-	-	1114	-	-	226	239	609	233	249	569
Stage 1	-	-	-	-	-	-	569	556	-	550	541	-
Stage 2	-	-	-	-	-	-	531	523	-	562	556	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1031	-	-	1109	-	-	191	232	603	213	242	564
Mov Cap-2 Maneuver	-	-	-	-	-	-	191	232	-	213	242	-
Stage 1	-	-	-	-	-	-	558	544	-	539	537	-
Stage 2	-	-	-	-	-	-	476	519	-	530	544	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	21.1	27
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	229	603	1031	-	-	1109	-	-	222	564
HCM Lane V/C Ratio	0.087	0.004	0.015	-	-	0.003	-	-	0.395	0.045
HCM Control Delay (s)	22.2	11	8.5	-	-	8.3	-	-	31.4	11.7
HCM Lane LOS	C	B	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.3	0	0	-	-	0	-	-	1.8	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	428	10	51	453	28	14	68	91	27	57	100
Future Volume (vph)	75	428	10	51	453	28	14	68	91	27	57	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1329			729			417			1313	
Travel Time (s)		30.2			16.6			9.5			29.8	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

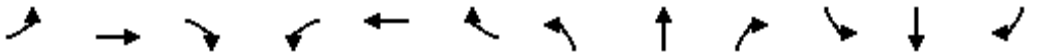
Intersection	
Int Delay, s/veh	20.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	428	10	51	453	28	14	68	91	27	57	100
Future Vol, veh/h	75	428	10	51	453	28	14	68	91	27	57	100
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	83	476	11	57	503	31	16	76	101	30	63	111

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	539	0	0	492	0	0	1378	1306	492	1379	1296	529
Stage 1	-	-	-	-	-	-	653	653	-	638	638	-
Stage 2	-	-	-	-	-	-	725	653	-	741	658	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1029	-	-	1071	-	-	122	160	577	122	162	550
Stage 1	-	-	-	-	-	-	456	464	-	465	471	-
Stage 2	-	-	-	-	-	-	416	464	-	408	461	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1024	-	-	1066	-	-	56	138	572	51	140	545
Mov Cap-2 Maneuver	-	-	-	-	-	-	56	138	-	51	140	-
Stage 1	-	-	-	-	-	-	417	424	-	425	444	-
Stage 2	-	-	-	-	-	-	267	437	-	252	421	-

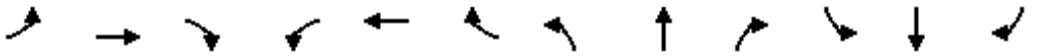
Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.8	61.7	94.1
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	110	572	1024	-	-	1066	-	-	90	545
HCM Lane V/C Ratio	0.828	0.177	0.081	-	-	0.053	-	-	1.037	0.204
HCM Control Delay (s)	116.1	12.6	8.8	-	-	8.6	-	-	190.2	13.3
HCM Lane LOS	F	B	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	4.8	0.6	0.3	-	-	0.2	-	-	6.1	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	428	10	51	453	28	14	68	91	27	57	100
Future Volume (vph)	75	428	10	51	453	28	14	68	91	27	57	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1329			729			417			1313	
Travel Time (s)		30.2			16.6			9.5			29.8	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other



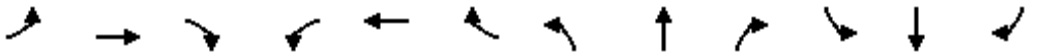
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	428	10	51	453	28	14	68	91	27	57	100
Future Volume (veh/h)	75	428	10	51	453	28	14	68	91	27	57	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	0.99		0.99
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	83	476	11	57	503	31	16	76	101	30	63	111
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	769	18	91	716	44	121	485	474	199	378	474
Arrive On Green	0.06	0.42	0.42	0.05	0.41	0.41	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	1820	42	1781	1743	107	169	1608	1572	396	1253	1572
Grp Volume(v), veh/h	83	0	487	57	0	534	92	0	101	93	0	111
Grp Sat Flow(s),veh/h/ln	1781	0	1862	1781	0	1850	1777	0	1572	1649	0	1572
Q Serve(g_s), s	2.7	0.0	12.3	1.9	0.0	14.3	0.0	0.0	2.9	0.0	0.0	3.2
Cycle Q Clear(g_c), s	2.7	0.0	12.3	1.9	0.0	14.3	2.2	0.0	2.9	2.2	0.0	3.2
Prop In Lane	1.00		0.02	1.00		0.06	0.17		1.00	0.32		1.00
Lane Grp Cap(c), veh/h	111	0	786	91	0	760	606	0	474	577	0	474
V/C Ratio(X)	0.75	0.00	0.62	0.63	0.00	0.70	0.15	0.00	0.21	0.16	0.00	0.23
Avail Cap(c_a), veh/h	163	0	786	151	0	760	606	0	474	577	0	474
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	0.00	1.00
Uniform Delay (d), s/veh	27.7	0.0	13.6	27.9	0.0	14.6	15.4	0.0	15.6	15.4	0.0	15.7
Incr Delay (d2), s/veh	10.0	0.0	3.6	6.9	0.0	5.4	0.5	0.0	1.0	0.6	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	5.2	0.9	0.0	6.3	0.9	0.0	1.1	1.0	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.7	0.0	17.2	34.8	0.0	20.0	15.9	0.0	16.7	16.0	0.0	16.9
LnGrp LOS	D	A	B	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		570			591			193			204	
Approach Delay, s/veh		20.2			21.4			16.3			16.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	29.8		22.6	8.2	29.2		22.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	23.3		18.1	5.5	22.9		18.1				
Max Q Clear Time (g_c+I1), s	3.9	14.3		5.2	4.7	16.3		4.9				
Green Ext Time (p_c), s	0.0	2.1		0.7	0.0	1.9		0.6				

Intersection Summary												
HCM 6th Ctrl Delay			19.7									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	148	925	521	188	720	173	442	514	142	273	449	111
Future Volume (vph)	148	925	521	188	720	173	442	514	142	273	449	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210		170	275		200	170		105	140		50
Storage Lanes	2		1	2		1	1		1	1		1
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			45	
Link Distance (ft)		596			1310			710			927	
Travel Time (s)		7.4			16.2			10.8			14.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	925	521	188	720	173	442	514	142	273	449	111
Future Volume (veh/h)	148	925	521	188	720	173	442	514	142	273	449	111
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		0.99	1.00		0.99	1.00		0.99
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	156	974	548	198	758	182	465	541	149	287	473	117
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	1445	446	264	1507	465	500	989	439	325	640	283
Arrive On Green	0.06	0.28	0.28	0.08	0.30	0.30	0.28	0.28	0.28	0.18	0.18	0.18
Sat Flow, veh/h	3456	5106	1577	3456	5106	1577	1781	3554	1577	1781	3554	1572
Grp Volume(v), veh/h	156	974	548	198	758	182	465	541	149	287	473	117
Grp Sat Flow(s),veh/h/ln	1728	1702	1577	1728	1702	1577	1781	1777	1577	1781	1777	1572
Q Serve(g_s), s	4.4	16.9	28.3	5.6	12.3	9.2	25.4	13.0	7.5	15.7	12.6	6.6
Cycle Q Clear(g_c), s	4.4	16.9	28.3	5.6	12.3	9.2	25.4	13.0	7.5	15.7	12.6	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	1445	446	264	1507	465	500	989	439	325	640	283
V/C Ratio(X)	0.70	0.67	1.23	0.75	0.50	0.39	0.93	0.55	0.34	0.88	0.74	0.41
Avail Cap(c_a), veh/h	308	1445	446	294	1507	465	565	989	439	468	640	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	31.8	35.8	45.2	29.2	28.1	35.0	30.7	28.8	39.9	38.8	36.3
Incr Delay (d2), s/veh	4.2	2.5	121.0	9.3	1.2	2.5	20.9	2.2	2.1	13.2	7.5	4.4
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	1.9	6.7	25.2	2.6	4.8	3.6	13.2	5.6	3.0	7.7	5.9	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.0	34.3	156.8	54.5	30.4	30.5	55.9	32.9	30.9	53.1	46.3	40.7
LnGrp LOS	D	C	F	D	C	C	E	C	C	D	D	D
Approach Vol, veh/h		1678			1138			1155			877	
Approach Delay, s/veh		75.8			34.6			41.9			47.8	
Approach LOS		E			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	32.8	32.6	22.5	10.9	34.0	22.7	32.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	23.8	31.7	18.0	8.9	23.4	26.3	23.4
Max Q Clear Time (g_c+I1), s	7.6	30.3	27.4	14.6	6.4	14.3	17.7	15.0
Green Ext Time (p_c), s	0.1	0.0	0.6	1.1	0.1	3.4	0.5	2.5

Intersection Summary	
HCM 6th Ctrl Delay	53.0
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1206	116	1	863	1	59	1	1	5	15	19
Future Volume (vph)	5	1206	116	1	863	1	59	1	1	5	15	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		100	300		0	35		0	35		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	90			90			60			60		
Link Speed (mph)		55			55			45			30	
Link Distance (ft)		2281			1381			545			687	
Travel Time (s)		28.3			17.1			8.3			15.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	15

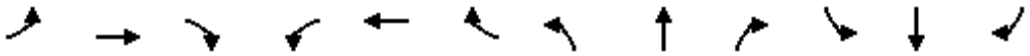
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1206	116	1	863	1	59	1	1	5	15	19
Future Vol, veh/h	5	1206	116	1	863	1	59	1	1	5	15	19
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	100	300	-	-	35	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1243	120	1	890	1	61	1	1	5	15	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	896	0	0	1368	0	0	1718	2156	632	1535	2276	456
Stage 1	-	-	-	-	-	-	1258	1258	-	898	898	-
Stage 2	-	-	-	-	-	-	460	898	-	637	1378	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	753	-	-	498	-	-	~ 58	47	423	79	40	551
Stage 1	-	-	-	-	-	-	181	241	-	301	356	-
Stage 2	-	-	-	-	-	-	551	356	-	432	210	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	749	-	-	496	-	-	~ 38	46	419	76	39	546
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 38	46	-	76	39	-
Stage 1	-	-	-	-	-	-	179	238	-	298	354	-
Stage 2	-	-	-	-	-	-	505	354	-	424	207	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	$ 513.3	76.7
HCM LOS			F	F

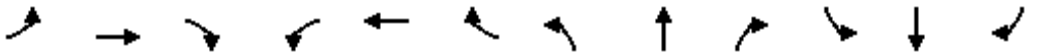
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	38	83	749	-	-	496	-	-	76	81
HCM Lane V/C Ratio	1.601	0.025	0.007	-	-	0.002	-	-	0.068	0.433
HCM Control Delay (s)	$ 529	49.5	9.8	-	-	12.3	-	-	55.8	79.8
HCM Lane LOS	F	E	A	-	-	B	-	-	F	F
HCM 95th %tile Q(veh)	6.4	0.1	0	-	-	0	-	-	0.2	1.8

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1206	116	1	863	1	59	1	1	5	15	19
Future Volume (vph)	5	1206	116	1	863	1	59	1	1	5	15	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		100	300		0	35		0	35		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	90			90			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			30	
Link Distance (ft)		2281			1381			545			687	
Travel Time (s)		28.3			17.1			8.3			15.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1206	116	1	863	1	59	1	1	5	15	19
Future Volume (veh/h)	5	1206	116	1	863	1	59	1	1	5	15	19
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		0.99	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	5	1243	120	1	890	1	61	1	1	5	15	20
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	1683	747	3	1706	2	510	257	257	541	217	290
Arrive On Green	0.01	0.47	0.47	0.00	0.94	0.94	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	3554	1577	1781	3642	4	1367	856	856	1408	725	966
Grp Volume(v), veh/h	5	1243	120	1	434	457	61	0	2	5	0	35
Grp Sat Flow(s),veh/h/ln	1781	1777	1577	1781	1777	1870	1367	0	1711	1408	0	1691
Q Serve(g_s), s	0.2	17.0	2.6	0.0	1.8	1.8	2.0	0.0	0.0	0.1	0.0	0.9
Cycle Q Clear(g_c), s	0.2	17.0	2.6	0.0	1.8	1.8	2.9	0.0	0.0	0.2	0.0	0.9
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.50	1.00		0.57
Lane Grp Cap(c), veh/h	12	1683	747	3	832	876	510	0	513	541	0	507
V/C Ratio(X)	0.42	0.74	0.16	0.34	0.52	0.52	0.12	0.00	0.00	0.01	0.00	0.07
Avail Cap(c_a), veh/h	148	1683	747	148	832	876	510	0	513	541	0	507
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.92	0.92	0.92	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.7	12.8	9.0	29.9	1.1	1.1	16.0	0.0	14.7	14.8	0.0	15.0
Incr Delay (d2), s/veh	22.0	2.9	0.5	52.1	2.1	2.0	0.5	0.0	0.0	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	5.2	0.7	0.1	0.8	0.8	0.6	0.0	0.0	0.0	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.7	15.7	9.5	82.0	3.2	3.1	16.5	0.0	14.7	14.8	0.0	15.3
LnGrp LOS	D	B	A	F	A	A	B	A	B	B	A	B
Approach Vol, veh/h		1368			892			63			40	
Approach Delay, s/veh		15.3			3.3			16.5			15.2	
Approach LOS		B			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.6	32.9		22.5	4.9	32.6		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.0	23.5		18.0				
Max Q Clear Time (g_c+I1), s	2.0	19.0		2.9	2.2	3.8		4.9				
Green Ext Time (p_c), s	0.0	3.0		0.1	0.0	4.7		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			10.8									
HCM 6th LOS			B									



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1071	140	8	787	78	5
Future Volume (vph)	1071	140	8	787	78	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300	200		175	0
Storage Lanes		1	1		1	1
Taper Length (ft)			90		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	55			55	30	
Link Distance (ft)	1381			386	451	
Travel Time (s)	17.1			4.8	10.3	
Confl. Peds. (#/hr)		5	5		5	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)						

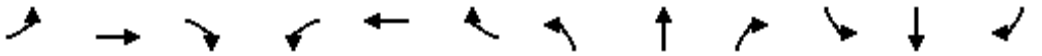
Intersection Summary	
Area Type:	Other



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1071	140	8	787	78	5
Future Volume (veh/h)	1071	140	8	787	78	5
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1116	146	8	820	81	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1651	732	19	1955	534	476
Arrive On Green	0.46	0.46	0.01	0.55	0.30	0.30
Sat Flow, veh/h	3647	1577	1781	3647	1781	1585
Grp Volume(v), veh/h	1116	146	8	820	81	5
Grp Sat Flow(s),veh/h/ln	1777	1577	1781	1777	1781	1585
Q Serve(g_s), s	14.7	3.3	0.3	8.1	2.0	0.1
Cycle Q Clear(g_c), s	14.7	3.3	0.3	8.1	2.0	0.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1651	732	19	1955	534	476
V/C Ratio(X)	0.68	0.20	0.43	0.42	0.15	0.01
Avail Cap(c_a), veh/h	1651	732	148	1955	534	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.5	9.5	29.5	7.9	15.4	14.7
Incr Delay (d2), s/veh	2.2	0.6	15.1	0.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.9	0.2	2.0	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.8	10.1	44.6	8.6	16.0	14.8
LnGrp LOS	B	B	D	A	B	B
Approach Vol, veh/h	1262			828	86	
Approach Delay, s/veh	14.2			8.9	15.9	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.1	32.4				37.5	22.5
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	5.0	23.5				33.0	18.0
Max Q Clear Time (g_c+I1), s	2.3	16.7				10.1	4.0
Green Ext Time (p_c), s	0.0	3.9				5.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	94	18	2	66	4	12	66	1	14	110	22
Future Volume (vph)	10	94	18	2	66	4	12	66	1	14	110	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		50	0		50	0		50	0		50
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		799			1333			1318			3757	
Travel Time (s)		18.2			30.3			20.0			56.9	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												

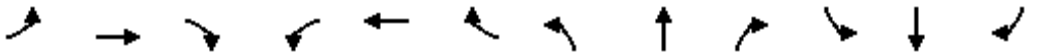
Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	94	18	2	66	4	12	66	1	14	110	22
Future Vol, veh/h	10	94	18	2	66	4	12	66	1	14	110	22
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	106	20	2	74	4	13	74	1	16	124	25
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	8.9	8.7	8.9	9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	15%	0%	10%	0%	3%	0%	11%	0%
Vol Thru, %	85%	0%	90%	0%	97%	0%	89%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	78	1	104	18	68	4	124	22
LT Vol	12	0	10	0	2	0	14	0
Through Vol	66	0	94	0	66	0	110	0
RT Vol	0	1	0	18	0	4	0	22
Lane Flow Rate	88	1	117	20	76	4	139	25
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.13	0.001	0.173	0.026	0.113	0.006	0.203	0.031
Departure Headway (Hd)	5.34	4.559	5.317	4.565	5.344	4.625	5.245	4.485
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	670	782	674	782	669	772	684	796
Service Time	3.084	2.302	3.055	2.302	3.086	2.366	2.983	2.223
HCM Lane V/C Ratio	0.131	0.001	0.174	0.026	0.114	0.005	0.203	0.031
HCM Control Delay	8.9	7.3	9.2	7.4	8.8	7.4	9.3	7.4
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.4	0	0.6	0.1	0.4	0	0.8	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	29	20	1	15	20	10	142	7	21	163	11
Future Volume (vph)	13	29	20	1	15	20	10	142	7	21	163	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		50	0		50
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1333			785			1313			4316	
Travel Time (s)		30.3			17.8			29.8			98.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

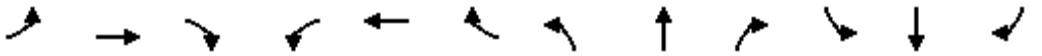
Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↓	↱		↑↓	↱		↑↓	↱		↑↓	↱
Traffic Vol, veh/h	13	29	20	1	15	20	10	142	7	21	163	11
Future Vol, veh/h	13	29	20	1	15	20	10	142	7	21	163	11
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	50	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	34	24	1	18	24	12	167	8	25	192	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	47	0	0	63	0	0	209	118	44	194	118	28
Stage 1	-	-	-	-	-	-	69	69	-	25	25	-
Stage 2	-	-	-	-	-	-	140	49	-	169	93	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1560	-	-	1540	-	-	748	772	1026	765	772	1047
Stage 1	-	-	-	-	-	-	941	837	-	993	874	-
Stage 2	-	-	-	-	-	-	863	854	-	833	818	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1553	-	-	1533	-	-	583	756	1016	619	756	1037
Mov Cap-2 Maneuver	-	-	-	-	-	-	583	756	-	619	756	-
Stage 1	-	-	-	-	-	-	927	824	-	978	869	-
Stage 2	-	-	-	-	-	-	660	849	-	649	806	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.2	11.3	11.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	742	1016	1553	-	-	1533	-	-	737	1037
HCM Lane V/C Ratio	0.241	0.008	0.01	-	-	0.001	-	-	0.294	0.012
HCM Control Delay (s)	11.4	8.6	7.3	0	-	7.3	0	-	11.9	8.5
HCM Lane LOS	B	A	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0.9	0	0	-	-	0	-	-	1.2	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	385	7	4	425	26	2	36	7	46	49	25
Future Volume (vph)	20	385	7	4	425	26	2	36	7	46	49	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		721			1329			455			1318	
Travel Time (s)		16.4			30.2			6.9			20.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

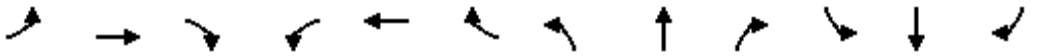
Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	385	7	4	425	26	2	36	7	46	49	25
Future Vol, veh/h	20	385	7	4	425	26	2	36	7	46	49	25
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	405	7	4	447	27	2	38	7	48	52	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	479	0	0	417	0	0	969	943	419	952	933	471
Stage 1	-	-	-	-	-	-	456	456	-	474	474	-
Stage 2	-	-	-	-	-	-	513	487	-	478	459	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.8	6.52	6.22	6.8	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1083	-	-	1142	-	-	254	263	634	260	266	593
Stage 1	-	-	-	-	-	-	584	568	-	571	558	-
Stage 2	-	-	-	-	-	-	544	550	-	568	566	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1078	-	-	1137	-	-	200	254	628	222	257	587
Mov Cap-2 Maneuver	-	-	-	-	-	-	200	254	-	222	257	-
Stage 1	-	-	-	-	-	-	570	554	-	557	553	-
Stage 2	-	-	-	-	-	-	467	545	-	510	552	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.1	20.3	26.5
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	250	628	1078	-	-	1137	-	-	239	587
HCM Lane V/C Ratio	0.16	0.012	0.02	-	-	0.004	-	-	0.418	0.045
HCM Control Delay (s)	22.1	10.8	8.4	-	-	8.2	-	-	30.5	11.4
HCM Lane LOS	C	B	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.6	0	0.1	-	-	0	-	-	1.9	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	466	11	53	484	23	5	50	54	20	56	111
Future Volume (vph)	93	466	11	53	484	23	5	50	54	20	56	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1329			729			417			1313	
Travel Time (s)		30.2			16.6			9.5			29.8	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

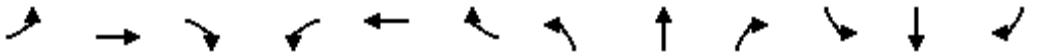
Intersection	
Int Delay, s/veh	16.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	93	466	11	53	484	23	5	50	54	20	56	111
Future Vol, veh/h	93	466	11	53	484	23	5	50	54	20	56	111
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	104	524	12	60	544	26	6	56	61	22	63	125

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	575	0	0	541	0	0	1519	1438	540	1484	1431	567
Stage 1	-	-	-	-	-	-	743	743	-	682	682	-
Stage 2	-	-	-	-	-	-	776	695	-	802	749	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	998	-	-	1028	-	-	97	133	542	103	134	523
Stage 1	-	-	-	-	-	-	407	422	-	440	450	-
Stage 2	-	-	-	-	-	-	390	444	-	378	419	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	993	-	-	1023	-	-	36	111	537	49	112	518
Mov Cap-2 Maneuver	-	-	-	-	-	-	36	111	-	49	112	-
Stage 1	-	-	-	-	-	-	363	376	-	392	421	-
Stage 2	-	-	-	-	-	-	236	416	-	254	373	-

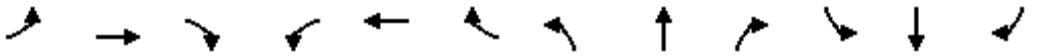
Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.8	56.5	86.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	93	537	993	-	-	1023	-	-	84	518
HCM Lane V/C Ratio	0.664	0.113	0.105	-	-	0.058	-	-	1.017	0.241
HCM Control Delay (s)	99.7	12.6	9.1	-	-	8.7	-	-	191.7	14.1
HCM Lane LOS	F	B	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	3.2	0.4	0.4	-	-	0.2	-	-	5.7	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	466	11	53	484	23	5	50	54	20	56	111
Future Volume (vph)	93	466	11	53	484	23	5	50	54	20	56	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1329			729			417			1313	
Travel Time (s)		30.2			16.6			9.5			29.8	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	466	11	53	484	23	5	50	54	20	56	111
Future Volume (veh/h)	93	466	11	53	484	23	5	50	54	20	56	111
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		0.99	0.99		0.99	0.99		0.99
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	524	12	60	544	26	6	56	61	22	63	125
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	769	18	94	709	34	85	531	472	166	427	472
Arrive On Green	0.07	0.42	0.42	0.05	0.40	0.40	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	1821	42	1781	1770	85	65	1768	1572	303	1423	1572
Grp Volume(v), veh/h	104	0	536	60	0	570	62	0	61	85	0	125
Grp Sat Flow(s),veh/h/ln	1781	0	1863	1781	0	1855	1833	0	1572	1726	0	1572
Q Serve(g_s), s	3.4	0.0	14.0	2.0	0.0	16.0	0.0	0.0	1.7	0.0	0.0	3.6
Cycle Q Clear(g_c), s	3.4	0.0	14.0	2.0	0.0	16.0	1.4	0.0	1.7	2.0	0.0	3.6
Prop In Lane	1.00		0.02	1.00		0.05	0.10		1.00	0.26		1.00
Lane Grp Cap(c), veh/h	133	0	787	94	0	742	616	0	472	593	0	472
V/C Ratio(X)	0.78	0.00	0.68	0.64	0.00	0.77	0.10	0.00	0.13	0.14	0.00	0.27
Avail Cap(c_a), veh/h	163	0	787	151	0	742	616	0	472	593	0	472
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	0.00	1.00
Uniform Delay (d), s/veh	27.3	0.0	14.1	27.9	0.0	15.6	15.2	0.0	15.3	15.4	0.0	16.0
Incr Delay (d2), s/veh	17.7	0.0	4.7	7.0	0.0	7.5	0.3	0.0	0.6	0.5	0.0	1.4
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	2.0	0.0	6.1	1.0	0.0	7.4	0.6	0.0	0.6	0.9	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.0	0.0	18.8	34.9	0.0	23.1	15.5	0.0	15.9	15.9	0.0	17.3
LnGrp LOS	D	A	B	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		640			630			123			210	
Approach Delay, s/veh		23.0			24.2			15.7			16.8	
Approach LOS		C			C			B			B	

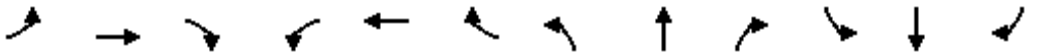
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	29.8		22.5	9.0	28.5		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	23.4		18.0	5.5	23.0		18.0				
Max Q Clear Time (g_c+I1), s	4.0	16.0		5.6	5.4	18.0		3.7				
Green Ext Time (p_c), s	0.0	2.0		0.6	0.0	1.7		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		22.1	
HCM 6th LOS		C	

APPENDIX 6.1:

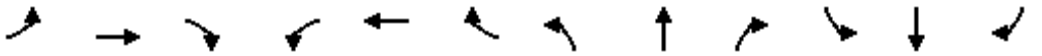
EAPC (2024) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

This Page Intentionally Left Blank



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	682	507	203	763	296	377	478	143	111	244	51
Future Volume (vph)	117	682	507	203	763	296	377	478	143	111	244	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210		170	275		200	170		105	140		50
Storage Lanes	2		1	2		1	1		1	1		1
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			45	
Link Distance (ft)		596			1310			710			927	
Travel Time (s)		7.4			16.2			10.8			14.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												

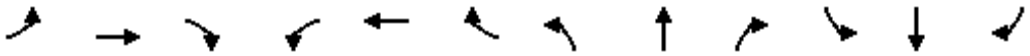
Intersection Summary	
Area Type:	Other



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	682	507	203	763	296	377	478	143	111	244	51
Future Volume (veh/h)	117	682	507	203	763	296	377	478	143	111	244	51
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		0.99
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	127	741	551	221	829	322	410	520	155	121	265	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	1565	483	288	1709	528	446	1228	545	151	640	283
Arrive On Green	0.06	0.31	0.31	0.08	0.33	0.33	0.25	0.35	0.35	0.08	0.18	0.18
Sat Flow, veh/h	3456	5106	1577	3456	5106	1578	1781	3554	1578	1781	3554	1572
Grp Volume(v), veh/h	127	741	551	221	829	322	410	520	155	121	265	55
Grp Sat Flow(s),veh/h/ln	1728	1702	1577	1728	1702	1578	1781	1777	1578	1781	1777	1572
Q Serve(g_s), s	3.6	11.8	30.6	6.3	12.9	17.1	22.4	11.2	7.1	6.7	6.6	3.0
Cycle Q Clear(g_c), s	3.6	11.8	30.6	6.3	12.9	17.1	22.4	11.2	7.1	6.7	6.6	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	1565	483	288	1709	528	446	1228	545	151	640	283
V/C Ratio(X)	0.67	0.47	1.14	0.77	0.49	0.61	0.92	0.42	0.28	0.80	0.41	0.19
Avail Cap(c_a), veh/h	276	1565	483	328	1709	528	525	1228	545	239	640	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	28.1	34.7	44.9	26.4	27.8	36.5	25.1	23.7	44.9	36.3	34.8
Incr Delay (d2), s/veh	4.0	1.0	85.4	9.3	1.0	5.2	19.6	1.1	1.3	9.9	2.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.6	22.4	2.9	4.9	6.8	11.6	4.6	2.7	3.3	2.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.3	29.2	120.1	54.1	27.4	33.0	56.1	26.2	25.0	54.8	38.3	36.4
LnGrp LOS	D	C	F	D	C	C	E	C	C	D	D	D
Approach Vol, veh/h		1419			1372			1085			441	
Approach Delay, s/veh		66.4			33.0			37.3			42.6	
Approach LOS		E			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	35.1	29.5	22.5	10.0	38.0	13.0	39.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.5	25.0	29.5	18.0	8.0	26.5	13.4	34.1
Max Q Clear Time (g_c+I1), s	8.3	32.6	24.4	8.6	5.6	19.1	8.7	13.2
Green Ext Time (p_c), s	0.1	0.0	0.6	1.1	0.1	3.5	0.1	3.6

Intersection Summary	
HCM 6th Ctrl Delay	46.0
HCM 6th LOS	D



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	810	71	2	1206	4	103	1	6	1	1	3
Future Volume (vph)	1	810	71	2	1206	4	103	1	6	1	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		100	300		0	35		0	35		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	90			90			60			60		
Link Speed (mph)		55			55			45			30	
Link Distance (ft)		2281			1381			545			687	
Travel Time (s)		28.3			17.1			8.3			15.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	19.4

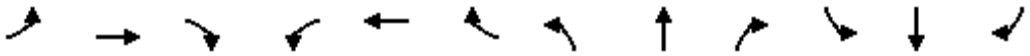
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	810	71	2	1206	4	103	1	6	1	1	3
Future Vol, veh/h	1	810	71	2	1206	4	103	1	6	1	1	3
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	100	300	-	-	35	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	890	78	2	1325	4	113	1	7	1	1	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1334	0	0	973	0	0	1569	2235	455	1789	2311	675
Stage 1	-	-	-	-	-	-	897	897	-	1336	1336	-
Stage 2	-	-	-	-	-	-	672	1338	-	453	975	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	513	-	-	704	-	-	~ 75	42	552	51	38	396
Stage 1	-	-	-	-	-	-	301	357	-	162	221	-
Stage 2	-	-	-	-	-	-	412	220	-	556	328	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	511	-	-	701	-	-	~ 72	41	547	49	37	392
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 72	41	-	49	37	-
Stage 1	-	-	-	-	-	-	299	355	-	161	219	-
Stage 2	-	-	-	-	-	-	403	218	-	544	326	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	$ 386.9	46
HCM LOS			F	E

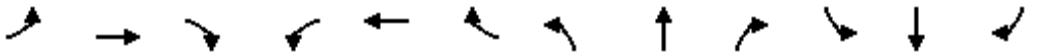
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	72	198	511	-	-	701	-	-	49	115
HCM Lane V/C Ratio	1.572	0.039	0.002	-	-	0.003	-	-	0.022	0.038
HCM Control Delay (s)	$ 411.6	23.9	12.1	-	-	10.2	-	-	80.1	37.5
HCM Lane LOS	F	C	B	-	-	B	-	-	F	E
HCM 95th %tile Q(veh)	9.6	0.1	0	-	-	0	-	-	0.1	0.1

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	810	71	2	1206	4	103	1	6	1	1	3
Future Volume (vph)	1	810	71	2	1206	4	103	1	6	1	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		100	300		0	35		0	35		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	90			90			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			30	
Link Distance (ft)		2281			1381			545			687	
Travel Time (s)		28.3			17.1			8.3			15.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	810	71	2	1206	4	103	1	6	1	1	3
Future Volume (veh/h)	1	810	71	2	1206	4	103	1	6	1	1	3
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		0.99	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	1	890	78	2	1325	4	113	1	7	1	1	3
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	1678	745	5	1721	5	539	60	422	535	123	369
Arrive On Green	0.00	0.47	0.47	0.00	0.16	0.16	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	3554	1577	1781	3634	11	1405	201	1408	1400	410	1231
Grp Volume(v), veh/h	1	890	78	2	648	681	113	0	8	1	0	4
Grp Sat Flow(s),veh/h/ln	1781	1777	1577	1781	1777	1868	1405	0	1609	1400	0	1641
Q Serve(g_s), s	0.0	10.6	1.6	0.1	21.0	21.0	3.7	0.0	0.2	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	10.6	1.6	0.1	21.0	21.0	3.8	0.0	0.2	0.2	0.0	0.1
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.88	1.00		0.75
Lane Grp Cap(c), veh/h	3	1678	745	5	842	885	539	0	483	535	0	492
V/C Ratio(X)	0.34	0.53	0.10	0.41	0.77	0.77	0.21	0.00	0.02	0.00	0.00	0.01
Avail Cap(c_a), veh/h	148	1678	745	148	842	885	539	0	483	535	0	492
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.81	0.81	0.81	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.9	11.1	8.8	29.9	22.2	22.2	16.1	0.0	14.8	14.9	0.0	14.7
Incr Delay (d2), s/veh	56.0	1.2	0.3	39.3	5.5	5.2	0.9	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	3.1	0.5	0.1	10.7	11.2	1.1	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.9	12.4	9.1	69.3	27.7	27.4	16.9	0.0	14.8	14.9	0.0	14.8
LnGrp LOS	F	B	A	E	C	C	B	A	B	B	A	B
Approach Vol, veh/h		969			1331			121			5	
Approach Delay, s/veh		12.2			27.6			16.8			14.8	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.7	32.8		22.5	4.6	32.9		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.0	23.5		18.0				
Max Q Clear Time (g_c+I1), s	2.1	12.6		2.2	2.0	23.0		5.8				
Green Ext Time (p_c), s	0.0	4.2		0.0	0.0	0.4		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			20.9									
HCM 6th LOS			C									



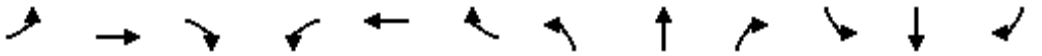
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	736	80	3	1065	146	11
Future Volume (vph)	736	80	3	1065	146	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300	200		175	0
Storage Lanes		1	1		1	1
Taper Length (ft)			90		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	55			55	30	
Link Distance (ft)	1381			386	451	
Travel Time (s)	17.1			4.8	10.3	
Confl. Peds. (#/hr)		5	5		5	5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						

Intersection Summary	
Area Type:	Other

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	736	80	3	1065	146	11
Future Volume (veh/h)	736	80	3	1065	146	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	783	85	3	1133	155	12
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1644	729	7	1925	549	489
Arrive On Green	0.46	0.46	0.00	0.54	0.31	0.31
Sat Flow, veh/h	3647	1576	1781	3647	1781	1585
Grp Volume(v), veh/h	783	85	3	1133	155	12
Grp Sat Flow(s),veh/h/ln	1777	1576	1781	1777	1781	1585
Q Serve(g_s), s	9.1	1.8	0.1	12.9	4.0	0.3
Cycle Q Clear(g_c), s	9.1	1.8	0.1	12.9	4.0	0.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1644	729	7	1925	549	489
V/C Ratio(X)	0.48	0.12	0.41	0.59	0.28	0.02
Avail Cap(c_a), veh/h	1644	729	148	1925	549	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.1	9.2	29.8	9.3	15.7	14.5
Incr Delay (d2), s/veh	1.0	0.3	33.7	1.3	1.3	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	2.7	0.5	0.1	3.4	1.7	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.1	9.5	63.5	10.6	17.0	14.6
LnGrp LOS	B	A	E	B	B	B
Approach Vol, veh/h	868			1136	167	
Approach Delay, s/veh	11.8			10.7	16.8	
Approach LOS	B			B	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	4.7	32.3				37.0	23.0
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	5.0	23.0				32.5	18.5
Max Q Clear Time (g_c+I1), s	2.1	11.1				14.9	6.0
Green Ext Time (p_c), s	0.0	3.9				6.7	0.3

Intersection Summary			
HCM 6th Ctrl Delay		11.6	
HCM 6th LOS		B	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	132	31	1	163	18	36	60	3	8	92	26
Future Volume (vph)	22	132	31	1	163	18	36	60	3	8	92	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		50	0		50	0		50	0		50
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		799			1333			1318			3757	
Travel Time (s)		18.2			30.3			20.0			56.9	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Shared Lane Traffic (%)												

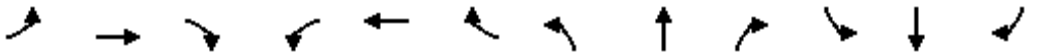
Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	132	31	1	163	18	36	60	3	8	92	26
Future Vol, veh/h	22	132	31	1	163	18	36	60	3	8	92	26
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	27	163	38	1	201	22	44	74	4	10	114	32
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	10.4	10.7	10.4	9.9
HCM LOS	B	B	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	38%	0%	14%	0%	1%	0%	8%	0%
Vol Thru, %	62%	0%	86%	0%	99%	0%	92%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	96	3	154	31	164	18	100	26
LT Vol	36	0	22	0	1	0	8	0
Through Vol	60	0	132	0	163	0	92	0
RT Vol	0	3	0	31	0	18	0	26
Lane Flow Rate	119	4	190	38	202	22	123	32
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.205	0.005	0.303	0.053	0.319	0.031	0.207	0.047
Departure Headway (Hd)	6.213	5.315	5.737	4.958	5.673	4.964	6.022	5.273
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	578	674	627	723	636	722	598	680
Service Time	3.941	3.043	3.46	2.682	3.396	2.686	3.749	3
HCM Lane V/C Ratio	0.206	0.006	0.303	0.053	0.318	0.03	0.206	0.047
HCM Control Delay	10.5	8.1	10.9	8	11	7.8	10.3	8.3
HCM Lane LOS	B	A	B	A	B	A	B	A
HCM 95th-tile Q	0.8	0	1.3	0.2	1.4	0.1	0.8	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	48	18	3	51	12	33	137	3	6	171	12
Future Volume (vph)	10	48	18	3	51	12	33	137	3	6	171	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		50	0		50
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1333			785			1313			4316	
Travel Time (s)		30.3			17.8			29.8			98.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

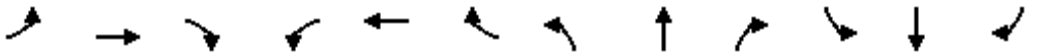
Intersection	
Int Delay, s/veh	9.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↓	↱		↑↓	↱		↑↓	↱		↑↓	↱
Traffic Vol, veh/h	10	48	18	3	51	12	33	137	3	6	171	12
Future Vol, veh/h	10	48	18	3	51	12	33	137	3	6	171	12
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	50	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	59	22	4	62	15	40	167	4	7	209	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	82	0	0	86	0	0	283	178	69	260	185	72
Stage 1	-	-	-	-	-	-	88	88	-	75	75	-
Stage 2	-	-	-	-	-	-	195	90	-	185	110	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1515	-	-	1510	-	-	669	716	994	693	709	990
Stage 1	-	-	-	-	-	-	920	822	-	934	833	-
Stage 2	-	-	-	-	-	-	807	820	-	817	804	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1508	-	-	1503	-	-	497	701	985	554	694	981
Mov Cap-2 Maneuver	-	-	-	-	-	-	497	701	-	554	694	-
Stage 1	-	-	-	-	-	-	908	811	-	922	826	-
Stage 2	-	-	-	-	-	-	590	813	-	638	794	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.3	13	12.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	649	985	1508	-	-	1503	-	-	688	981
HCM Lane V/C Ratio	0.319	0.004	0.008	-	-	0.002	-	-	0.314	0.015
HCM Control Delay (s)	13.1	8.7	7.4	0	-	7.4	0	-	12.6	8.7
HCM Lane LOS	B	A	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	1.4	0	0	-	-	0	-	-	1.3	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	395	3	3	416	60	1	18	2	57	28	33
Future Volume (vph)	17	395	3	3	416	60	1	18	2	57	28	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		721			1329			455			1318	
Travel Time (s)		16.4			30.2			6.9			20.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

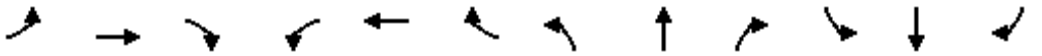
Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	395	3	3	416	60	1	18	2	57	28	33
Future Vol, veh/h	17	395	3	3	416	60	1	18	2	57	28	33
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	439	3	3	462	67	1	20	2	63	31	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	534	0	0	447	0	0	1025	1024	451	1002	992	506
Stage 1	-	-	-	-	-	-	484	484	-	507	507	-
Stage 2	-	-	-	-	-	-	541	540	-	495	485	-
Critical Hdwy	4.12	-	-	4.12	-	-	7	6.52	6.22	7	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1034	-	-	1113	-	-	221	235	608	229	246	566
Stage 1	-	-	-	-	-	-	564	552	-	548	539	-
Stage 2	-	-	-	-	-	-	525	521	-	556	552	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1029	-	-	1108	-	-	181	228	602	207	238	561
Mov Cap-2 Maneuver	-	-	-	-	-	-	181	228	-	207	238	-
Stage 1	-	-	-	-	-	-	551	539	-	535	535	-
Stage 2	-	-	-	-	-	-	459	517	-	521	539	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.1	21.6	27.8
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	225	602	1029	-	-	1108	-	-	216	561
HCM Lane V/C Ratio	0.094	0.004	0.018	-	-	0.003	-	-	0.437	0.065
HCM Control Delay (s)	22.7	11	8.6	-	-	8.3	-	-	34	11.9
HCM Lane LOS	C	B	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.3	0	0.1	-	-	0	-	-	2.1	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	432	10	51	454	30	14	73	91	32	73	102
Future Volume (vph)	76	432	10	51	454	30	14	73	91	32	73	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1329			729			417			1313	
Travel Time (s)		30.2			16.6			9.5			29.8	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

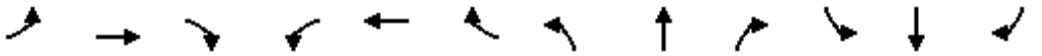
Intersection	
Int Delay, s/veh	33.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	76	432	10	51	454	30	14	73	91	32	73	102
Future Vol, veh/h	76	432	10	51	454	30	14	73	91	32	73	102
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	84	480	11	57	504	33	16	81	101	36	81	113

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	542	0	0	496	0	0	1396	1315	496	1390	1304	531
Stage 1	-	-	-	-	-	-	659	659	-	640	640	-
Stage 2	-	-	-	-	-	-	737	656	-	750	664	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1027	-	-	1068	-	-	119	158	574	120	160	548
Stage 1	-	-	-	-	-	-	453	461	-	464	470	-
Stage 2	-	-	-	-	-	-	410	462	-	403	458	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1022	-	-	1063	-	-	45	136	569	47	138	543
Mov Cap-2 Maneuver	-	-	-	-	-	-	45	136	-	47	138	-
Stage 1	-	-	-	-	-	-	414	421	-	424	442	-
Stage 2	-	-	-	-	-	-	249	435	-	244	418	-

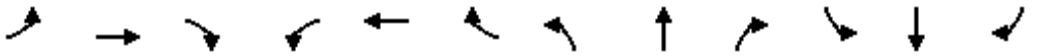
Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.8	79	158.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	103	569	1022	-	-	1063	-	-	87	543
HCM Lane V/C Ratio	0.939	0.178	0.083	-	-	0.053	-	-	1.341	0.209
HCM Control Delay (s)	148.4	12.7	8.8	-	-	8.6	-	-	298.8	13.4
HCM Lane LOS	F	B	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	5.6	0.6	0.3	-	-	0.2	-	-	8.7	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	432	10	51	454	30	14	73	91	32	73	102
Future Volume (vph)	76	432	10	51	454	30	14	73	91	32	73	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1329			729			417			1313	
Travel Time (s)		30.2			16.6			9.5			29.8	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	432	10	51	454	30	14	73	91	32	73	102
Future Volume (veh/h)	76	432	10	51	454	30	14	73	91	32	73	102
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		0.99	0.99		0.99	0.99		0.99
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	84	480	11	57	504	33	16	81	101	36	81	113
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	112	769	18	91	712	47	117	490	474	191	388	474
Arrive On Green	0.06	0.42	0.42	0.05	0.41	0.41	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	1821	42	1781	1735	114	155	1625	1572	373	1287	1572
Grp Volume(v), veh/h	84	0	491	57	0	537	97	0	101	117	0	113
Grp Sat Flow(s),veh/h/ln	1781	0	1863	1781	0	1849	1780	0	1572	1660	0	1572
Q Serve(g_s), s	2.8	0.0	12.4	1.9	0.0	14.5	0.0	0.0	2.9	0.0	0.0	3.2
Cycle Q Clear(g_c), s	2.8	0.0	12.4	1.9	0.0	14.5	2.3	0.0	2.9	2.8	0.0	3.2
Prop In Lane	1.00		0.02	1.00		0.06	0.16		1.00	0.31		1.00
Lane Grp Cap(c), veh/h	112	0	786	91	0	759	607	0	474	579	0	474
V/C Ratio(X)	0.75	0.00	0.62	0.63	0.00	0.71	0.16	0.00	0.21	0.20	0.00	0.24
Avail Cap(c_a), veh/h	157	0	786	151	0	759	607	0	474	579	0	474
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	0.00	1.00
Uniform Delay (d), s/veh	27.7	0.0	13.6	27.9	0.0	14.7	15.4	0.0	15.6	15.6	0.0	15.8
Incr Delay (d2), s/veh	11.8	0.0	3.7	6.9	0.0	5.5	0.6	0.0	1.0	0.8	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	5.3	0.9	0.0	6.4	1.0	0.0	1.1	1.2	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.5	0.0	17.3	34.8	0.0	20.2	16.0	0.0	16.7	16.4	0.0	16.9
LnGrp LOS	D	A	B	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		575			594			198			230	
Approach Delay, s/veh		20.6			21.6			16.3			16.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	29.8		22.6	8.3	29.1		22.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	23.3		18.1	5.3	23.1		18.1				
Max Q Clear Time (g_c+I1), s	3.9	14.4		5.2	4.8	16.5		4.9				
Green Ext Time (p_c), s	0.0	2.1		0.8	0.0	1.9		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		19.9	
HCM 6th LOS		B	



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	16	94	3	5	69
Future Volume (vph)	8	16	94	3	5	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	331		673			545
Travel Time (s)	7.5		10.2			8.3
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	16	94	3	5	69
Future Vol, veh/h	8	16	94	3	5	69
Conflicting Peds, #/hr	5	5	0	5	5	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	9	17	102	3	5	75

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	199	114	0	0	110	0
Stage 1	109	-	-	-	-	-
Stage 2	90	-	-	-	-	-
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	790	939	-	-	1480	-
Stage 1	916	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	779	930	-	-	1473	-
Mov Cap-2 Maneuver	779	-	-	-	-	-
Stage 1	911	-	-	-	-	-
Stage 2	926	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	874	1473	-
HCM Lane V/C Ratio	-	-	0.03	0.004	-
HCM Control Delay (s)	-	-	9.2	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	12	8	89	4	3	74
Future Volume (vph)	12	8	89	4	3	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	321		3757			673
Travel Time (s)	7.3		56.9			10.2
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						

Intersection Summary	
Area Type:	Other

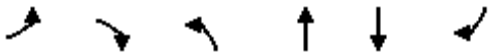
Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	8	89	4	3	74
Future Vol, veh/h	12	8	89	4	3	74
Conflicting Peds, #/hr	5	5	0	5	5	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	13	9	97	4	3	80

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	195	109	0	0	106	0
Stage 1	104	-	-	-	-	-
Stage 2	91	-	-	-	-	-
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	794	945	-	-	1485	-
Stage 1	920	-	-	-	-	-
Stage 2	933	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	784	936	-	-	1478	-
Mov Cap-2 Maneuver	784	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	926	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	838	1478	-
HCM Lane V/C Ratio	-	-	0.026	0.002	-
HCM Control Delay (s)	-	-	9.4	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	12	24	8	145	79	4
Future Volume (vph)	12	24	8	145	79	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30			30	30	
Link Distance (ft)	248			4316	451	
Travel Time (s)	5.6			98.1	10.3	
Confl. Peds. (#/hr)	5	5	5			5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						

Intersection Summary	
Area Type:	Other

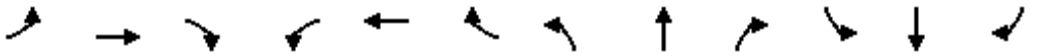
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	24	8	145	79	4
Future Vol, veh/h	12	24	8	145	79	4
Conflicting Peds, #/hr	5	5	5	0	0	5
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	13	26	9	158	86	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	274	98	95	0	-	0
Stage 1	93	-	-	-	-	-
Stage 2	181	-	-	-	-	-
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	716	958	1499	-	-	-
Stage 1	931	-	-	-	-	-
Stage 2	850	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	704	949	1492	-	-	-
Mov Cap-2 Maneuver	704	-	-	-	-	-
Stage 1	920	-	-	-	-	-
Stage 2	846	-	-	-	-	-

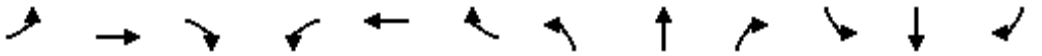
Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1492	-	850	-	-
HCM Lane V/C Ratio	0.006	-	0.046	-	-
HCM Control Delay (s)	7.4	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	148	947	521	191	733	176	442	514	146	277	449	111
Future Volume (vph)	148	947	521	191	733	176	442	514	146	277	449	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	210		170	275		200	170		105	140		50
Storage Lanes	2		1	2		1	1		1	1		1
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			45	
Link Distance (ft)		596			1310			710			927	
Travel Time (s)		7.4			16.2			10.8			14.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	947	521	191	733	176	442	514	146	277	449	111
Future Volume (veh/h)	148	947	521	191	733	176	442	514	146	277	449	111
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		0.99	1.00		0.99	1.00		0.99
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	156	997	548	201	772	185	465	541	154	292	473	117
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	1441	445	267	1507	465	500	979	434	330	640	283
Arrive On Green	0.06	0.28	0.28	0.08	0.30	0.30	0.28	0.28	0.28	0.19	0.18	0.18
Sat Flow, veh/h	3456	5106	1577	3456	5106	1577	1781	3554	1576	1781	3554	1572
Grp Volume(v), veh/h	156	997	548	201	772	185	465	541	154	292	473	117
Grp Sat Flow(s),veh/h/ln	1728	1702	1577	1728	1702	1577	1781	1777	1576	1781	1777	1572
Q Serve(g_s), s	4.4	17.4	28.2	5.7	12.6	9.4	25.4	13.0	7.8	16.0	12.6	6.6
Cycle Q Clear(g_c), s	4.4	17.4	28.2	5.7	12.6	9.4	25.4	13.0	7.8	16.0	12.6	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	1441	445	267	1507	465	500	979	434	330	640	283
V/C Ratio(X)	0.70	0.69	1.23	0.75	0.51	0.40	0.93	0.55	0.35	0.89	0.74	0.41
Avail Cap(c_a), veh/h	308	1441	445	294	1507	465	565	979	434	474	640	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	32.0	35.9	45.2	29.3	28.1	35.0	31.0	29.1	39.7	38.8	36.3
Incr Delay (d2), s/veh	4.2	2.7	122.5	9.6	1.2	2.5	20.9	2.2	2.3	13.3	7.5	4.4
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	1.9	6.9	25.3	2.7	4.9	3.7	13.2	5.6	0.3	7.9	5.9	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.0	34.8	158.4	54.8	30.5	30.7	55.9	33.2	31.4	53.0	46.3	40.7
LnGrp LOS	D	C	F	D	C	C	E	C	C	D	D	D
Approach Vol, veh/h		1701			1158			1160			882	
Approach Delay, s/veh		76.0			34.8			42.1			47.8	
Approach LOS		E			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	32.7	32.6	22.5	10.9	34.0	23.0	32.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	23.8	31.7	18.0	8.9	23.4	26.6	23.1
Max Q Clear Time (g_c+I1), s	7.7	30.2	27.4	14.6	6.4	14.6	18.0	15.0
Green Ext Time (p_c), s	0.0	0.0	0.6	1.1	0.1	3.4	0.5	2.4

Intersection Summary	
HCM 6th Ctrl Delay	53.1
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1215	138	5	868	1	72	1	4	5	15	19
Future Volume (vph)	5	1215	138	5	868	1	72	1	4	5	15	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		100	300		0	35		0	35		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	90			90			60			60		
Link Speed (mph)		55			55			45			30	
Link Distance (ft)		2281			1381			545			687	
Travel Time (s)		28.3			17.1			8.3			15.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	24.9

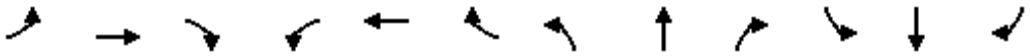
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1215	138	5	868	1	72	1	4	5	15	19
Future Vol, veh/h	5	1215	138	5	868	1	72	1	4	5	15	19
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	100	300	-	-	35	-	-	35	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1253	142	5	895	1	74	1	4	5	15	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	901	0	0	1400	0	0	1738	2179	637	1553	2321	458
Stage 1	-	-	-	-	-	-	1268	1268	-	911	911	-
Stage 2	-	-	-	-	-	-	470	911	-	642	1410	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	750	-	-	484	-	-	~ 56	46	420	77	37	550
Stage 1	-	-	-	-	-	-	178	238	-	295	351	-
Stage 2	-	-	-	-	-	-	543	351	-	429	203	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	746	-	-	482	-	-	~ 35	45	416	73	36	545
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 35	45	-	73	36	-
Stage 1	-	-	-	-	-	-	176	235	-	292	346	-
Stage 2	-	-	-	-	-	-	493	346	-	418	201	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	$ 714.6	85.5
HCM LOS			F	F

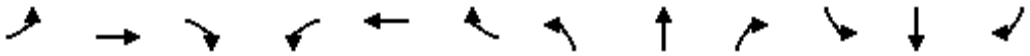
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	35	157	746	-	-	482	-	-	73	75
HCM Lane V/C Ratio	2.121	0.033	0.007	-	-	0.011	-	-	0.071	0.467
HCM Control Delay (s)	$ 762.2	28.7	9.9	-	-	12.6	-	-	58	89.5
HCM Lane LOS	F	D	A	-	-	B	-	-	F	F
HCM 95th %tile Q(veh)	8.3	0.1	0	-	-	0	-	-	0.2	1.9

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1215	138	5	868	1	72	1	4	5	15	19
Future Volume (vph)	5	1215	138	5	868	1	72	1	4	5	15	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		100	300		0	35		0	35		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	90			90			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			30	
Link Distance (ft)		2281			1381			545			687	
Travel Time (s)		28.3			17.1			8.3			15.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1215	138	5	868	1	72	1	4	5	15	19
Future Volume (veh/h)	5	1215	138	5	868	1	72	1	4	5	15	19
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		0.99	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	5	1253	142	5	895	1	74	1	4	5	15	20
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	1664	738	12	1706	2	510	98	391	538	217	290
Arrive On Green	0.01	0.47	0.47	0.01	0.94	0.94	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	3554	1577	1781	3642	4	1367	326	1303	1404	725	966
Grp Volume(v), veh/h	5	1253	142	5	437	459	74	0	5	5	0	35
Grp Sat Flow(s),veh/h/ln	1781	1777	1577	1781	1777	1870	1367	0	1628	1404	0	1691
Q Serve(g_s), s	0.2	17.4	3.2	0.2	1.8	1.8	2.5	0.0	0.1	0.2	0.0	0.9
Cycle Q Clear(g_c), s	0.2	17.4	3.2	0.2	1.8	1.8	3.3	0.0	0.1	0.3	0.0	0.9
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.80	1.00		0.57
Lane Grp Cap(c), veh/h	12	1664	738	12	832	876	510	0	488	538	0	507
V/C Ratio(X)	0.42	0.75	0.19	0.42	0.52	0.52	0.15	0.00	0.01	0.01	0.00	0.07
Avail Cap(c_a), veh/h	148	1664	738	148	832	876	510	0	488	538	0	507
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.92	0.92	0.92	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.7	13.1	9.3	29.5	1.1	1.1	16.2	0.0	14.7	14.8	0.0	15.0
Incr Delay (d2), s/veh	22.0	3.2	0.6	20.4	2.2	2.1	0.6	0.0	0.0	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	5.4	0.9	0.1	0.8	0.8	0.7	0.0	0.0	0.0	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.7	16.3	9.9	49.8	3.2	3.1	16.8	0.0	14.8	14.9	0.0	15.3
LnGrp LOS	D	B	A	D	A	A	B	A	B	B	A	B
Approach Vol, veh/h		1400			901			79			40	
Approach Delay, s/veh		15.8			3.4			16.7			15.2	
Approach LOS		B			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.9	32.6		22.5	4.9	32.6		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.0	23.5		18.0				
Max Q Clear Time (g_c+I1), s	2.2	19.4		2.9	2.2	3.8		5.3				
Green Ext Time (p_c), s	0.0	2.8		0.1	0.0	4.7		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		11.2	
HCM 6th LOS		B	



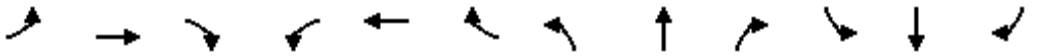
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1074	149	12	791	83	8
Future Volume (vph)	1074	149	12	791	83	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		300	200		175	0
Storage Lanes		1	1		1	1
Taper Length (ft)			90		90	
Right Turn on Red		Yes				Yes
Link Speed (mph)	55			55	30	
Link Distance (ft)	1381			386	451	
Travel Time (s)	17.1			4.8	10.3	
Confl. Peds. (#/hr)		5	5		5	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)						

Intersection Summary	
Area Type:	Other

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1074	149	12	791	83	8
Future Volume (veh/h)	1074	149	12	791	83	8
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1119	155	12	824	86	8
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1634	725	27	1955	534	476
Arrive On Green	0.46	0.46	0.02	0.55	0.30	0.30
Sat Flow, veh/h	3647	1576	1781	3647	1781	1585
Grp Volume(v), veh/h	1119	155	12	824	86	8
Grp Sat Flow(s),veh/h/ln	1777	1576	1781	1777	1781	1585
Q Serve(g_s), s	14.9	3.5	0.4	8.2	2.1	0.2
Cycle Q Clear(g_c), s	14.9	3.5	0.4	8.2	2.1	0.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1634	725	27	1955	534	476
V/C Ratio(X)	0.68	0.21	0.45	0.42	0.16	0.02
Avail Cap(c_a), veh/h	1634	725	148	1955	534	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.8	9.7	29.3	7.9	15.4	14.8
Incr Delay (d2), s/veh	2.4	0.7	11.1	0.7	0.6	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	4.6	1.0	0.2	2.1	0.9	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.1	10.4	40.4	8.6	16.1	14.8
LnGrp LOS	B	B	D	A	B	B
Approach Vol, veh/h	1274			836	94	
Approach Delay, s/veh	14.5			9.0	16.0	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.4	32.1				37.5	22.5
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	5.0	23.5				33.0	18.0
Max Q Clear Time (g_c+I1), s	2.4	16.9				10.2	4.1
Green Ext Time (p_c), s	0.0	3.8				5.0	0.2

Intersection Summary		
HCM 6th Ctrl Delay	12.5	
HCM 6th LOS	B	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	96	18	2	67	4	12	84	1	14	120	25
Future Volume (vph)	14	96	18	2	67	4	12	84	1	14	120	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		50	0		50	0		50	0		50
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		799			1333			1318			3757	
Travel Time (s)		18.2			30.3			20.0			56.9	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												

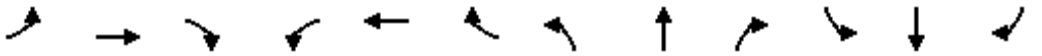
Intersection Summary	
Area Type:	Other

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	96	18	2	67	4	12	84	1	14	120	25
Future Vol, veh/h	14	96	18	2	67	4	12	84	1	14	120	25
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	108	20	2	75	4	13	94	1	16	135	28
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	9.1	8.8	9.2	9.2
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	12%	0%	13%	0%	3%	0%	10%	0%
Vol Thru, %	88%	0%	87%	0%	97%	0%	90%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	96	1	110	18	69	4	134	25
LT Vol	12	0	14	0	2	0	14	0
Through Vol	84	0	96	0	67	0	120	0
RT Vol	0	1	0	18	0	4	0	25
Lane Flow Rate	108	1	124	20	78	4	151	28
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.161	0.001	0.186	0.026	0.117	0.006	0.221	0.035
Departure Headway (Hd)	5.373	4.605	5.425	4.657	5.446	4.727	5.292	4.536
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	666	774	660	766	656	754	678	787
Service Time	3.12	2.353	3.172	2.404	3.198	2.478	3.036	2.279
HCM Lane V/C Ratio	0.162	0.001	0.188	0.026	0.119	0.005	0.223	0.036
HCM Control Delay	9.2	7.4	9.4	7.5	8.9	7.5	9.5	7.4
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.6	0	0.7	0.1	0.4	0	0.8	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	29	20	1	15	20	10	167	7	21	177	12
Future Volume (vph)	15	29	20	1	15	20	10	167	7	21	177	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		50	0		50
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1333			785			1313			4316	
Travel Time (s)		30.3			17.8			29.8			98.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

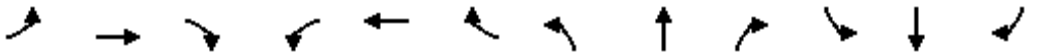
Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑	↱		↑	↱
Traffic Vol, veh/h	15	29	20	1	15	20	10	167	7	21	177	12
Future Vol, veh/h	15	29	20	1	15	20	10	167	7	21	177	12
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	50	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	34	24	1	18	24	12	196	8	25	208	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	47	0	0	63	0	0	223	124	44	214	124	28
Stage 1	-	-	-	-	-	-	75	75	-	25	25	-
Stage 2	-	-	-	-	-	-	148	49	-	189	99	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1560	-	-	1540	-	-	733	766	1026	743	766	1047
Stage 1	-	-	-	-	-	-	934	833	-	993	874	-
Stage 2	-	-	-	-	-	-	855	854	-	813	813	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1553	-	-	1533	-	-	557	748	1016	577	748	1037
Mov Cap-2 Maneuver	-	-	-	-	-	-	557	748	-	577	748	-
Stage 1	-	-	-	-	-	-	918	819	-	976	869	-
Stage 2	-	-	-	-	-	-	638	849	-	603	799	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.7	0.2	11.7	12.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	734	1016	1553	-	-	1533	-	-	725	1037
HCM Lane V/C Ratio	0.284	0.008	0.011	-	-	0.001	-	-	0.321	0.014
HCM Control Delay (s)	11.8	8.6	7.3	0	-	7.3	0	-	12.3	8.5
HCM Lane LOS	B	A	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	1.2	0	0	-	-	0	-	-	1.4	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	387	7	4	426	30	2	38	7	49	50	32
Future Volume (vph)	31	387	7	4	426	30	2	38	7	49	50	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		721			1329			455			1318	
Travel Time (s)		16.4			30.2			6.9			20.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

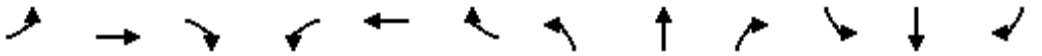
Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	387	7	4	426	30	2	38	7	49	50	32
Future Vol, veh/h	31	387	7	4	426	30	2	38	7	49	50	32
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	407	7	4	448	32	2	40	7	52	53	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	485	0	0	419	0	0	1003	975	421	982	962	474
Stage 1	-	-	-	-	-	-	482	482	-	477	477	-
Stage 2	-	-	-	-	-	-	521	493	-	505	485	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.8	6.52	6.22	6.8	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1078	-	-	1140	-	-	241	251	632	249	256	590
Stage 1	-	-	-	-	-	-	565	553	-	569	556	-
Stage 2	-	-	-	-	-	-	539	547	-	549	552	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1073	-	-	1135	-	-	183	240	626	207	244	584
Mov Cap-2 Maneuver	-	-	-	-	-	-	183	240	-	207	244	-
Stage 1	-	-	-	-	-	-	545	533	-	549	551	-
Stage 2	-	-	-	-	-	-	456	542	-	484	532	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.1	21.6	28.7
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	236	626	1073	-	-	1135	-	-	224	584
HCM Lane V/C Ratio	0.178	0.012	0.03	-	-	0.004	-	-	0.465	0.058
HCM Control Delay (s)	23.5	10.8	8.5	-	-	8.2	-	-	34.3	11.5
HCM Lane LOS	C	B	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.6	0	0.1	-	-	0	-	-	2.3	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	469	11	53	488	28	5	68	54	23	66	112
Future Volume (vph)	95	469	11	53	488	28	5	68	54	23	66	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1329			729			417			1313	
Travel Time (s)		30.2			16.6			9.5			29.8	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other

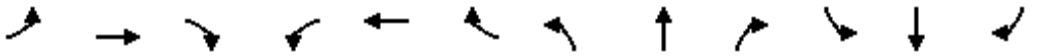
Intersection	
Int Delay, s/veh	33

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	95	469	11	53	488	28	5	68	54	23	66	112
Future Vol, veh/h	95	469	11	53	488	28	5	68	54	23	66	112
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	107	527	12	60	548	31	6	76	61	26	74	126

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	584	0	0	544	0	0	1541	1456	543	1510	1447	574
Stage 1	-	-	-	-	-	-	752	752	-	689	689	-
Stage 2	-	-	-	-	-	-	789	704	-	821	758	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	991	-	-	1025	-	-	94	130	540	99	131	518
Stage 1	-	-	-	-	-	-	402	418	-	436	446	-
Stage 2	-	-	-	-	-	-	384	440	-	369	415	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	986	-	-	1020	-	-	28	108	535	33	109	513
Mov Cap-2 Maneuver	-	-	-	-	-	-	28	108	-	33	109	-
Stage 1	-	-	-	-	-	-	357	371	-	387	417	-
Stage 2	-	-	-	-	-	-	223	412	-	230	368	-

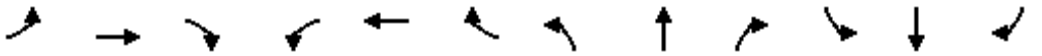
Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.8	94.3	175.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	90	535	986	-	-	1020	-	-	68	513
HCM Lane V/C Ratio	0.911	0.113	0.108	-	-	0.058	-	-	1.471	0.245
HCM Control Delay (s)	154.7	12.6	9.1	-	-	8.7	-	-	$ 378.9	14.3
HCM Lane LOS	F	B	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	5.1	0.4	0.4	-	-	0.2	-	-	8.4	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	469	11	53	488	28	5	68	54	23	66	112
Future Volume (vph)	95	469	11	53	488	28	5	68	54	23	66	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	60			60			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1329			729			417			1313	
Travel Time (s)		30.2			16.6			9.5			29.8	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												

Intersection Summary	
Area Type:	Other



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	469	11	53	488	28	5	68	54	23	66	112
Future Volume (veh/h)	95	469	11	53	488	28	5	68	54	23	66	112
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		0.99	0.99		0.99	0.99		0.99
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	107	527	12	60	548	31	6	76	61	26	74	126
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	769	18	94	698	39	76	542	472	167	424	472
Arrive On Green	0.08	0.42	0.42	0.05	0.40	0.40	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	1821	41	1781	1753	99	40	1807	1572	303	1415	1572
Grp Volume(v), veh/h	107	0	539	60	0	579	82	0	61	100	0	126
Grp Sat Flow(s),veh/h/ln	1781	0	1863	1781	0	1852	1847	0	1572	1718	0	1572
Q Serve(g_s), s	3.5	0.0	14.1	2.0	0.0	16.4	0.0	0.0	1.7	0.0	0.0	3.7
Cycle Q Clear(g_c), s	3.5	0.0	14.1	2.0	0.0	16.4	1.9	0.0	1.7	2.4	0.0	3.7
Prop In Lane	1.00		0.02	1.00		0.05	0.07		1.00	0.26		1.00
Lane Grp Cap(c), veh/h	137	0	787	94	0	737	618	0	472	591	0	472
V/C Ratio(X)	0.78	0.00	0.69	0.64	0.00	0.79	0.13	0.00	0.13	0.17	0.00	0.27
Avail Cap(c_a), veh/h	163	0	787	151	0	737	618	0	472	591	0	472
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	0.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	14.1	27.9	0.0	15.8	15.4	0.0	15.3	15.5	0.0	16.0
Incr Delay (d2), s/veh	18.3	0.0	4.8	7.0	0.0	8.2	0.4	0.0	0.6	0.6	0.0	1.4
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	2.1	0.0	6.2	1.0	0.0	7.7	0.8	0.0	0.6	1.0	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.5	0.0	18.9	34.9	0.0	24.0	15.8	0.0	15.9	16.1	0.0	17.4
LnGrp LOS	D	A	B	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		646			639			143			226	
Approach Delay, s/veh		23.3			25.1			15.8			16.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	29.8		22.5	9.1	28.4		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	23.4		18.0	5.5	23.0		18.0				
Max Q Clear Time (g_c+I1), s	4.0	16.1		5.7	5.5	18.4		3.9				
Green Ext Time (p_c), s	0.0	2.0		0.7	0.0	1.6		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		22.5	
HCM 6th LOS		C	



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	10	66	9	18	141
Future Volume (vph)	5	10	66	9	18	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	331		673			545
Travel Time (s)	7.5		10.2			8.3
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	10	66	9	18	141
Future Vol, veh/h	5	10	66	9	18	141
Conflicting Peds, #/hr	5	5	0	5	5	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	5	11	72	10	20	153

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	280	87	0	0	87	0
Stage 1	82	-	-	-	-	-
Stage 2	198	-	-	-	-	-
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	710	971	-	-	1509	-
Stage 1	941	-	-	-	-	-
Stage 2	835	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	692	962	-	-	1502	-
Mov Cap-2 Maneuver	692	-	-	-	-	-
Stage 1	936	-	-	-	-	-
Stage 2	818	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	851	1502	-
HCM Lane V/C Ratio	-	-	0.019	0.013	-
HCM Control Delay (s)	-	-	9.3	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	5	70	13	9	137
Future Volume (vph)	8	5	70	13	9	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	321		3757			673
Travel Time (s)	7.3		56.9			10.2
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						

Intersection Summary	
Area Type:	Other

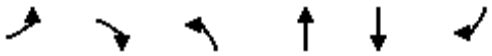
Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	5	70	13	9	137
Future Vol, veh/h	8	5	70	13	9	137
Conflicting Peds, #/hr	5	5	0	5	5	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	9	5	76	14	10	149

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	262	93	0	0	95	0
Stage 1	88	-	-	-	-	-
Stage 2	174	-	-	-	-	-
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	727	964	-	-	1499	-
Stage 1	935	-	-	-	-	-
Stage 2	856	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	715	955	-	-	1492	-
Mov Cap-2 Maneuver	715	-	-	-	-	-
Stage 1	930	-	-	-	-	-
Stage 2	846	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	0.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	792	1492	-
HCM Lane V/C Ratio	-	-	0.018	0.007	-
HCM Control Delay (s)	-	-	9.6	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	8	15	27	83	148	13
Future Volume (vph)	8	15	27	83	148	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30			30	30	
Link Distance (ft)	248			4316	451	
Travel Time (s)	5.6			98.1	10.3	
Confl. Peds. (#/hr)	5	5	5			5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						

Intersection Summary	
Area Type:	Other

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	15	27	83	148	13
Future Vol, veh/h	8	15	27	83	148	13
Conflicting Peds, #/hr	5	5	5	0	0	5
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	9	16	29	90	161	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	326	178	180	0	-	0
Stage 1	173	-	-	-	-	-
Stage 2	153	-	-	-	-	-
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	668	865	1396	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	875	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	647	857	1389	-	-	-
Mov Cap-2 Maneuver	647	-	-	-	-	-
Stage 1	834	-	-	-	-	-
Stage 2	871	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	1.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1389	-	770	-	-
HCM Lane V/C Ratio	0.021	-	0.032	-	-
HCM Control Delay (s)	7.6	0	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection: 2: Alessandro Av. & Ramona Exwy.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	T	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	101	151	41	6	99	125	61	19	6	11
Average Queue (ft)	69	102	21	1	72	93	36	7	1	2
95th Queue (ft)	114	163	49	11	103	127	68	33	11	14
Link Distance (ft)	2218	2218			1313	1313		463		641
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			100	300			35		35	
Storage Blk Time (%)		5					10	0	1	0
Queuing Penalty (veh)		4					1	0	0	0

Intersection: 3: Vernon Av. & Ramona Exwy.

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	R
Maximum Queue (ft)	22	37	26	19	194	153	105	17
Average Queue (ft)	7	11	9	7	133	88	75	6
95th Queue (ft)	29	40	38	28	193	162	115	24
Link Distance (ft)	1313	1313			346	346		354
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			300	200			175	
Storage Blk Time (%)					1			
Queuing Penalty (veh)					0			

Intersection: 2: Alessandro Av. & Ramona Exwy.

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	23	158	175	49	23	158	127	51	22	12	39
Average Queue (ft)	6	108	130	31	6	101	79	30	4	3	20
95th Queue (ft)	24	173	196	59	26	166	143	60	29	18	45
Link Distance (ft)		2218	2218			1313	1313		463		641
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	300			100	300			35		35	
Storage Blk Time (%)			10					10		2	6
Queuing Penalty (veh)			14					0		1	0

EAPC PM Peak Hour

Intersection: 3: Vernon Av. & Ramona Exwy.

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	R
Maximum Queue (ft)	166	180	53	18	144	59	75	29
Average Queue (ft)	128	138	37	8	98	46	45	7
95th Queue (ft)	184	201	59	29	142	69	87	27
Link Distance (ft)	1313	1313			346	346		354
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			300	200			175	
Storage Blk Time (%)								
Queuing Penalty (veh)								