Appendix F:
Transportation Analysis Report

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TECHNICAL MEMORANDUM

DATE: May 16, 2025
TO: Mario Suarez, City of Colton
FROM: Alex So, Urban Crossroads, Inc.
JOB NO: 16031-01 VMT

SUBJECT: CITY OF COLTON HOUSING ELEMENT PROGRAM 10 & 11 GENERAL PLAN AMENDMENT VEHICLE MILES TRAVELED (VMT) ANALYSIS

Urban Crossroads, Inc. has completed the following Vehicle Miles Traveled (VMT) Analysis for the City of Colton Housing Element Program 10 & 11 General Plan Amendment (Project). Project Overview

PROJECT OVERVIEW

Pursuant to Housing Element law, a housing element must identify potential sites suitable for redesignation and/or rezoning to accommodate housing needs for all segments of the community. The potential sites for rezoning were developed consistent with provisions of Government Code Section 65583.1, which states, in part, that:

> The Department of Housing and Community Development, in evaluating a proposed or adopted housing element for substantial compliance with this article, may allow a city or county to identify adequate sites, as required pursuant to Section 65583, by a variety of methods, including, but not limited to, redesignation of property to a more intense land use category and increasing the density allowed within one or more categories.[1]

Program 10 of the Housing Element Update provides that to accommodate for a shortfall of sites and provide for adequate sites, the City will also up-zone its Mixed-Use Downtown zoning designations to allow up to 40 dwelling units per acre (du/acre) and its R3/R4 zone to allow up to 30 du/acre. The Mixed-Use zoning standards will also be updated to allow 100 percent residential use and require at least 50 percent of the total floor area to be occupied by a residential use. The City will rezone 89.66 total acres as a part of Program 11 to help meet its RHNA shortfall.[2]

1 California Legislative Information. No date. California Government Code Article 10.6. Housing Elements [65580-65589.11]. Website: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=GOV&division=1.&title=7.&part=&chapter=3.&article=10.6. Accessed August 21, 2024.

2 The Hub City Centre Specific Plan (HCCSP) will be amended at a later date to allow up to 40 units per acre in the specific plan area on retail parcels identified for rezoning in the sites inventory and is not the subject of this document.

The site inventory analysis has been conservative in identifying Mixed-use/Downtown (M-U/D) properties to accommodate a portion of the City's RHNA allocation for lower-income housing, and only those parcels with the greatest potential for residential development have been included in the site inventory. If developers choose not to pursue projects at these particular sites, ample additional affordable housing development opportunities are available on other properties within the M-U/D zoning district and on other vacant and underutilized parcels that have been identified by the City as candidates for rezoning. The City is committed to maintaining no net loss of capacity to accommodate the entire RHNA.

The properties proposed for rezoning and for amendment of their general plan land use designation are described as part of the five areas in the City that relate to Program 10/11 of the 2021-2029 General Plan Housing Element Update. Under Program 10/11, rezoned sites would comply with the requirements of Government Code Sec. 65583.2(h), which states that cities must have a program to facilitate by-right approval for projects that include at least 20 percent of the units for lower-income housing on rezoned low-income sites. In total, 89.66 acres would be rezoned.

Two areas are also proposed for rezoning and GPA to implement the South Colton Livable Corridor Plan. Rezoned sites shall comply with the following:

- Permit owner-occupied and rental multi-family uses by-right for developments in which 20 percent or more of the units are affordable to lower-income households;
- Accommodate a minimum of 16 units per site;
- Require a minimum density of 20 units per acre; or
- At least 50 percent of the lower-income need must be accommodated on sites designated for residential use only or on sites zoned for mixed uses that accommodate all of the very low and low-income housing need, if those sites allow 100 percent residential use and require residential use occupy 50 percent of the total floor area of a mixed-use project.

The Project location map can be found in Attachment 1.

BACKGROUND

The California Environmental Quality Act (CEQA) requires all lead agencies to adopt VMT as the measure for identifying transportation impacts for land use projects. The VMT analysis presented in this report has been developed based on the adopted City of Colton VMT (Vehicle Miles Traveled) Guidelines (June 2020) (**City Guidelines**) (1). This evaluation is based on the City's adopted guidelines.

VMT SCREENING

As discussed in the City Guidelines, Land Use Plans (e.g. General Plans, Specific Plans, etc.) are not applicable to VMT screening due to the generally large scale of these plans. As such, the Project would not qualify for any screening criteria and a VMT analysis would be required to evaluate the Project's VMT impact.

TRAFFIC MODELING METHODOLOGY

City Guidelines state that San Bernardino County Transportation Analysis Model (SBTAM) is the preferred tool for conducting VMT analysis for land use projects in the City of. San Bernardino County Transportation Authority's (SBCTA) most recent release of SBTAM is version 3.2, released in

June 2024. SBTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households, and employment. The calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each vehicle type.

VMT ANALYSIS METHODOLOGY

For purposes of this assessment, VMT was estimated using the Production/Attraction method. For the Production/Attraction method, VMT is presented as Home-Based (HB) production VMT per capita.

PRODUCTION/ATTRACTION METHOD

The Production/Attraction (PA) method for calculating VMT sums all weekday VMT generated by HB trips with at least one trip-end in the study area (i.e., Project Traffic Analysis Zone or TAZ) by trip purpose to/from their ultimate destination unless that destination is outside of the model boundary area. Productions are land use types that generate trips (residences), and attractions are land use types that attract trips (employment). The PA method allows Project VMT to be evaluated based on trip purpose, which is consistent with both the Office of Planning and Research (OPR) Technical Advisory and City Guidelines.

VMT METRIC AND SIGNIFICANCE THRESHOLD

As stated in the City Guidelines, the overall land use plan has a significant impact on the City VMT when one or more land development projects within the Land Use Plan fail to meet the following criteria:

- 15% below the existing baseline City VMT

The City Guidelines identify VMT per capita[3] as the appropriate VMT metric for residential land uses.

CITY OF COLTON VMT PER CAPITA

The City of existing VMT per capita has been calculated using SBTAM. Table 1 presents the resulting City of Colton existing VMT per capita of 15.2 and a City threshold of 15% below existing to be 13.0 VMT per capita.

TABLE 1: CITY OF COLTON BASELINE VMT PER CAPITA

	City of Colton
Population	56,237
HB VMT	858,394
VMT per Capita	15.2
15% Below Existing Citywide Average VMT per Capita (City Threshold)	13.0

[3] City Guidelines; Page 26

LAND USE CONVERSION

In order to evaluate project-generated VMT, standard land use information such as number of households are coded into SBTAM. The SBTAM model converts household inputs into estimated population values by using TAZ-specific distributions of households by size and location. These TAZ-specific assumptions are provided by the Southern California Association of Governments' (SCAG) growth forecasting models. Table 2 presents household count by individual TAZ and the population estimates as calculated from the SBTAM model. A detailed household count of each parcel by TAZ can be found in Attachment 2.

TABLE 2: BASELINE PROJECT POPULATION ESTIMATES

TAZ	Additional Households	Additional Population
53774101	6	23
53774102	12	45
53774202	24	94
53774501	77	294
53779301	182	288
53787102	1,204	4,802
53787103	774	3,087
Total Project	2,279	8,633

The additional households and population were added to their respective TAZ and the SBTAM model was run inclusive of the Project.

PROJECT VMT ESTIMATES

The project-generated VMT and a comparison to the City's impact threshold is presented in Table 3 by individual TAZ.

TABLE 3: BASELINE + PROJECT VMT PER CAPITA

TAZ	Population	VMT	VMT per Capita	City Threshold	Exceeds City Threshold?
53774101	749	11,694	15.6	13.0	Yes
53774102	325	4,881	15.0	13.0	Yes
53774202	1,139	17,407	15.3	13.0	Yes
53774501	503	7,133	14.2	13.0	Yes
53779301	856	11,756	13.7	13.0	Yes
53787102	5,262	63,017	12.0	13.0	No
53787103	3,258	40,380	12.4	13.0	No

As shown in Table 3, the Project's addition to existing baseline conditions exceeds the City's adopted VMT impact threshold.

Supplemental Evaluation of Citywide VMT

Although not specified by the City Guidelines, a cursory review of the Project effect on Citywide VMT per capita was performed. The Baseline + Project SBTAM model outputs were calculated for the entire City of Colton similarly to the calculations performed in the previous section City of Colton VMT per Capita. Table 4 presents the comparison between the baseline Citywide and the baseline + Project Citywide VMT per capita.

Table 4: Citywide VMT per Capita Comparison

City of Colton	Baseline	Baseline + Project
Population	56,237	64,870
HB VMT	858,394	963,792
VMT per Capita	15.2	14.9

As shown in Table 4, the Baseline + Project HB VMT increases with the additional population proposed by the Project, as expected. However, once framed into an efficiency metric by dividing the HB VMT by the population, the Citywide VMT per capita was shown to reduce Citywide, which would indicate the Project would increase VMT efficiency and lower VMT per capita within the City.

VMT Reduction Strategies

As required by the City Guidelines, transportation demand management (TDM) strategies should be considered for the purpose of reducing VMT impacts determined to be potentially significant. The effectiveness of TDM strategies to reduce VMT as described by City Guidelines are derived from the Quantifying Greenhouse Gas Mitigation Measures (**CAPCOA**, 2010) (CAPCOA). However, subsequent to the adoption of City Guidelines, CAPCOA has published an update to their VMT reduction measure guidance titled Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA, 2024) (**Handbook**), which now supersedes the previous CAPCOA document. This Handbook has instead been used for this assessment.

Consistent with VMT reduction measures described within the Handbook, the following are applicable to the Project and, if implemented as Project design features, could contribute towards a small reduction in project-generated VMT:

- Provide pedestrian and bicycle network improvements within the development connecting to existing off-site facilities.
- Where applicable, ensure design of key intersections and roadways to encourage the use of walking, biking, and transit.
- Collaborate with the local transit agencies to determine the feasibility of providing new or re-routing existing transit services to the area.

The Project is a General Plan Amendment and does not propose a specific development at this time. Instead, it establishes a framework for future growth. As individual projects are proposed, each will undergo a project-level VMT analysis to assess potential transportation impacts. If significant VMT impacts are identified, appropriate mitigation measures will be required to reduce these impacts in accordance with City Guidelines.

CONCLUSION

Based on the results of this analysis, the following findings are made:

- Based on its large land use plan, the Project does not qualify for any applicable VMT screening and is required to perform a model-based VMT analysis.
- The VMT analysis results show that the Project exceeds the City's adopted VMT threshold.
- The Project results in a significant VMT impact.

If you have any questions, please contact me directly at aso@urbanxroads.com.

REFERENCES

1. **City of Colton.** *VMT (Vehicle Miles Traveled) Guidelines.* June 2020.

ATTACHMENT 1:

PROJECT LOCATION MAP

ATTACHMENT 2:

PROJECT TAZ BY ASSESSOR PARCEL NUMBER

Site ID	APN	Site Address	Existing Zoning	Proposed Zoning	Realistic Capacity	SBTAM TAZ
162	16307431	233 S. La Cadena Drive	General Commercial	Res Overlay	6	53774101
166	16308106	131 E. L Street	General Commercial	Res Overlay	4	53774102
165	16308107	115 E. L Street	General Commercial	Res Overlay	4	53774102
163	16308108	Northeast corner of S. La Cadena Dr. and E. L St.	General Commercial	Res Overlay	2	53774102
164	16308109	158 S. La Cadena Drive	General Commercial	Res Overlay	2	53774102
180	16317246	609 S. 7th Street	Low Density Residential	MU-D	2	53774202
181	16317247	613 S. 7th Street	Low Density Residential	MU-D	4	53774202
183	16317249	655 S. 7th Street	General Commercial	MU-D	4	53774202
184	16317250	659 S. 7th Street	General Commercial	MU-D	4	53774202
190	16321102	Corner of S. 7th and S. Cadena Dr.	General Commercial	MU-D	44	53774501
159	16321105	Southeast corner of E. O Street and S. 8th St.	General Commercial	Res Overlay	8	53774501
158	16321125	Southwest corner of E. O Street and S. La Cadena Drive	General Commercial	Res Overlay	25	53774501
182	16418108	Northside of Fairway Drive and Crossroads Dr.	Industrial Park	MU	132	53787102
181	16418112	Northside of Fairway Dr. east of Sperry St.	Industrial Park	MU	78	53787102
177	16418238	South of Fairway Dr. on Crossroads Dr.	Industrial Park	MU	6	53787103
172	16418241	South of Fairway Dr. on Crossroads Dr.	Industrial Park	MU	11	53787103
174	16418243	South of Fairway Dr. on Crossroads Dr.	Industrial Park	MU	50	53787103
171	16418246	South of Fairway Dr. on Crossroads Dr.	Industrial Park	MU	28	53787103
170	16418247	South of Fairway Dr. on Crossroads Dr.	Industrial Park	MU	28	53787103
169	16418248	South of Fairway Dr. on Crossroads Dr.	Industrial Park	MU	27	53787103
176	16418251	Southeast corner of Fairway Dr. and Crossroads Dr.	Industrial Park	MU	230	53787103
185	16418252	N. Crossroads Dr. and E. Crossroads Drive	Industrial Park	MU-D	1	53787103
168	16418253	South of Fairway Dr. on Crossroads Dr.	Industrial Park	MU	45	53787103
186	16418254	1200 Fairway Drive	Industrial Park	MU-D	1	53787103
167	16418255	Southwest corner of Fairway Dr. and Crossroads Dr.	Industrial Park	MU	246	53787103
175	16418257	South of Fairway Dr. on Crossroads Dr.	Industrial Park	MU	28	53787103
173	16418258	South of Fairway Dr. on Crossroads Dr.	Industrial Park	MU	73	53787103
184	16428101	On S. Auto Center Dr. north of 1619 Fairway Dr.	Industrial Park	MU	249	53787102
183	16428102	Northside of Fairway Drive and Crossroads Dr.	Industrial Park	MU	162	53787102
180	16428109	Northside of Fairway Dr. east of Sperry St.	Industrial Park	MU	111	53787102
179	16428111	Northside of Fairway Dr. east of Sperry St.	Industrial Park	MU	472	53787102
188	27614430	Vacant unimproved	General Commercial	C-2/R-O	36	53779301
189	27614431	Vacant unimproved and Parking Lot	General Commercial	C-2/R-O	146	53779301
187	TBD	Hurts @ Congress SEC	N/A	MU-D	10	53774202

APPENDIX 3.1:

TRAFFIC COUNTS

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City of Colton
N/S: N Pepper Avenue
E/W: Valley Boulevard
Weather: Clear

File Name : 02_COL_Pep_Val AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	N Pepper Avenue Southbound					Valley Boulevard Westbound					N Pepper Avenue Northbound					Valley Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	12	214	13	2	239	65	41	8	2	114	50	190	20	4	260	23	12	27	18	62	26	675	701
07:15 AM	17	275	12	0	304	70	45	7	4	122	80	202	16	5	298	12	38	55	24	105	33	829	862
07:30 AM	19	320	16	0	355	92	89	8	1	189	54	185	19	11	258	20	34	79	27	133	39	935	974
07:45 AM	26	322	16	0	364	75	45	11	6	131	70	212	30	12	312	29	41	71	29	141	47	948	995
Total	74	1131	57	2	1262	302	220	34	13	556	254	789	85	32	1128	84	125	232	98	441	145	3387	3532
08:00 AM	32	234	17	2	283	72	82	16	5	170	67	166	16	4	249	26	68	89	23	183	34	885	919
08:15 AM	27	249	21	1	297	51	40	9	5	100	57	201	22	6	280	21	45	71	24	137	36	814	850
08:30 AM	25	195	14	1	234	40	76	15	5	131	42	166	16	8	224	27	65	33	19	125	33	714	747
08:45 AM	20	168	17	4	205	37	55	10	3	102	67	174	15	5	256	18	33	27	15	78	27	641	668
Total	104	846	69	8	1019	200	253	50	18	503	233	707	69	23	1009	92	211	220	81	523	130	3054	3184
Grand Total	178	1977	126	10	2281	502	473	84	31	1059	487	1496	154	55	2137	176	336	452	179	964	275	6441	6716
Apprch %	7.8	86.7	5.5			47.4	44.7	7.9			22.8	70	7.2			18.3	34.9	46.9					
Total %	2.8	30.7	2		35.4	7.8	7.3	1.3		16.4	7.6	23.2	2.4		33.2	2.7	5.2	7		15	4.1	95.9	

	N Pepper Avenue Southbound				Valley Boulevard Westbound				N Pepper Avenue Northbound				Valley Boulevard 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	17	275	12	304	70	45	7	122	**80**	202	16	298	12	38	55	105	829
07:30 AM	19	320	16	355	**92**	**89**	8	**189**	54	185	19	258	20	34	79	133	935
07:45 AM	26	**322**	16	**364**	75	45	11	131	70	**212**	**30**	**312**	**29**	41	71	141	**948**
08:00 AM	**32**	234	**17**	283	72	82	**16**	170	67	166	16	249	26	**68**	**89**	**183**	885
Total Volume	94	1151	61	1306	309	261	42	612	271	765	81	1117	87	181	294	562	3597
% App. Total	7.2	88.1	4.7		50.5	42.6	6.9		24.3	68.5	7.3		15.5	32.2	52.3		
PHF	.734	.894	.897	.897	.840	.733	.656	.810	.847	.902	.675	.895	.750	.665	.826	.768	.949

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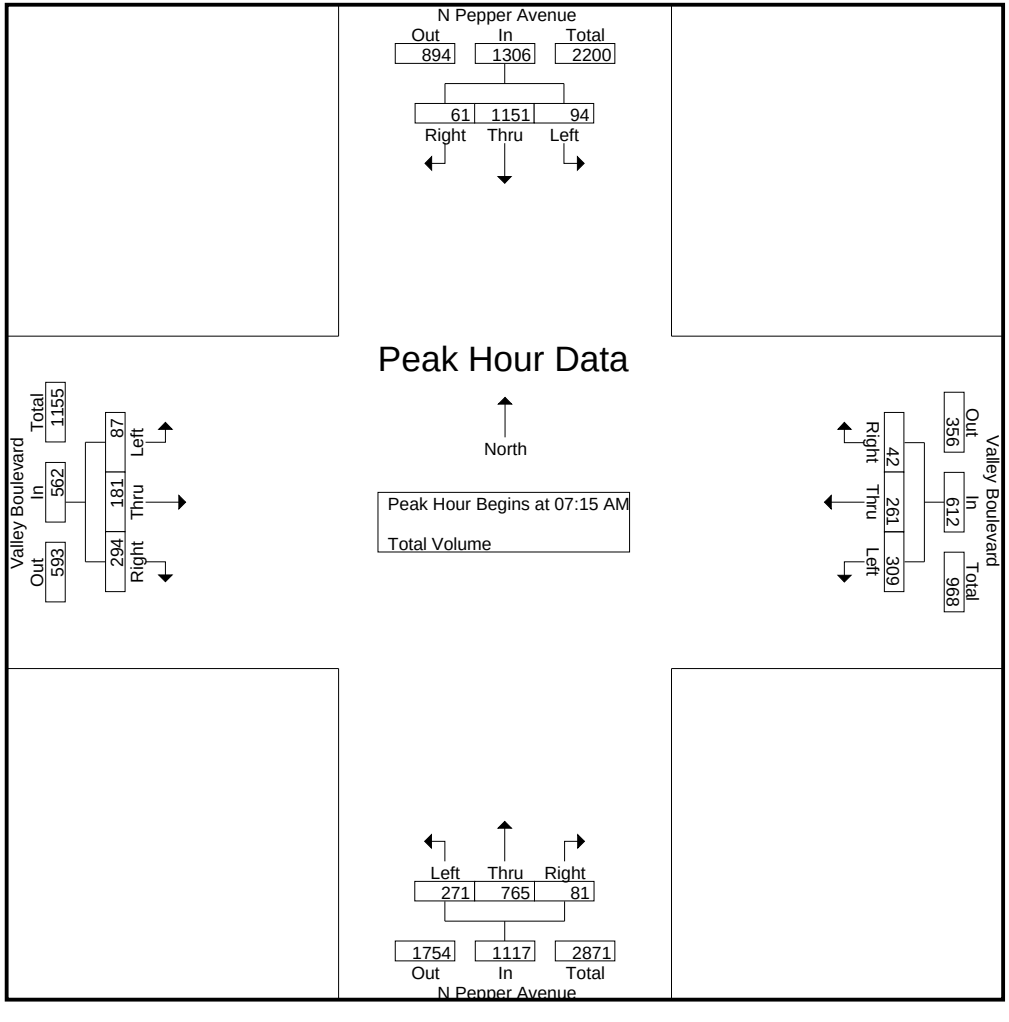
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:00 AM				07:30 AM				
+0 mins.	17	275	12	304	70	45	7	122	50	190	20	260	20	34	79	133	
+15 mins.	19	320	16	355	**92**	**89**	8	**189**	**80**	202	16	298	**29**	41	71	141	
+30 mins.	26	**322**	16	**364**	75	45	11	131	54	185	19	258	26	**68**	**89**	**183**	
+45 mins.	**32**	234	**17**	283	72	82	**16**	170	70	**212**	**30**	**312**	21	45	71	137	
Total Volume	94	1151	61	1306	309	261	42	612	254	789	85	1128	96	188	310	594	
% App. Total	7.2	88.1	4.7		50.5	42.6	6.9		22.5	69.9	7.5		16.2	31.6	52.2		
PHF	.734	.894	.897	.897	.840	.733	.656	.810	.794	.930	.708	.904	.828	.691	.871	.811	

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04:00 PM	29	205	15	4	249	37	67	13	1	117	87	196	44	15	327	31	93	74	23	198	43	891	934
04:15 PM	24	175	28	3	227	48	78	17	6	143	75	175	40	28	290	27	90	48	26	165	63	825	888
04:30 PM	20	187	22	5	229	50	115	24	4	189	60	193	42	28	295	43	96	65	28	204	65	917	982
04:45 PM	42	211	13	1	266	39	91	23	4	153	73	212	39	14	324	29	86	48	22	163	41	906	947
Total	115	778	78	13	971	174	351	77	15	602	295	776	165	85	1236	130	365	235	99	730	212	3539	3751
05:00 PM	27	190	25	4	242	45	81	15	2	141	76	195	33	15	304	22	102	63	31	187	52	874	926
05:15 PM	20	159	14	3	193	41	93	23	4	157	60	190	35	14	285	40	89	58	22	187	43	822	865
05:30 PM	32	192	24	2	248	35	85	11	2	131	76	232	30	10	338	27	76	37	24	140	38	857	895
05:45 PM	24	173	15	2	212	41	104	24	0	169	62	179	41	19	282	30	69	38	19	137	40	800	840
Total	103	714	78	11	895	162	363	73	8	598	274	796	139	58	1209	119	336	196	96	651	173	3353	3526
Grand Total	218	1492	156	24	1866	336	714	150	23	1200	569	1572	304	143	2445	249	701	431	195	1381	385	6892	7277
Apprch %	11.7	80	8.4			28	59.5	12.5			23.3	64.3	12.4			18	50.8	31.2					
Total %	3.2	21.6	2.3		27.1	4.9	10.4	2.2		17.4	8.3	22.8	4.4		35.5	3.6	10.2	6.3		20	5.3	94.7	

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Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	29	205	15	249	37	67	13	117	**87**	196	**44**	**327**	31	93	**74**	198	891
04:15 PM	24	175	**28**	227	48	78	17	143	75	175	40	290	27	90	48	165	825
04:30 PM	20	187	22	229	**50**	**115**	**24**	**189**	60	193	42	295	**43**	**96**	65	**204**	**917**
04:45 PM	**42**	**211**	13	**266**	39	91	23	153	73	**212**	39	324	29	86	48	163	906
Total Volume	115	778	78	971	174	351	77	602	295	776	165	1236	130	365	235	730	3539
% App. Total	11.8	80.1	8		28.9	58.3	12.8		23.9	62.8	13.3		17.8	50	32.2		
PHF	.685	.922	.696	.913	.870	.763	.802	.796	.848	.915	.938	.945	.756	.951	.794	.895	.965

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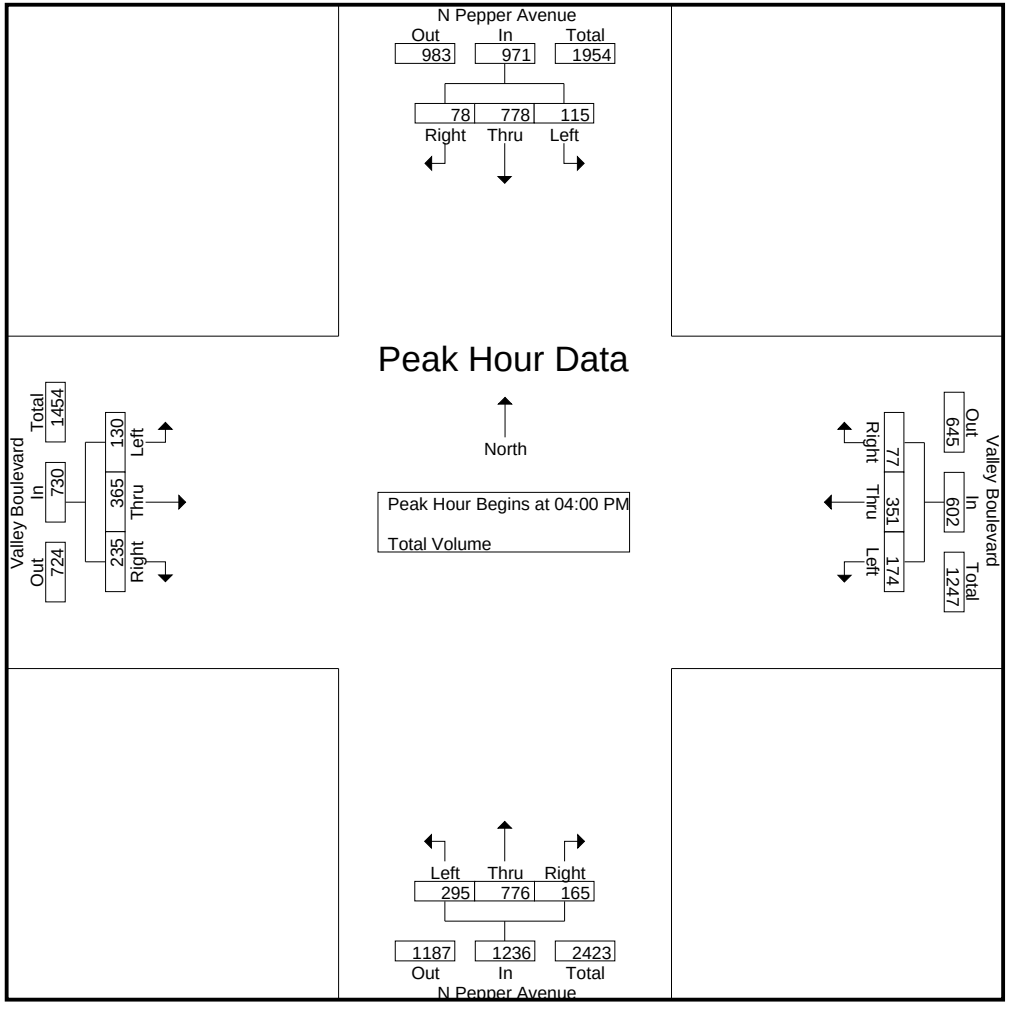

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File Name : 02_COL_Pep_Val PM
Site Code : 241045
Start Date : 11/21/2024

	N Pepper Avenue Southbound				Valley Boulevard Westbound				N Pepper Avenue Northbound				Valley Boulevard 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 Each Approach Begins at:																	
	04:00 PM				04:30 PM				04:45 PM				04:30 PM				
+0 mins.	29	205	15	249	**50**	**115**	**24**	**189**	73	212	**39**	324	**43**	96	**65**	**204**	
+15 mins.	24	175	**28**	227	39	91	23	153	**76**	195	33	304	29	86	48	163	
+30 mins.	20	187	22	229	45	81	15	141	60	190	35	285	22	**102**	63	187	
+45 mins.	**42**	**211**	13	**266**	41	93	23	157	76	**232**	30	**338**	40	89	58	187	
Total Volume	115	778	78	971	175	380	85	640	285	829	137	1251	134	373	234	741	
% App. Total	11.8	80.1	8		27.3	59.4	13.3		22.8	66.3	11		18.1	50.3	31.6		
PHF	.685	.922	.696	.913	.875	.826	.885	.847	.938	.893	.878	.925	.779	.914	.900	.908	

Location: Colton
N/S: N Pepper Avenue
E/W: Valley Boulevard

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg N Pepper Avenue	East Leg Valley Boulevard	South Leg N Pepper Avenue	West Leg Valley Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	1	0	0	0	1
7:30 AM	0	2	0	0	2
7:45 AM	1	1	0	0	2
8:00 AM	3	2	0	1	6
8:15 AM	0	2	0	2	4
8:30 AM	0	1	3	0	4
8:45 AM	2	1	0	3	6
TOTAL VOLUMES:	7	9	3	6	25

	North Leg N Pepper Avenue	East Leg Valley Boulevard	South Leg N Pepper Avenue	West Leg Valley Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	1	0	1	3
4:15 PM	0	0	0	0	0
4:30 PM	1	0	0	0	1
4:45 PM	0	0	0	1	1
5:00 PM	0	0	0	0	0
5:15 PM	1	0	0	1	2
5:30 PM	2	0	0	1	3
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	5	1	0	4	10

Location: Colton
N/S: N Pepper Avenue
E/W: Valley Boulevard

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound N Pepper Avenue			Westbound Valley Boulevard			Northbound N Pepper Avenue			Eastbound Valley Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	0	1	0	2	0	0	1	0	0	0	0	4

	Southbound N Pepper Avenue			Westbound Valley Boulevard			Northbound N Pepper Avenue			Eastbound Valley Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	0	0	0	0	0	0	2	0	3

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City of Colton
N/S: Rancho Avenue
E/W: Citrus Street
Weather: Clear

File Name : 03_COL_Ran_Cit AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Rancho Avenue Southbound					Citrus Street Westbound					Rancho Avenue Northbound					Citrus Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	138	2	0	141	15	1	2	2	18	3	76	10	2	89	3	6	35	26	44	30	292	322
07:15 AM	5	157	7	1	169	17	5	9	6	31	10	76	12	3	98	5	5	33	17	43	27	341	368
07:30 AM	16	162	1	0	179	22	6	4	3	32	12	94	26	3	132	10	10	29	18	49	24	392	416
07:45 AM	9	138	2	0	149	18	3	6	5	27	11	100	17	2	128	5	5	22	15	32	22	336	358
Total	31	595	12	1	638	72	15	21	16	108	36	346	65	10	447	23	26	119	76	168	103	1361	1464
08:00 AM	2	119	1	0	122	7	5	3	3	15	13	90	8	0	111	3	1	24	14	28	17	276	293
08:15 AM	1	99	4	1	104	6	1	6	3	13	11	56	12	0	79	1	2	25	21	28	25	224	249
08:30 AM	1	136	6	2	143	14	2	3	2	19	13	74	11	3	98	4	2	33	16	39	23	299	322
08:45 AM	2	87	3	1	92	7	4	5	5	16	8	100	14	1	122	2	2	14	11	18	18	248	266
Total	6	441	14	4	461	34	12	17	13	63	45	320	45	4	410	10	7	96	62	113	83	1047	1130
Grand Total	37	1036	26	5	1099	106	27	38	29	171	81	666	110	14	857	33	33	215	138	281	186	2408	2594
Apprch %	3.4	94.3	2.4			62	15.8	22.2			9.5	77.7	12.8			11.7	11.7	76.5					
Total %	1.5	43	1.1		45.6	4.4	1.1	1.6		7.1	3.4	27.7	4.6		35.6	1.4	1.4	8.9		11.7	7.2	92.8	

	Rancho Avenue Southbound				Citrus Street Westbound				Rancho Avenue Northbound				Citrus 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 07:00 AM																	
07:00 AM	1	138	2	141	15	1	2	18	3	76	10	89	3	6	**35**	44	292
07:15 AM	5	157	**7**	169	17	5	**9**	31	10	76	12	98	5	5	33	43	341
07:30 AM	**16**	**162**	1	**179**	**22**	**6**	4	**32**	**12**	94	**26**	**132**	**10**	**10**	29	**49**	**392**
07:45 AM	9	138	2	149	18	3	6	27	11	**100**	17	128	5	5	22	32	336
Total Volume	31	595	12	638	72	15	21	108	36	346	65	447	23	26	119	168	1361
% App. Total	4.9	93.3	1.9		66.7	13.9	19.4		8.1	77.4	14.5		13.7	15.5	70.8		
PHF	.484	.918	.429	.891	.818	.625	.583	.844	.750	.865	.625	.847	.575	.650	.850	.857	.868

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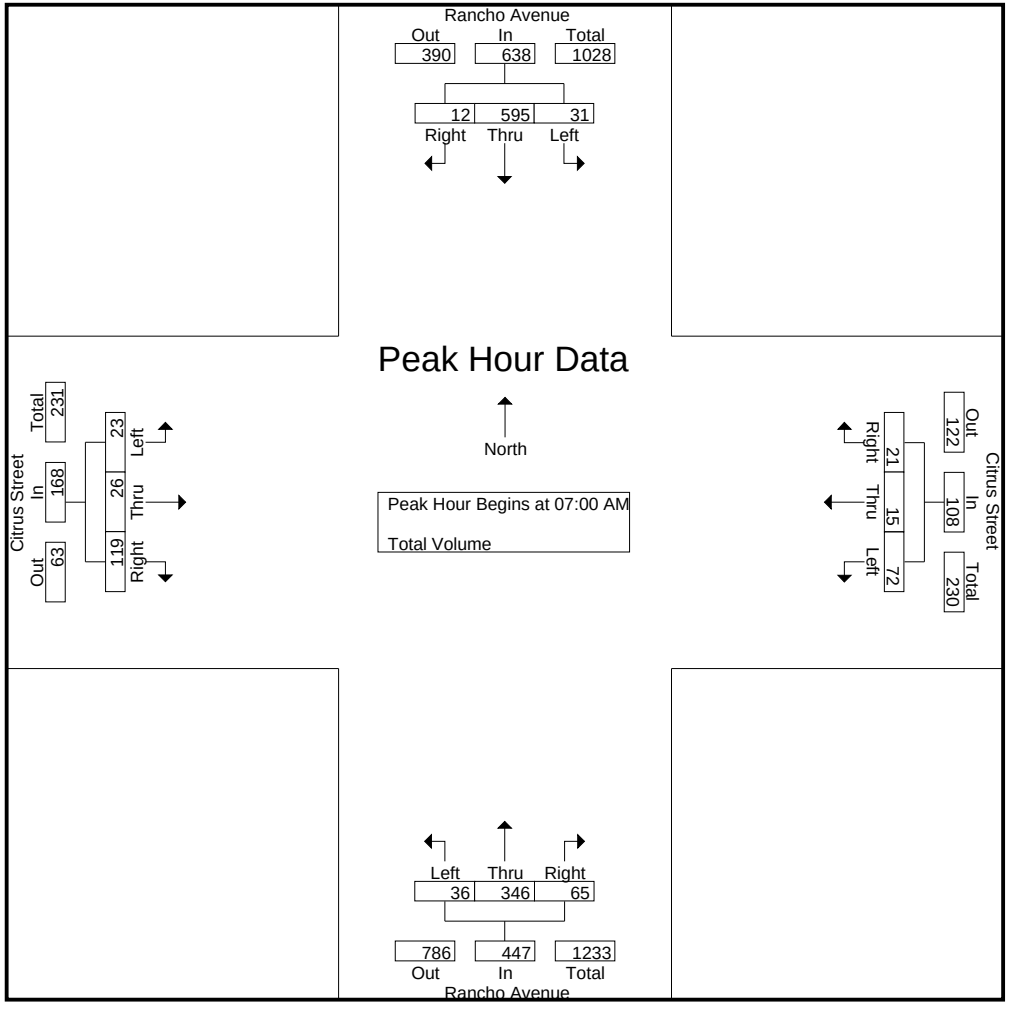
City of Colton
N/S: Rancho Avenue
E/W: Citrus Street
Weather: Clear

File Name : 03_COL_Ran_Cit AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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City of Colton
N/S: Rancho Avenue
E/W: Citrus Street
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File Name : 03_COL_Ran_Cit AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 3

	Rancho Avenue Southbound				Citrus Street Westbound				Rancho Avenue Northbound				Citrus 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 Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:15 AM				07:00 AM				
+0 mins.	1	138	2	141	15	1	2	18	10	76	12	98	3	6	**35**	44	
+15 mins.	5	157	**7**	169	17	5	**9**	31	12	94	**26**	**132**	5	5	33	43	
+30 mins.	**16**	**162**	1	**179**	**22**	**6**	4	**32**	11	**100**	17	128	**10**	**10**	29	**49**	
+45 mins.	9	138	2	149	18	3	6	27	**13**	90	8	111	5	5	22	32	
Total Volume	31	595	12	638	72	15	21	108	46	360	63	469	23	26	119	168	
% App. Total	4.9	93.3	1.9		66.7	13.9	19.4		9.8	76.8	13.4		13.7	15.5	70.8		
PHF	.484	.918	.429	.891	.818	.625	.583	.844	.885	.900	.606	.888	.575	.650	.850	.857	

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City of Colton
N/S: Rancho Avenue
E/W: Citrus Street
Weather: Clear

File Name : 03_COL_Ran_Cit PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Rancho Avenue Southbound					Citrus Street Westbound					Rancho Avenue Northbound					Citrus Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	2	151	2	0	155	15	6	8	3	29	31	184	15	3	230	2	3	16	14	21	20	435	455
04:15 PM	3	113	11	4	127	11	6	5	3	22	24	172	14	1	210	3	3	26	19	32	27	391	418
04:30 PM	4	125	8	1	137	9	5	8	5	22	21	187	11	1	219	4	3	15	12	22	19	400	419
04:45 PM	5	164	9	2	178	11	4	8	5	23	22	173	17	0	212	4	1	15	15	20	22	433	455
Total	14	553	30	7	597	46	21	29	16	96	98	716	57	5	871	13	10	72	60	95	88	1659	1747
05:00 PM	7	150	5	0	162	14	5	7	4	26	14	157	10	1	181	6	5	16	10	27	15	396	411
05:15 PM	6	166	8	1	180	6	6	6	5	18	19	173	9	1	201	3	0	18	15	21	22	420	442
05:30 PM	4	139	9	1	152	8	3	1	1	12	22	157	4	0	183	6	2	18	13	26	15	373	388
05:45 PM	2	136	7	0	145	7	4	4	3	15	25	150	9	3	184	5	0	14	8	19	14	363	377
Total	19	591	29	2	639	35	18	18	13	71	80	637	32	5	749	20	7	66	46	93	66	1552	1618
Grand Total	33	1144	59	9	1236	81	39	47	29	167	178	1353	89	10	1620	33	17	138	106	188	154	3211	3365
Apprch %	2.7	92.6	4.8			48.5	23.4	28.1			11	83.5	5.5			17.6	9	73.4					
Total %	1	35.6	1.8		38.5	2.5	1.2	1.5		5.2	5.5	42.1	2.8		50.5	1	0.5	4.3		5.9	4.6	95.4	

	Rancho Avenue Southbound				Citrus Street Westbound				Rancho Avenue Northbound				Citrus 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	151	2	155	**15**	**6**	**8**	**29**	**31**	184	15	**230**	2	**3**	16	21	**435**
04:15 PM	3	113	**11**	127	11	6	5	22	24	172	14	210	3	3	**26**	**32**	391
04:30 PM	4	125	8	137	9	5	8	22	21	**187**	11	219	**4**	3	15	22	400
04:45 PM	**5**	**164**	9	**178**	11	4	8	23	22	173	**17**	212	4	1	15	20	433
Total Volume	14	553	30	597	46	21	29	96	98	716	57	871	13	10	72	95	1659
% App. Total	2.3	92.6	5		47.9	21.9	30.2		11.3	82.2	6.5		13.7	10.5	75.8		
PHF	.700	.843	.682	.838	.767	.875	.906	.828	.790	.957	.838	.947	.813	.833	.692	.742	.953

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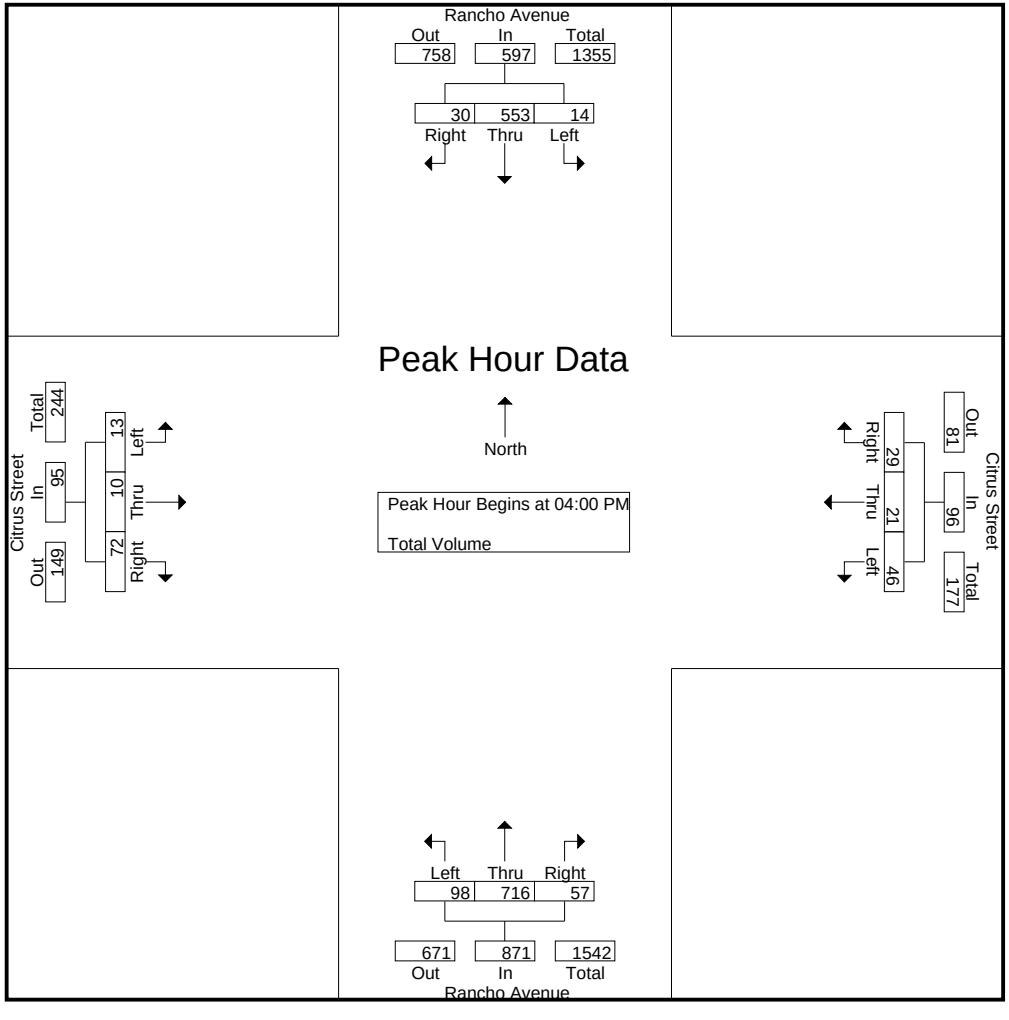
City of Colton
N/S: Rancho Avenue
E/W: Citrus Street
Weather: Clear

File Name : 03_COL_Ran_Cit PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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City of Colton
N/S: Rancho Avenue
E/W: Citrus Street
Weather: Clear

File Name : 03_COL_Ran_Cit PM
Site Code : 241045
Start Date : 11/21/2024

	Rancho Avenue Southbound				Citrus Street Westbound				Rancho Avenue Northbound				Citrus 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 Each Approach Begins at:																	
	04:45 PM				04:00 PM				04:00 PM				04:15 PM				
+0 mins.	5	164	**9**	178	**15**	**6**	**8**	**29**	**31**	184	15	**230**	3	3	**26**	**32**	
+15 mins.	**7**	150	5	162	11	6	5	22	24	172	14	210	4	3	15	22	
+30 mins.	6	**166**	8	**180**	9	5	8	22	21	**187**	11	219	4	1	15	20	
+45 mins.	4	139	9	152	11	4	8	23	22	173	**17**	212	**6**	**5**	16	27	
Total Volume	22	619	31	672	46	21	29	96	98	716	57	871	17	12	72	101	
% App. Total	3.3	92.1	4.6		47.9	21.9	30.2		11.3	82.2	6.5		16.8	11.9	71.3		
PHF	.786	.932	.861	.933	.767	.875	.906	.828	.790	.957	.838	.947	.708	.600	.692	.789	

Location: Colton
N/S: Rancho Avenue
E/W: Citrus Street

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg Rancho Avenue	East Leg Citrus Street	South Leg Rancho Avenue	West Leg Citrus Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	2	1	2	5
7:15 AM	0	1	0	1	2
7:30 AM	0	4	0	1	5
7:45 AM	0	0	0	0	0
8:00 AM	0	1	0	0	1
8:15 AM	0	1	2	2	5
8:30 AM	0	2	0	2	4
8:45 AM	0	0	1	0	1
TOTAL VOLUMES:	0	11	4	8	23

	North Leg Rancho Avenue	East Leg Citrus Street	South Leg Rancho Avenue	West Leg Citrus Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	3	1	0	4
4:15 PM	0	7	1	0	8
4:30 PM	0	1	0	0	1
4:45 PM	2	2	0	2	6
5:00 PM	1	4	0	1	6
5:15 PM	0	2	0	0	2
5:30 PM	0	4	0	0	4
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	3	23	2	3	31

Location: Colton
N/S: Rancho Avenue
E/W: Citrus Street

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound Rancho Avenue			Westbound Citrus Street			Northbound Rancho Avenue			Eastbound Citrus Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

	Southbound Rancho Avenue			Westbound Citrus Street			Northbound Rancho Avenue			Eastbound Citrus Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

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City of Colton
N/S: Rancho Avenue
E/W: N Street
Weather: Clear

File Name : 04_COL_Ran_N St AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Rancho Avenue Southbound			N Street Westbound				Rancho Avenue Northbound						
Start Time	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	15	232	247	1	13	0	14	112	0	0	112	0	373	373
07:15 AM	8	261	269	3	19	0	22	135	0	0	135	0	426	426
07:30 AM	10	324	334	4	10	0	14	136	0	0	136	0	484	484
07:45 AM	12	321	333	6	10	0	16	136	0	0	136	0	485	485
Total	45	1138	1183	14	52	0	66	519	0	0	519	0	1768	1768
08:00 AM	13	205	218	3	19	0	22	138	1	0	139	0	379	379
08:15 AM	12	194	206	0	8	0	8	109	0	0	109	0	323	323
08:30 AM	12	195	207	2	17	0	19	105	1	0	106	0	332	332
08:45 AM	11	195	206	2	13	0	15	100	1	0	101	0	322	322
Total	48	789	837	7	57	0	64	452	3	0	455	0	1356	1356
Grand Total	93	1927	2020	21	109	0	130	971	3	0	974	0	3124	3124
Apprch %	4.6	95.4		16.2	83.8			99.7	0.3					
Total %	3	61.7	64.7	0.7	3.5		4.2	31.1	0.1		31.2	0	100	

	Rancho Avenue Southbound			N Street Westbound			Rancho Avenue Northbound			
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	8	261	269	3	**19**	**22**	135	0	135	426
07:30 AM	10	**324**	**334**	4	10	14	136	0	136	484
07:45 AM	12	321	333	**6**	10	16	136	0	136	**485**
08:00 AM	**13**	205	218	3	19	22	**138**	**1**	**139**	379
Total Volume	43	1111	1154	16	58	74	545	1	546	1774
% App. Total	3.7	96.3		21.6	78.4		99.8	0.2		
PHF	.827	.857	.864	.667	.763	.841	.987	.250	.982	.914

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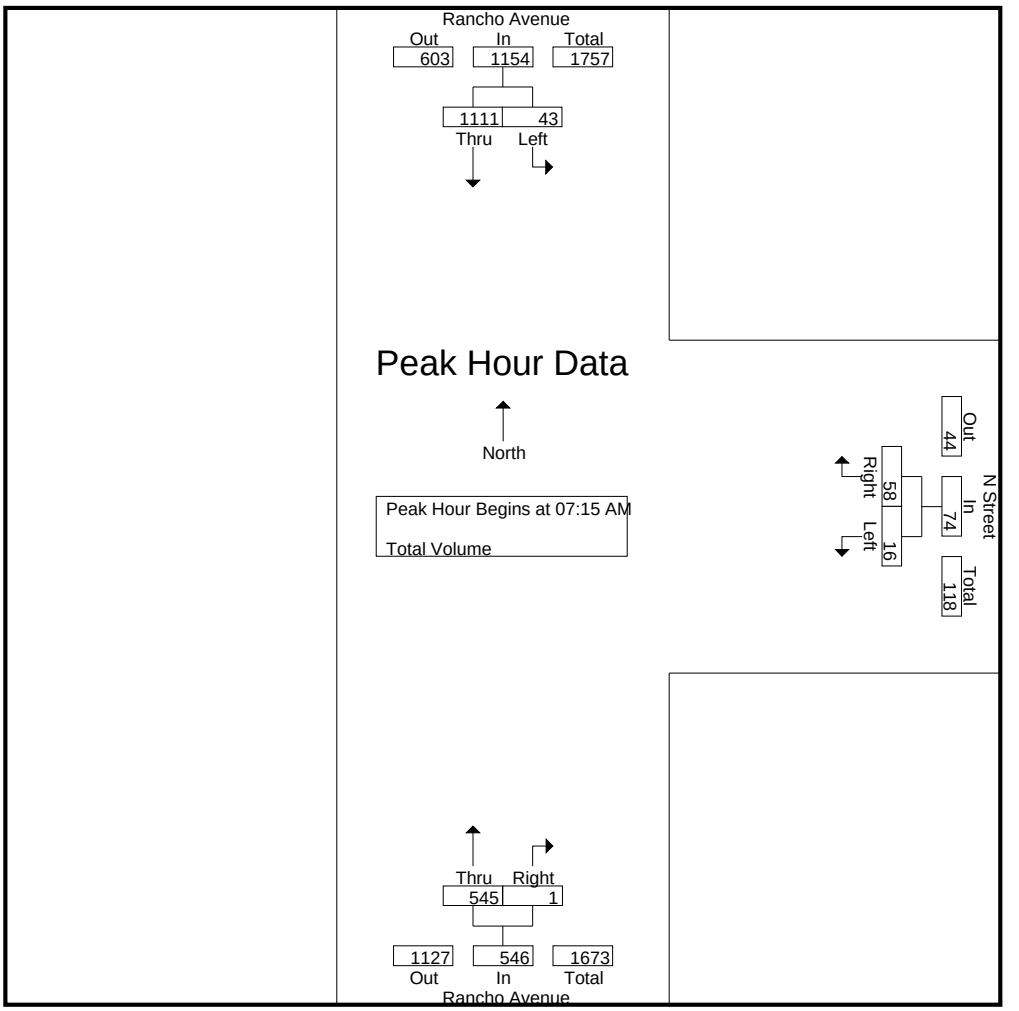
City of Colton
N/S: Rancho Avenue
E/W: N Street
Weather: Clear

File Name : 04_COL_Ran_N St AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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

	07:00 AM			07:15 AM			07:15 AM		
+0 mins.	**15**	232	247	3	**19**	**22**	135	0	135
+15 mins.	8	261	269	4	10	14	136	0	136
+30 mins.	10	**324**	**334**	**6**	10	16	136	0	136
+45 mins.	12	321	333	3	19	22	**138**	**1**	**139**
Total Volume	45	1138	1183	16	58	74	545	1	546
% App. Total	3.8	96.2		21.6	78.4		99.8	0.2	
PHF	.750	.878	.885	.667	.763	.841	.987	.250	.982

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City of Colton
N/S: Rancho Avenue
E/W: N Street
Weather: Clear

File Name : 04_COL_Ran_N St PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Rancho Avenue Southbound			N Street Westbound				Rancho Avenue Northbound						
Start Time	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	21	285	306	1	16	0	17	204	3	0	207	0	530	530
04:15 PM	20	267	287	2	13	0	15	224	2	0	226	0	528	528
04:30 PM	28	220	248	5	12	0	17	245	3	0	248	0	513	513
04:45 PM	38	225	263	1	13	0	14	232	2	0	234	0	511	511
Total	107	997	1104	9	54	0	63	905	10	0	915	0	2082	2082
05:00 PM	22	276	298	0	16	0	16	172	2	0	174	0	488	488
05:15 PM	16	236	252	1	12	0	13	209	2	0	211	0	476	476
05:30 PM	24	233	257	1	14	0	15	218	2	0	220	0	492	492
05:45 PM	29	196	225	2	7	0	9	229	1	0	230	0	464	464
Total	91	941	1032	4	49	0	53	828	7	0	835	0	1920	1920
Grand Total	198	1938	2136	13	103	0	116	1733	17	0	1750	0	4002	4002
Apprch %	9.3	90.7		11.2	88.8			99	1					
Total %	4.9	48.4	53.4	0.3	2.6		2.9	43.3	0.4		43.7	0	100	

	Rancho Avenue Southbound			N Street Westbound			Rancho Avenue Northbound			
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 04:00 PM										
04:00 PM	21	**285**	**306**	1	**16**	**17**	204	**3**	207	**530**
04:15 PM	20	267	287	2	13	15	224	2	226	528
04:30 PM	28	220	248	**5**	12	17	**245**	3	**248**	513
04:45 PM	**38**	225	263	1	13	14	232	2	234	511
Total Volume	107	997	1104	9	54	63	905	10	915	2082
% App. Total	9.7	90.3		14.3	85.7		98.9	1.1		
PHF	.704	.875	.902	.450	.844	.926	.923	.833	.922	.982

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City of Colton
N/S: Rancho Avenue
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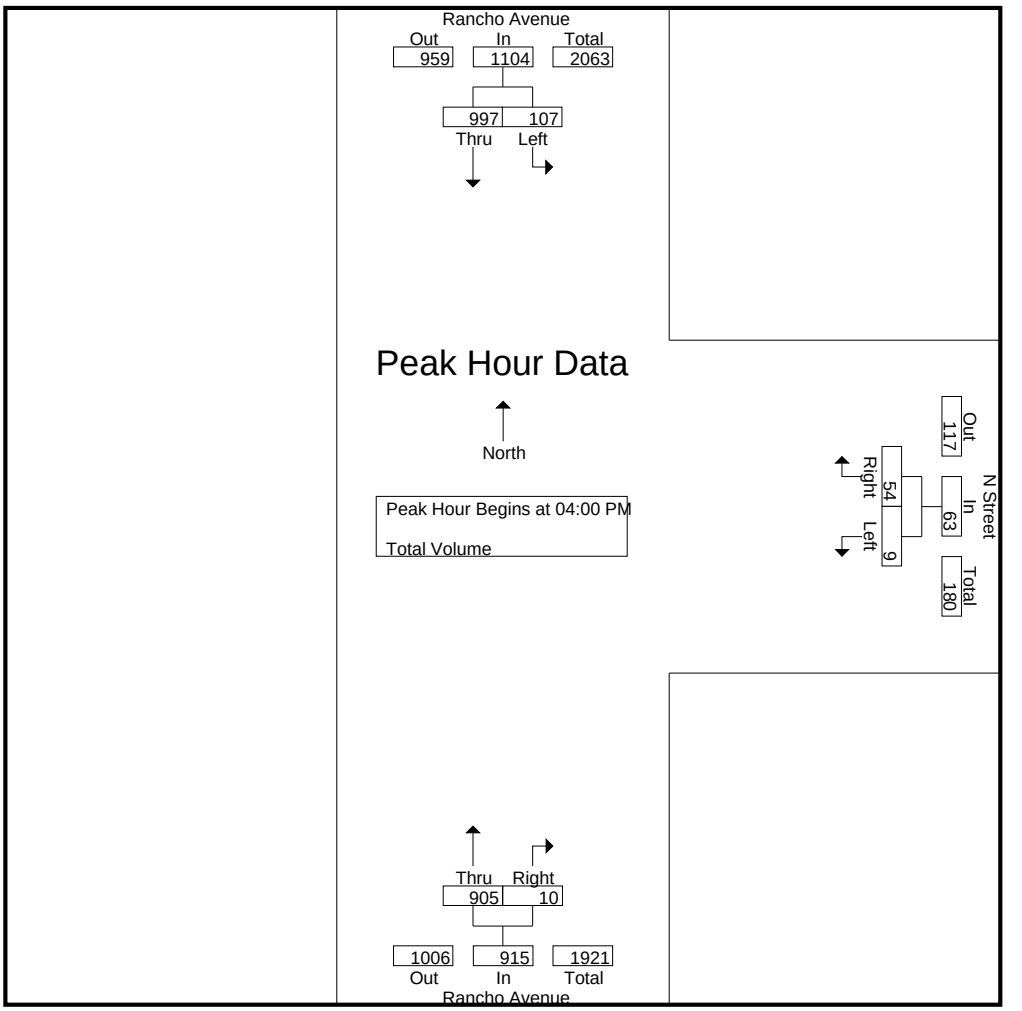
File Name : 04_COL_Ran_N St PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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			04:00 PM		
+0 mins.	21	**285**	**306**	1	**16**	**17**	204	**3**	207
+15 mins.	20	267	287	2	13	15	224	2	226
+30 mins.	28	220	248	**5**	12	17	**245**	3	**248**
+45 mins.	**38**	225	263	1	13	14	232	2	234
Total Volume	107	997	1104	9	54	63	905	10	915
% App. Total	9.7	90.3		14.3	85.7		98.9	1.1	
PHF	.704	.875	.902	.450	.844	.926	.923	.833	.922

Location: Colton
N/S: Rancho Avenue
E/W: N Street

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg Rancho Avenue	East Leg N Street	South Leg Rancho Avenue	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	1	0	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1

	North Leg Rancho Avenue	East Leg N Street	South Leg Rancho Avenue	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	1	0	0	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	1

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Location: Colton
N/S: Rancho Avenue
E/W: N Street

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound Rancho Avenue			Westbound N Street			Northbound Rancho Avenue			Eastbound Dead End			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	1	0	0	0	1

	Southbound Rancho Avenue			Westbound N Street			Northbound Rancho Avenue			Eastbound Dead End			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

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City of Colton
N/S: Rancho Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 05_COL_Ran_AM AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Rancho Avenue Southbound					Agua Mansa Road Westbound					Rancho Avenue Northbound					Agua Mansa Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	5	172	58	3	235	0	5	2	2	7	11	72	1	0	84	39	3	12	3	54	8	380	388
07:15 AM	4	204	62	0	270	0	7	1	0	8	16	94	4	0	114	49	5	14	5	68	5	460	465
07:30 AM	7	224	79	11	310	1	10	2	2	13	24	77	0	0	101	58	7	20	4	85	17	509	526
07:45 AM	15	197	114	13	326	1	14	1	0	16	40	77	9	2	126	64	7	17	5	88	20	556	576
Total	31	797	313	27	1141	2	36	6	4	44	91	320	14	2	425	210	22	63	17	295	50	1905	1955
08:00 AM	6	134	76	12	216	8	15	29	8	52	17	60	2	0	79	49	3	20	6	72	26	419	445
08:15 AM	14	124	58	0	196	1	5	8	1	14	11	57	3	1	71	44	4	15	4	63	6	344	350
08:30 AM	3	144	47	2	194	3	6	14	4	23	17	42	1	0	60	43	2	15	4	60	10	337	347
08:45 AM	2	136	46	0	184	1	5	1	0	7	7	57	0	0	64	47	3	12	5	62	5	317	322
Total	25	538	227	14	790	13	31	52	13	96	52	216	6	1	274	183	12	62	19	257	47	1417	1464
Grand Total	56	1335	540	41	1931	15	67	58	17	140	143	536	20	3	699	393	34	125	36	552	97	3322	3419
Apprch %	2.9	69.1	28			10.7	47.9	41.4			20.5	76.7	2.9			71.2	6.2	22.6					
Total %	1.7	40.2	16.3		58.1	0.5	2	1.7		4.2	4.3	16.1	0.6		21	11.8	1	3.8		16.6	2.8	97.2	

	Rancho Avenue Southbound				Agua Mansa Road Westbound				Rancho Avenue Northbound				Agua Mansa Road 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	4	204	62	270	0	7	1	8	16	**94**	4	114	49	5	14	68	460
07:30 AM	7	**224**	79	310	1	10	2	13	24	77	0	101	58	**7**	**20**	85	509
07:45 AM	**15**	197	**114**	**326**	1	14	1	16	**40**	77	**9**	**126**	**64**	7	17	**88**	**556**
08:00 AM	6	134	76	216	**8**	**15**	**29**	**52**	17	60	2	79	49	3	20	72	419
Total Volume	32	759	331	1122	10	46	33	89	97	308	15	420	220	22	71	313	1944
% App. Total	2.9	67.6	29.5		11.2	51.7	37.1		23.1	73.3	3.6		70.3	7	22.7		
PHF	.533	.847	.726	.860	.313	.767	.284	.428	.606	.819	.417	.833	.859	.786	.888	.889	.874

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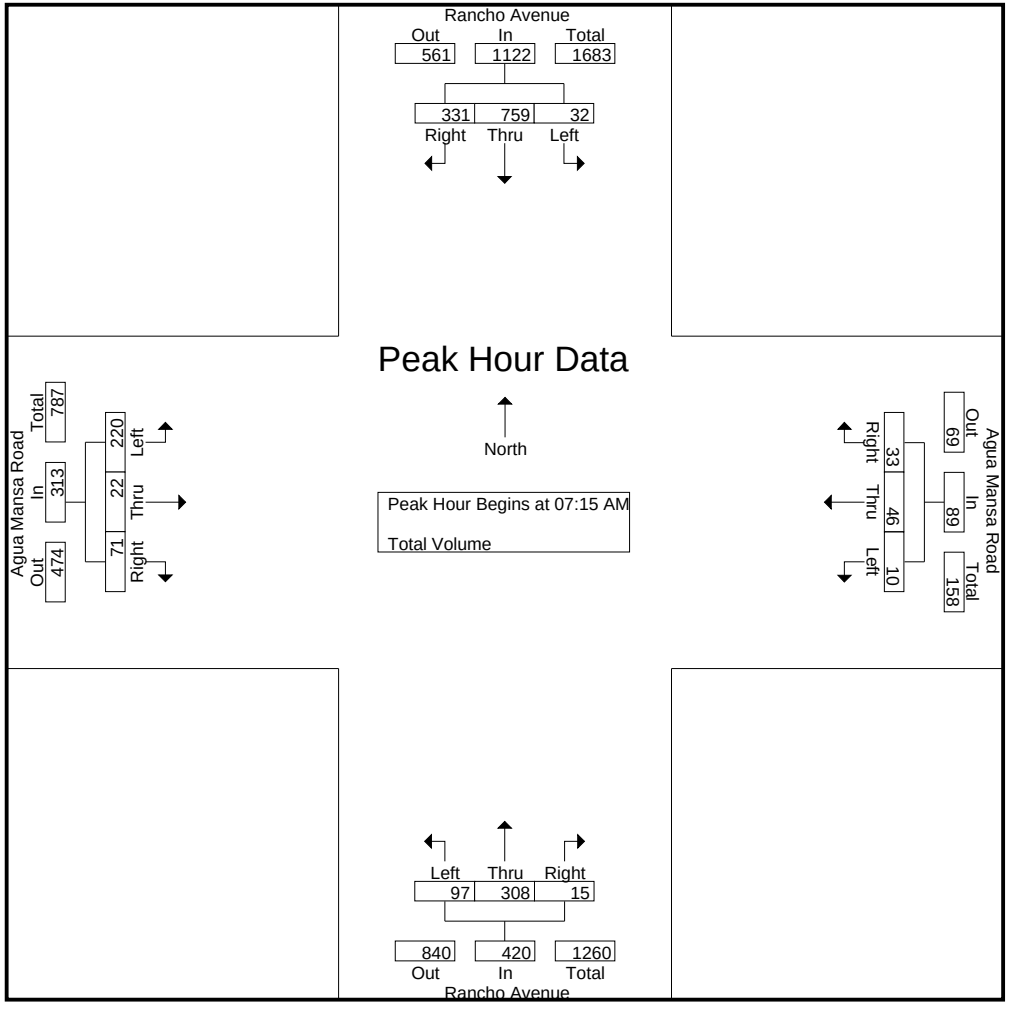
City of Colton
N/S: Rancho Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 05_COL_Ran_AM AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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City of Colton
N/S: Rancho Avenue
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File Name : 05_COL_Ran_AM AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 3

	Rancho Avenue Southbound				Agua Mansa Road Westbound				Rancho Avenue Northbound				Agua Mansa Road 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 Each Approach Begins at:																	
	07:00 AM				07:45 AM				07:00 AM				07:15 AM				
+0 mins.	5	172	58	235	1	14	1	16	11	72	1	84	49	5	14	68	
+15 mins.	4	204	62	270	**8**	**15**	**29**	**52**	16	**94**	4	114	58	**7**	**20**	85	
+30 mins.	7	**224**	79	310	1	5	8	14	24	77	0	101	**64**	7	17	**88**	
+45 mins.	**15**	197	**114**	**326**	3	6	14	23	**40**	77	**9**	**126**	49	3	20	72	
Total Volume	31	797	313	1141	13	40	52	105	91	320	14	425	220	22	71	313	
% App. Total	2.7	69.9	27.4		12.4	38.1	49.5		21.4	75.3	3.3		70.3	7	22.7		
PHF	.517	.890	.686	.875	.406	.667	.448	.505	.569	.851	.389	.843	.859	.786	.888	.889	

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File Name : 05_COL_Ran_AM PM
Site Code : 241045
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Page No : 1

Groups Printed- Total Volume

	Rancho Avenue Southbound					Agua Mansa Road Westbound					Rancho Avenue Northbound					Agua Mansa Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	2	240	47	6	289	2	8	10	5	20	24	86	2	1	112	106	12	51	9	169	21	590	611
04:15 PM	1	206	59	9	266	1	10	7	3	18	15	122	0	0	137	104	10	48	8	162	20	583	603
04:30 PM	1	176	50	2	227	1	7	6	3	14	21	112	0	0	133	123	19	63	13	205	18	579	597
04:45 PM	0	189	51	5	240	0	16	0	0	16	10	117	0	0	127	114	6	49	13	169	18	552	570
Total	4	811	207	22	1022	4	41	23	11	68	70	437	2	1	509	447	47	211	43	705	77	2304	2381
05:00 PM	0	203	59	6	262	0	12	4	4	16	24	80	0	0	104	85	8	46	9	139	19	521	540
05:15 PM	0	199	45	7	244	0	11	0	0	11	17	110	1	1	128	110	10	43	13	163	21	546	567
05:30 PM	1	193	46	5	240	0	8	3	1	11	25	115	1	1	141	94	4	42	11	140	18	532	550
05:45 PM	1	139	46	9	186	0	8	1	0	9	17	106	0	0	123	119	9	67	21	195	30	513	543
Total	2	734	196	27	932	0	39	8	5	47	83	411	2	2	496	408	31	198	54	637	88	2112	2200
Grand Total	6	1545	403	49	1954	4	80	31	16	115	153	848	4	3	1005	855	78	409	97	1342	165	4416	4581
Apprch %	0.3	79.1	20.6			3.5	69.6	27			15.2	84.4	0.4			63.7	5.8	30.5					
Total %	0.1	35	9.1		44.2	0.1	1.8	0.7		2.6	3.5	19.2	0.1		22.8	19.4	1.8	9.3		30.4	3.6	96.4	

	Rancho Avenue Southbound				Agua Mansa Road Westbound				Rancho Avenue Northbound				Agua Mansa Road 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**	**240**	47	**289**	**2**	8	**10**	**20**	**24**	86	**2**	112	106	12	51	169	**590**
04:15 PM	1	206	**59**	266	1	10	7	18	15	**122**	0	**137**	104	10	48	162	583
04:30 PM	1	176	50	227	1	7	6	14	21	112	0	133	**123**	**19**	**63**	**205**	579
04:45 PM	0	189	51	240	0	**16**	0	16	10	117	0	127	114	6	49	169	552
Total Volume	4	811	207	1022	4	41	23	68	70	437	2	509	447	47	211	705	2304
% App. Total	0.4	79.4	20.3		5.9	60.3	33.8		13.8	85.9	0.4		63.4	6.7	29.9		
PHF	.500	.845	.877	.884	.500	.641	.575	.850	.729	.895	.250	.929	.909	.618	.837	.860	.976

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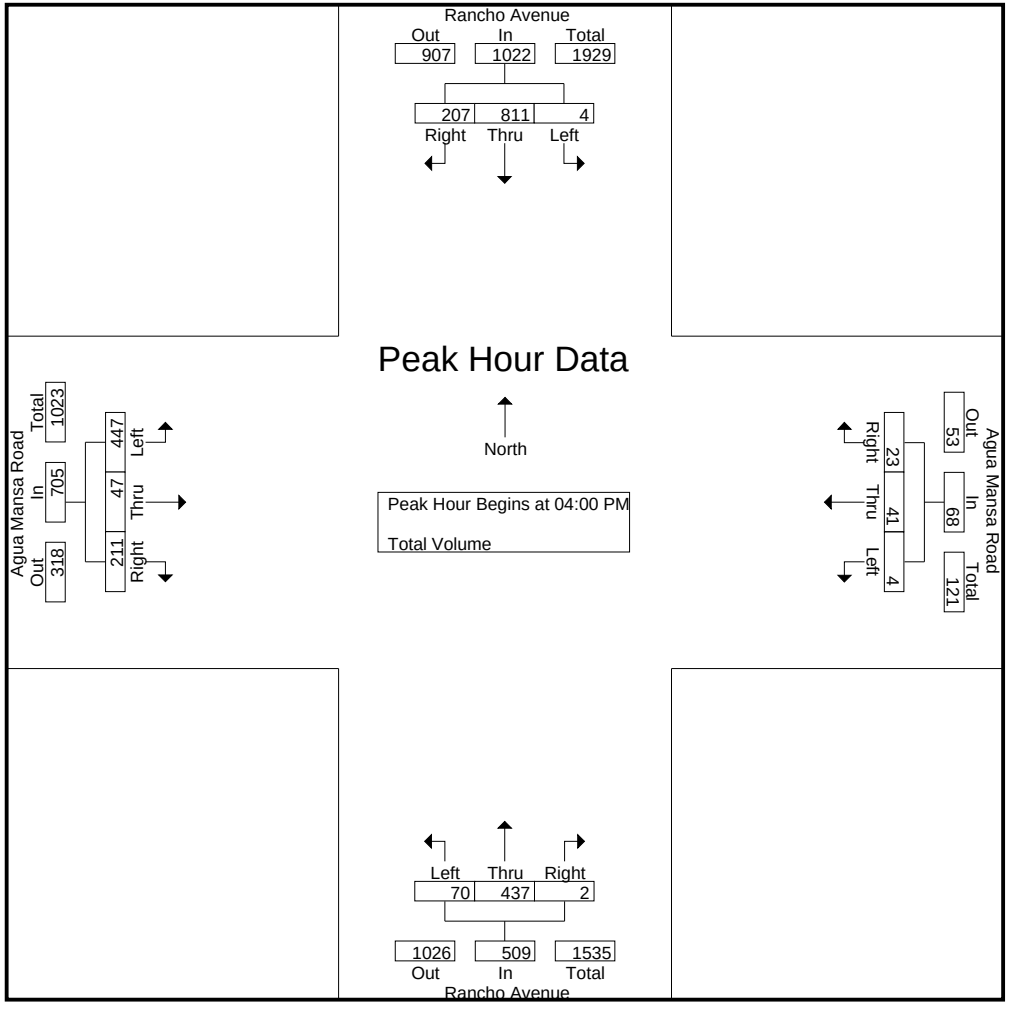

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	Rancho Avenue Southbound				Agua Mansa Road Westbound				Rancho Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	**2**	**240**	47	**289**	**2**	8	**10**	**20**	**24**	86	**2**	112	106	12	51	169	
+15 mins.	1	206	**59**	266	1	10	7	18	15	**122**	0	**137**	104	10	48	162	
+30 mins.	1	176	50	227	1	7	6	14	21	112	0	133	**123**	**19**	**63**	**205**	
+45 mins.	0	189	51	240	0	**16**	0	16	10	117	0	127	114	6	49	169	
Total Volume	4	811	207	1022	4	41	23	68	70	437	2	509	447	47	211	705	
% App. Total	0.4	79.4	20.3		5.9	60.3	33.8		13.8	85.9	0.4		63.4	6.7	29.9		
PHF	.500	.845	.877	.884	.500	.641	.575	.850	.729	.895	.250	.929	.909	.618	.837	.860	

Location: Colton
N/S: Rancho Avenue
E/W: Agua Mansa Road

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg Rancho Avenue	East Leg Agua Mansa Road	South Leg Rancho Avenue	West Leg Agua Mansa Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	0	1
8:45 AM	0	0	1	0	1
TOTAL VOLUMES:	0	1	1	0	2

	North Leg Rancho Avenue	East Leg Agua Mansa Road	South Leg Rancho Avenue	West Leg Agua Mansa Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	1	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	1	1

Location: Colton
N/S: Rancho Avenue
E/W: Agua Mansa Road

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound Rancho Avenue			Westbound Agua Mansa Road			Northbound Rancho Avenue			Eastbound Agua Mansa Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	1	0	0	1

	Southbound Rancho Avenue			Westbound Agua Mansa Road			Northbound Rancho Avenue			Eastbound Agua Mansa Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

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City of Colton
N/S: S 5th Street
E/W: K Street
Weather: Clear

File Name : 06_COL_5th_K St AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	S 5th Street Southbound				Empty Lot Westbound				S 5th Street Northbound				K 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	0	0	0	0	0	0	0	2	0	0	2	0	0	4	4	6
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
07:30 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	1	1	4
07:45 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	7	0	0	7	0	0	7	7	14
08:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	4	4	5
08:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	1	1	3
08:30 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	3	3	6
08:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3	3	4
Total	0	0	1	1	0	0	0	0	6	0	0	6	0	0	11	11	18
Grand Total	0	0	1	1	0	0	0	0	13	0	0	13	0	0	18	18	32
Apprch %	0	0	100		0	0	0		100	0	0		0	0	100		
Total %	0	0	3.1	3.1	0	0	0	0	40.6	0	0	40.6	0	0	56.2	56.2	

	S 5th Street Southbound				Empty Lot Westbound				S 5th Street Northbound				K 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 08:00 AM																	
08:00 AM	0	0	**1**	**1**	0	0	0	0	0	0	0	0	0	0	**4**	**4**	5
08:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	1	1	3
08:30 AM	0	0	0	0	0	0	0	0	**3**	0	0	**3**	0	0	3	3	**6**
08:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3	3	4
Total Volume	0	0	1	1	0	0	0	0	6	0	0	6	0	0	11	11	18
% App. Total	0	0	100		0	0	0		100	0	0		0	0	100		
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.500	.000	.000	.500	.000	.000	.688	.688	.750

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City of Colton
N/S: S 5th Street
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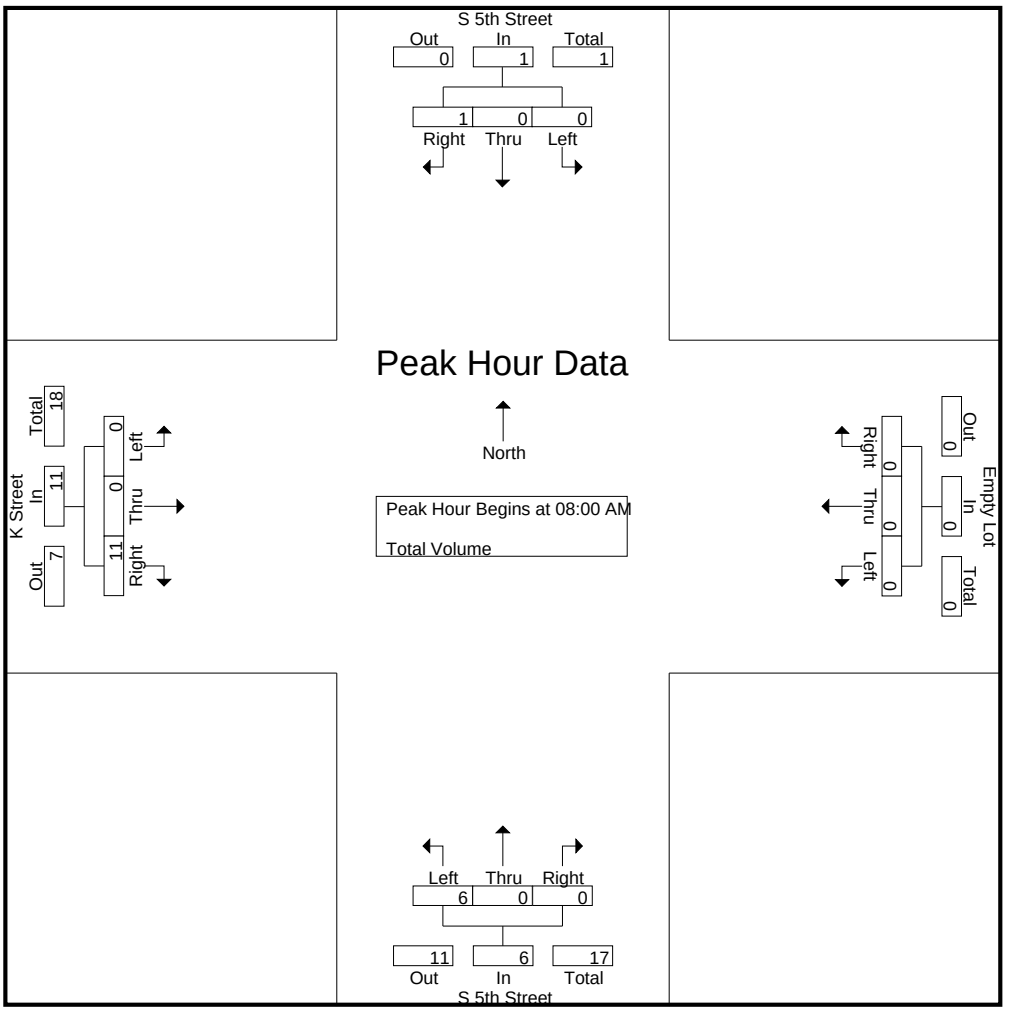
File Name : 06_COL_5th_K St AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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

	07:15 AM				07:00 AM				07:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	2	0	0	2	0	0	**4**	**4**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
+30 mins.	0	0	0	0	0	0	0	0	**3**	0	0	**3**	0	0	3	3
+45 mins.	0	0	**1**	**1**	0	0	0	0	2	0	0	2	0	0	3	3
Total Volume	0	0	1	1	0	0	0	0	7	0	0	7	0	0	11	11
% App. Total	0	0	100		0	0	0		100	0	0		0	0	100	
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.583	.000	.000	.583	.000	.000	.688	.688

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City of Colton
N/S: S 5th Street
E/W: K Street
Weather: Clear

File Name : 06_COL_5th_K St PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	S 5th Street Southbound				Empty Lot Westbound				S 5th Street Northbound				K 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	0	0	0	0	0	0	0	0	7	0	0	7	1	0	3	4	11
04:15 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	1	1	3
04:30 PM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	1	1	4
04:45 PM	0	0	0	0	0	0	0	0	6	0	0	6	0	0	2	2	8
Total	0	0	0	0	0	0	0	0	18	0	0	18	1	0	7	8	26
05:00 PM	0	0	0	0	0	0	0	0	7	0	0	7	0	0	2	2	9
05:15 PM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	3
05:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2
05:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	1	0	3	4	5
Total	0	0	0	0	0	0	0	0	12	0	0	12	1	0	6	7	19
Grand Total	0	0	0	0	0	0	0	0	30	0	0	30	2	0	13	15	45
Apprch %	0	0	0		0	0	0		100	0	0		13.3	0	86.7		
Total %	0	0	0	0	0	0	0	0	66.7	0	0	66.7	4.4	0	28.9	33.3	

	S 5th Street Southbound				Empty Lot Westbound				S 5th Street Northbound				K 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	0	0	0	0	0	0	0	0	**7**	0	0	**7**	**1**	0	**3**	**4**	**11**
04:15 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	1	1	3
04:30 PM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	1	1	4
04:45 PM	0	0	0	0	0	0	0	0	6	0	0	6	0	0	2	2	8
Total Volume	0	0	0	0	0	0	0	0	18	0	0	18	1	0	7	8	26
% App. Total	0	0	0		0	0	0		100	0	0		12.5	0	87.5		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.643	.000	.000	.643	.250	.000	.583	.500	.591

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City of Colton
N/S: S 5th Street
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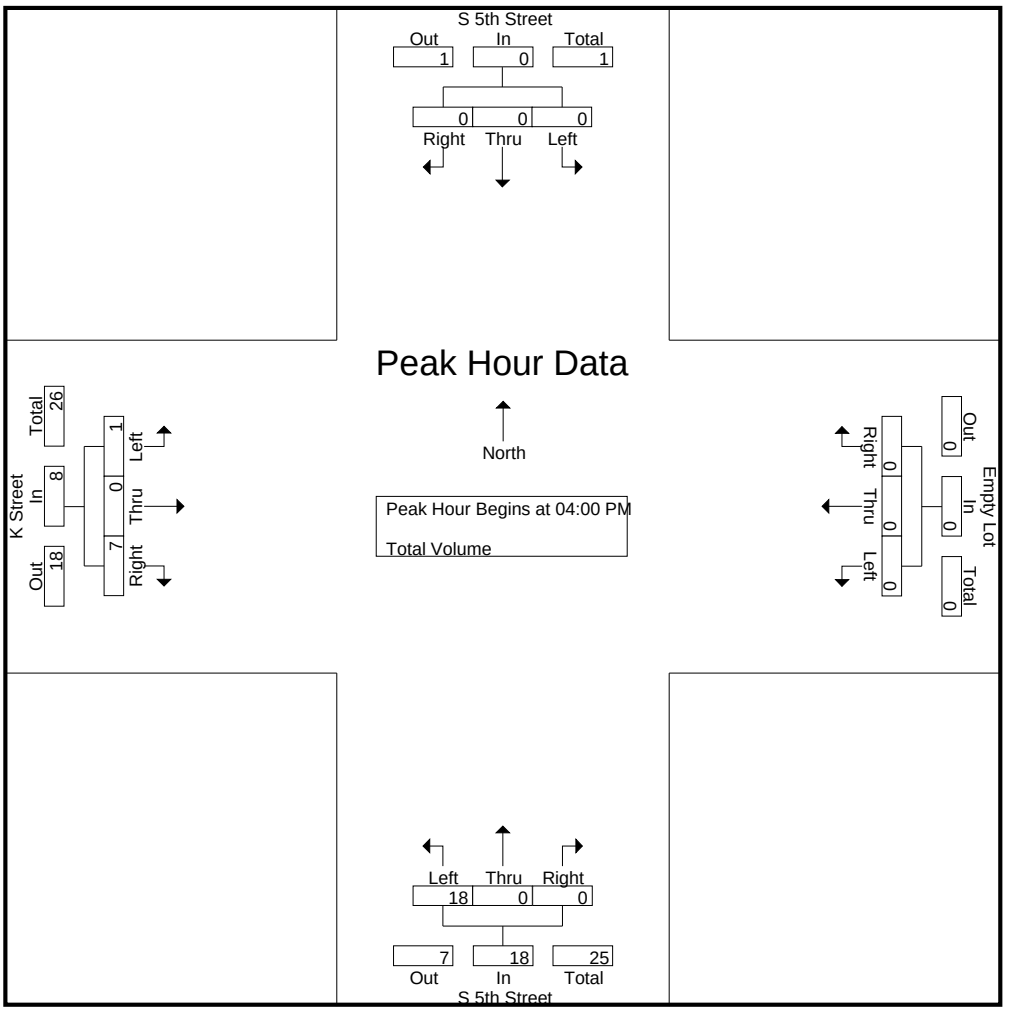
File Name : 06_COL_5th_K St PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	3	0	0	3	**1**	0	**3**	**4**
+15 mins.	0	0	0	0	0	0	0	0	6	0	0	6	0	0	1	1
+30 mins.	0	0	0	0	0	0	0	0	**7**	0	0	**7**	0	0	1	1
+45 mins.	0	0	0	0	0	0	0	0	3	0	0	3	0	0	2	2
Total Volume	0	0	0	0	0	0	0	0	19	0	0	19	1	0	7	8
% App. Total	0	0	0		0	0	0		100	0	0		12.5	0	87.5	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.679	.000	.000	.679	.250	.000	.583	.500

Location: Colton
N/S: S 5th Street
E/W: K Street

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg S 5th Street	East Leg Empty Lot	South Leg S 5th Street	West Leg K Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg S 5th Street	East Leg Empty Lot	South Leg S 5th Street	West Leg K Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	1	0	1
4:30 PM	1	0	0	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	1	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	0	2	0	3

Location: Colton
N/S: S 5th Street
E/W: K Street

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound S 5th Street			Westbound Empty Lot			Northbound S 5th Street			Eastbound K Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound S 5th Street			Westbound Empty Lot			Northbound S 5th Street			Eastbound K Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	2	0	0	0	0	2	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	2	1	0	0	0	2	5

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City of Colton
N/S: S La Cadena Drive
E/W: M Street
Weather: Clear

File Name : 07_COL_La C_M AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	S La Cadena Drive Southbound					M Street Westbound					S La Cadena Drive Northbound					M Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	8	105	1	0	114	8	2	12	9	22	0	113	11	0	124	4	0	0	0	4	9	264	273
07:15 AM	10	144	2	0	156	16	1	12	9	29	2	142	8	1	152	4	1	0	0	5	10	342	352
07:30 AM	11	186	4	0	201	21	0	16	9	37	2	136	11	0	149	3	2	2	1	7	10	394	404
07:45 AM	15	222	1	0	238	13	2	12	9	27	2	142	16	3	160	2	1	1	1	4	13	429	442
Total	44	657	8	0	709	58	5	52	36	115	6	533	46	4	585	13	4	3	2	20	42	1429	1471
08:00 AM	18	114	1	0	133	13	1	10	6	24	0	123	18	4	141	2	2	3	3	7	13	305	318
08:15 AM	18	111	2	0	131	10	2	13	9	25	1	82	11	1	94	1	0	3	2	4	12	254	266
08:30 AM	11	118	2	0	131	16	3	10	2	29	3	108	10	2	121	7	2	2	1	11	5	292	297
08:45 AM	11	122	3	0	136	14	2	9	4	25	1	99	11	0	111	6	1	0	0	7	4	279	283
Total	58	465	8	0	531	53	8	42	21	103	5	412	50	7	467	16	5	8	6	29	34	1130	1164
Grand Total	102	1122	16	0	1240	111	13	94	57	218	11	945	96	11	1052	29	9	11	8	49	76	2559	2635
Apprch %	8.2	90.5	1.3			50.9	6	43.1			1	89.8	9.1			59.2	18.4	22.4					
Total %	4	43.8	0.6		48.5	4.3	0.5	3.7		8.5	0.4	36.9	3.8		41.1	1.1	0.4	0.4		1.9	2.9	97.1	

	S La Cadena Drive Southbound				M Street Westbound				S La Cadena Drive Northbound				M 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	10	144	2	156	16	1	12	29	**2**	**142**	8	152	**4**	1	0	5	342
07:30 AM	11	186	**4**	201	**21**	0	**16**	**37**	2	136	11	149	3	**2**	2	**7**	394
07:45 AM	15	**222**	1	**238**	13	**2**	12	27	2	142	16	**160**	2	1	1	4	**429**
08:00 AM	**18**	114	1	133	13	1	10	24	0	123	**18**	141	2	2	**3**	7	305
Total Volume	54	666	8	728	63	4	50	117	6	543	53	602	11	6	6	23	1470
% App. Total	7.4	91.5	1.1		53.8	3.4	42.7		1	90.2	8.8		47.8	26.1	26.1		
PHF	.750	.750	.500	.765	.750	.500	.781	.791	.750	.956	.736	.941	.688	.750	.500	.821	.857

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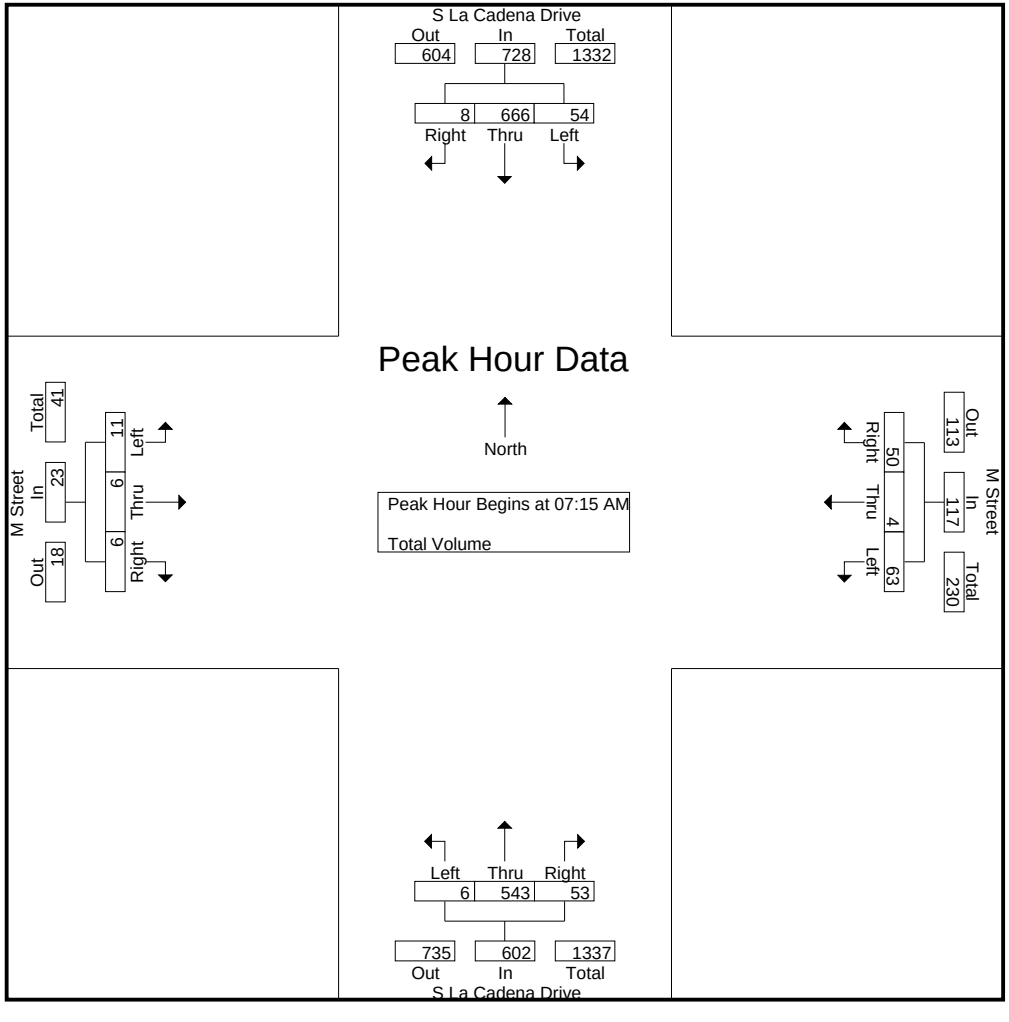
City of Colton
N/S: S La Cadena Drive
E/W: M Street
Weather: Clear

File Name : 07_COL_La C_M AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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City of Colton
N/S: S La Cadena Drive
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Weather: Clear

File Name : 07_COL_La C_M AM
Site Code : 241045
Start Date : 11/21/2024

	S La Cadena Drive Southbound				M Street Westbound				S La Cadena Drive Northbound				M 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 Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				08:00 AM				
+0 mins.	10	144	2	156	16	1	12	29	**2**	**142**	8	152	2	**2**	**3**	7	
+15 mins.	11	186	**4**	201	**21**	0	**16**	**37**	2	136	11	149	1	0	3	4	
+30 mins.	15	**222**	1	**238**	13	**2**	12	27	2	142	16	**160**	**7**	2	2	**11**	
+45 mins.	**18**	114	1	133	13	1	10	24	0	123	**18**	141	6	1	0	7	
Total Volume	54	666	8	728	63	4	50	117	6	543	53	602	16	5	8	29	
% App. Total	7.4	91.5	1.1		53.8	3.4	42.7		1	90.2	8.8		55.2	17.2	27.6		
PHF	.750	.750	.500	.765	.750	.500	.781	.791	.750	.956	.736	.941	.571	.625	.667	.659	

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City of Colton
N/S: S La Cadena Drive
E/W: M Street
Weather: Clear

File Name : 07_COL_La C_M PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	S La Cadena Drive Southbound					M Street Westbound					S La Cadena Drive Northbound					M Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	23	205	4	0	232	17	2	33	16	52	1	163	23	5	187	4	0	0	0	4	21	475	496
04:15 PM	27	186	3	0	216	26	3	34	17	63	1	174	17	4	192	4	3	2	2	9	23	480	503
04:30 PM	20	164	7	1	191	29	1	36	17	66	2	181	13	3	196	6	2	0	0	8	21	461	482
04:45 PM	16	159	2	1	177	24	3	33	7	60	2	172	23	3	197	4	4	1	0	9	11	443	454
Total	86	714	16	2	816	96	9	136	57	241	6	690	76	15	772	18	9	3	2	30	76	1859	1935
05:00 PM	18	169	2	0	189	14	1	34	17	49	0	186	17	1	203	5	2	2	2	9	20	450	470
05:15 PM	17	181	4	0	202	25	2	46	16	73	0	184	19	2	203	5	0	1	0	6	18	484	502
05:30 PM	21	164	3	1	188	21	1	34	12	56	2	147	26	1	175	6	2	2	1	10	15	429	444
05:45 PM	12	146	0	0	158	21	4	28	12	53	1	179	17	0	197	1	2	4	3	7	15	415	430
Total	68	660	9	1	737	81	8	142	57	231	3	696	79	4	778	17	6	9	6	32	68	1778	1846
Grand Total	154	1374	25	3	1553	177	17	278	114	472	9	1386	155	19	1550	35	15	12	8	62	144	3637	3781
Apprch %	9.9	88.5	1.6			37.5	3.6	58.9			0.6	89.4	10			56.5	24.2	19.4					
Total %	4.2	37.8	0.7		42.7	4.9	0.5	7.6		13	0.2	38.1	4.3		42.6	1	0.4	0.3		1.7	3.8	96.2	

	S La Cadena Drive Southbound				M Street Westbound				S La Cadena Drive Northbound				M 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	23	**205**	4	**232**	17	2	33	52	1	163	**23**	187	4	0	0	4	475
04:15 PM	**27**	186	3	216	26	**3**	34	63	1	174	17	192	4	3	**2**	**9**	**480**
04:30 PM	20	164	**7**	191	**29**	1	**36**	**66**	**2**	**181**	13	196	**6**	2	0	8	461
04:45 PM	16	159	2	177	24	3	33	60	2	172	23	**197**	4	**4**	1	9	443
Total Volume	86	714	16	816	96	9	136	241	6	690	76	772	18	9	3	30	1859
% App. Total	10.5	87.5	2		39.8	3.7	56.4		0.8	89.4	9.8		60	30	10		
PHF	.796	.871	.571	.879	.828	.750	.944	.913	.750	.953	.826	.980	.750	.563	.375	.833	.968

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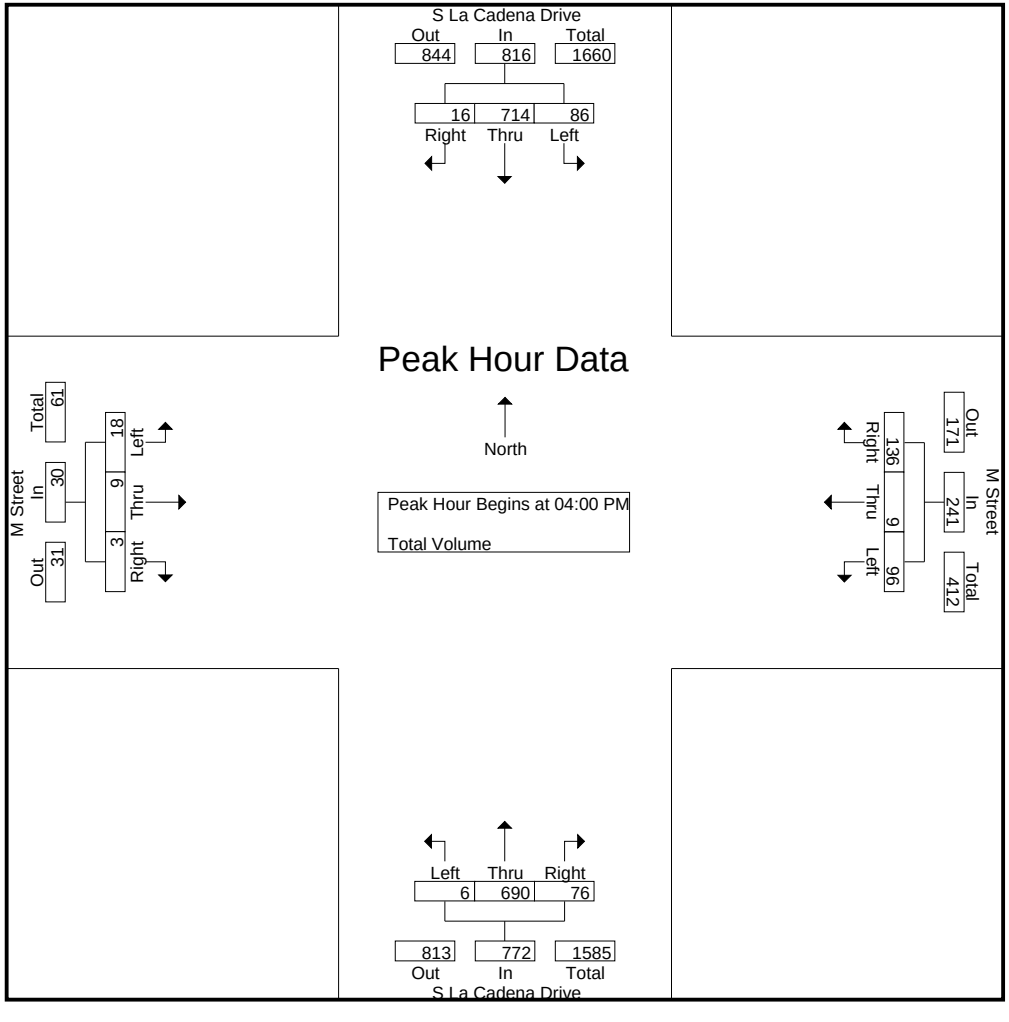
City of Colton
N/S: S La Cadena Drive
E/W: M Street
Weather: Clear

File Name : 07_COL_La C_M PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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City of Colton
N/S: S La Cadena Drive
E/W: M Street
Weather: Clear

File Name : 07_COL_La C_M PM
Site Code : 241045
Start Date : 11/21/2024

	S La Cadena Drive Southbound				M Street Westbound				S La Cadena Drive Northbound				M 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 Each Approach Begins at:																	
	04:00 PM				04:30 PM				04:30 PM				04:15 PM				
+0 mins.	23	**205**	4	**232**	**29**	1	36	66	**2**	181	13	196	4	3	**2**	**9**	
+15 mins.	**27**	186	3	216	24	**3**	33	60	2	172	**23**	197	**6**	2	0	8	
+30 mins.	20	164	**7**	191	14	1	34	49	0	**186**	17	**203**	4	**4**	1	9	
+45 mins.	16	159	2	177	25	2	**46**	**73**	0	184	19	203	5	2	2	9	
Total Volume	86	714	16	816	92	7	149	248	4	723	72	799	19	11	5	35	
% App. Total	10.5	87.5	2		37.1	2.8	60.1		0.5	90.5	9		54.3	31.4	14.3		
PHF	.796	.871	.571	.879	.793	.583	.810	.849	.500	.972	.783	.984	.792	.688	.625	.972	

Location: Colton
N/S: S La Cadena Drive
E/W: M Street

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg S La Cadena Drive	East Leg M Street	South Leg S La Cadena Drive	West Leg M Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	1	0	0	1
7:15 AM	1	2	0	0	3
7:30 AM	0	0	0	0	0
7:45 AM	0	1	1	3	5
8:00 AM	1	3	0	1	5
8:15 AM	0	0	0	0	0
8:30 AM	5	4	0	1	10
8:45 AM	2	0	0	0	2
TOTAL VOLUMES:	9	11	1	5	26

	North Leg S La Cadena Drive	East Leg M Street	South Leg S La Cadena Drive	West Leg M Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	5	0	0	0	5
4:15 PM	0	4	2	0	6
4:30 PM	0	2	1	1	4
4:45 PM	0	3	1	3	7
5:00 PM	0	6	0	0	6
5:15 PM	2	0	0	1	3
5:30 PM	1	2	0	3	6
5:45 PM	0	4	0	4	8
TOTAL VOLUMES:	8	21	4	12	45

Location: Colton
N/S: S La Cadena Drive
E/W: M Street

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound S La Cadena Drive			Westbound M Street			Northbound S La Cadena Drive			Eastbound M Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	2	1	0	0	0	3

	Southbound S La Cadena Drive			Westbound M Street			Northbound S La Cadena Drive			Eastbound M Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	1	0	0	0	0	0	3	0	0	0	0	4

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City of Colton
N/S: S La Cadena Drive
E/W: O Street
Weather: Clear

File Name : 08_COL_La C_O St AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	S La Cadena Drive Southbound				O Street Westbound				S La Cadena Drive Northbound				O 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	21	114	3	138	3	0	6	9	0	89	7	96	0	0	0	0	243
07:15 AM	22	164	2	188	4	0	8	12	0	111	8	119	0	0	1	1	320
07:30 AM	30	207	1	238	5	0	8	13	2	125	5	132	1	0	1	2	385
07:45 AM	29	183	2	214	1	0	5	6	0	137	6	143	0	0	0	0	363
Total	102	668	8	778	13	0	27	40	2	462	26	490	1	0	2	3	1311
08:00 AM	19	87	1	107	3	0	5	8	0	113	9	122	1	1	1	3	240
08:15 AM	18	79	4	101	7	1	3	11	0	100	4	104	0	0	0	0	216
08:30 AM	14	105	0	119	2	0	4	6	1	89	4	94	1	1	1	3	222
08:45 AM	14	87	3	104	7	0	3	10	0	94	8	102	0	2	0	2	218
Total	65	358	8	431	19	1	15	35	1	396	25	422	2	4	2	8	896
Grand Total	167	1026	16	1209	32	1	42	75	3	858	51	912	3	4	4	11	2207
Apprch %	13.8	84.9	1.3		42.7	1.3	56		0.3	94.1	5.6		27.3	36.4	36.4		
Total %	7.6	46.5	0.7	54.8	1.4	0	1.9	3.4	0.1	38.9	2.3	41.3	0.1	0.2	0.2	0.5	

	S La Cadena Drive Southbound				O Street Westbound				S La Cadena Drive Northbound				O 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 07:00 AM																	
07:00 AM	21	114	**3**	138	3	0	6	9	0	89	7	96	0	0	0	0	243
07:15 AM	22	164	2	188	4	0	**8**	12	0	111	**8**	119	0	0	**1**	1	320
07:30 AM	**30**	**207**	1	**238**	**5**	0	8	**13**	**2**	125	5	132	**1**	0	1	**2**	**385**
07:45 AM	29	183	2	214	1	0	5	6	0	**137**	6	**143**	0	0	0	0	363
Total Volume	102	668	8	778	13	0	27	40	2	462	26	490	1	0	2	3	1311
% App. Total	13.1	85.9	1		32.5	0	67.5		0.4	94.3	5.3		33.3	0	66.7		
PHF	.850	.807	.667	.817	.650	.000	.844	.769	.250	.843	.813	.857	.250	.000	.500	.375	.851

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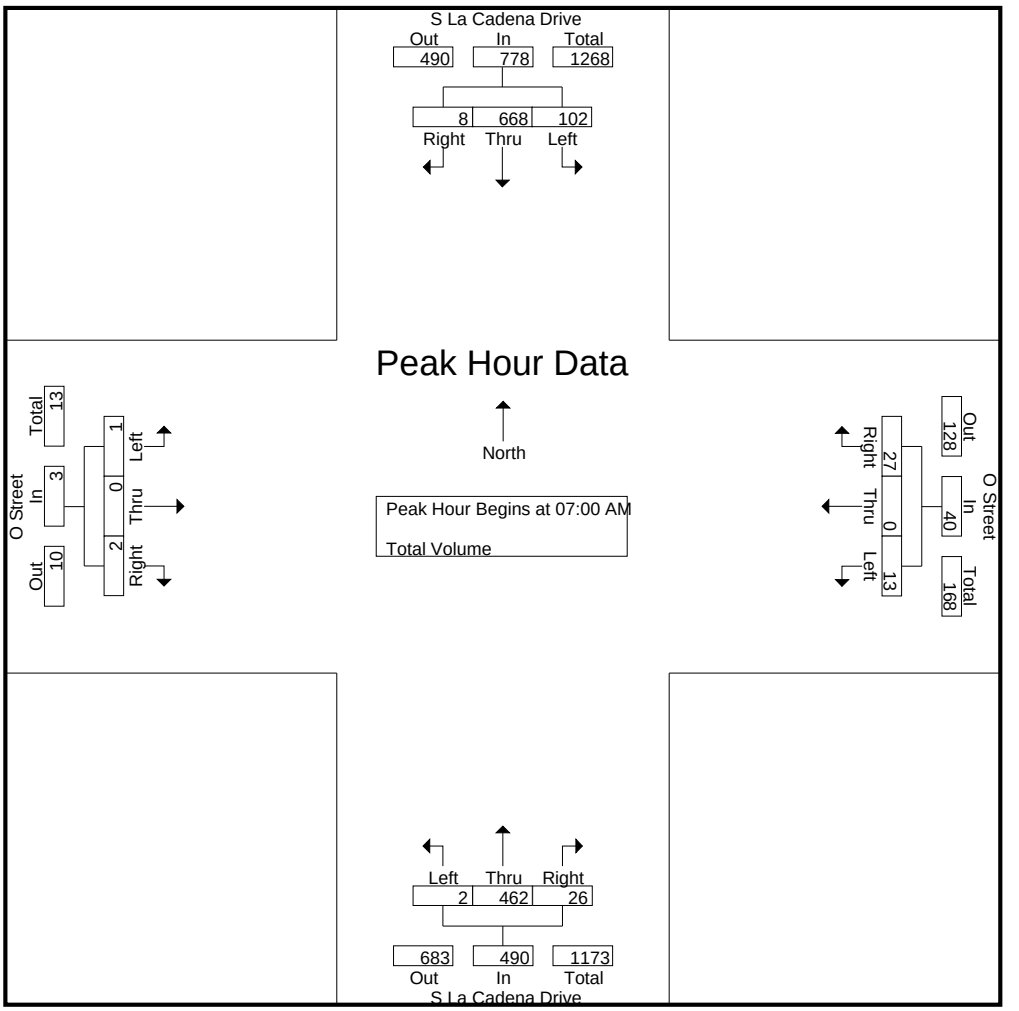
City of Colton
N/S: S La Cadena Drive
E/W: O Street
Weather: Clear

File Name : 08_COL_La C_O St AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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

	07:00 AM				07:00 AM				07:15 AM				08:00 AM			
+0 mins.	21	114	**3**	138	3	0	6	9	0	111	8	119	**1**	1	**1**	**3**
+15 mins.	22	164	2	188	4	0	**8**	12	**2**	125	5	132	0	0	0	0
+30 mins.	**30**	**207**	1	**238**	**5**	0	8	**13**	0	**137**	6	**143**	1	1	1	3
+45 mins.	29	183	2	214	1	0	5	6	0	113	**9**	122	0	**2**	0	2
Total Volume	102	668	8	778	13	0	27	40	2	486	28	516	2	4	2	8
% App. Total	13.1	85.9	1		32.5	0	67.5		0.4	94.2	5.4		25	50	25	
PHF	.850	.807	.667	.817	.650	.000	.844	.769	.250	.887	.778	.902	.500	.500	.500	.667

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City of Colton
N/S: S La Cadena Drive
E/W: O Street
Weather: Clear

File Name : 08_COL_La C_O St PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	S La Cadena Drive Southbound				O Street Westbound				S La Cadena Drive Northbound				O 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	16	226	2	244	4	0	5	9	2	170	4	176	1	1	3	5	434
04:15 PM	18	211	1	230	3	2	4	9	1	175	1	177	0	0	0	0	416
04:30 PM	16	172	0	188	2	1	8	11	0	179	3	182	1	0	0	1	382
04:45 PM	19	172	3	194	0	2	5	7	1	170	5	176	0	0	1	1	378
Total	69	781	6	856	9	5	22	36	4	694	13	711	2	1	4	7	1610
05:00 PM	19	188	4	211	1	0	12	13	3	178	1	182	3	0	0	3	409
05:15 PM	27	213	4	244	1	0	8	9	1	208	5	214	0	0	0	0	467
05:30 PM	12	158	1	171	3	1	6	10	1	140	5	146	2	0	1	3	330
05:45 PM	10	134	1	145	0	0	12	12	3	191	3	197	0	0	0	0	354
Total	68	693	10	771	5	1	38	44	8	717	14	739	5	0	1	6	1560
Grand Total	137	1474	16	1627	14	6	60	80	12	1411	27	1450	7	1	5	13	3170
Apprch %	8.4	90.6	1		17.5	7.5	75		0.8	97.3	1.9		53.8	7.7	38.5		
Total %	4.3	46.5	0.5	51.3	0.4	0.2	1.9	2.5	0.4	44.5	0.9	45.7	0.2	0	0.2	0.4	

	S La Cadena Drive Southbound				O Street Westbound				S La Cadena Drive Northbound				O 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 04:30 PM																	
04:30 PM	16	172	0	188	**2**	1	8	11	0	179	3	182	1	0	0	1	382
04:45 PM	19	172	3	194	0	**2**	5	7	1	170	**5**	176	0	0	**1**	1	378
05:00 PM	19	188	**4**	211	1	0	**12**	**13**	**3**	178	1	182	**3**	0	0	**3**	409
05:15 PM	**27**	**213**	4	**244**	1	0	8	9	1	**208**	5	**214**	0	0	0	0	**467**
Total Volume	81	745	11	837	4	3	33	40	5	735	14	754	4	0	1	5	1636
% App. Total	9.7	89	1.3		10	7.5	82.5		0.7	97.5	1.9		80	0	20		
PHF	.750	.874	.688	.858	.500	.375	.688	.769	.417	.883	.700	.881	.333	.000	.250	.417	.876

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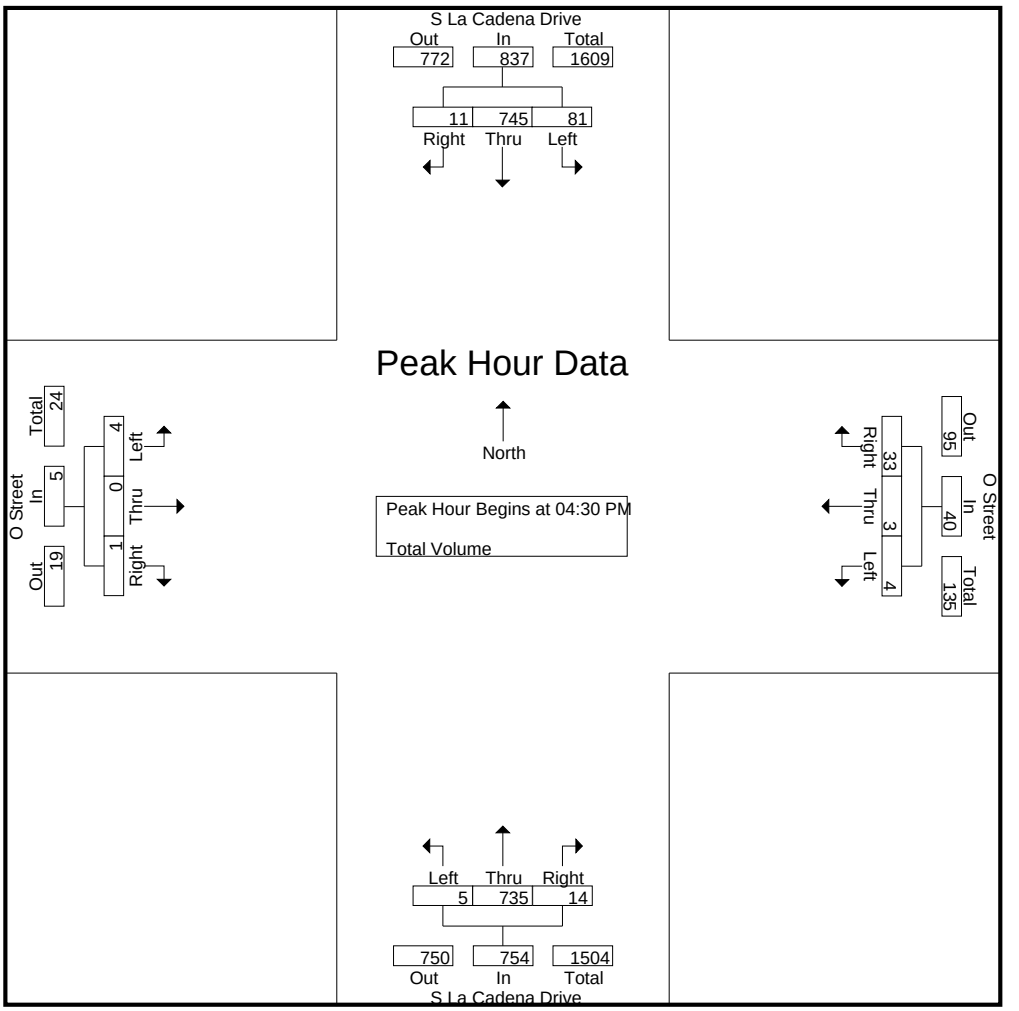
City of Colton
N/S: S La Cadena Drive
E/W: O Street
Weather: Clear

File Name : 08_COL_La C_O St PM
Site Code : 241045
Start Date : 11/21/2024
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.	16	**226**	2	**244**	1	0	**12**	**13**	0	179	3	182	**1**	**1**	**3**	**5**
+15 mins.	18	211	1	230	1	0	8	9	1	170	**5**	176	0	0	0	0
+30 mins.	16	172	0	188	**3**	**1**	6	10	**3**	178	1	182	1	0	0	1
+45 mins.	**19**	172	**3**	194	0	0	12	12	1	**208**	5	**214**	0	0	1	1
Total Volume	69	781	6	856	5	1	38	44	5	735	14	754	2	1	4	7
% App. Total	8.1	91.2	0.7		11.4	2.3	86.4		0.7	97.5	1.9		28.6	14.3	57.1	
PHF	.908	.864	.500	.877	.417	.250	.792	.846	.417	.883	.700	.881	.500	.250	.333	.350

Location: Colton
N/S: S La Cadena Drive
E/W: O Street

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg S La Cadena Drive	East Leg O Street	South Leg S La Cadena Drive	West Leg O Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	2	1	3
7:15 AM	0	0	1	0	1
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	1	0	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	1	3	1	5

	North Leg S La Cadena Drive	East Leg O Street	South Leg S La Cadena Drive	West Leg O Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	1	2	4
4:15 PM	0	0	1	2	3
4:30 PM	0	1	2	0	3
4:45 PM	0	0	2	0	2
5:00 PM	0	0	2	2	4
5:15 PM	0	1	0	0	1
5:30 PM	1	1	0	1	3
5:45 PM	1	0	1	5	7
TOTAL VOLUMES:	2	4	9	12	27

Location: Colton
N/S: S La Cadena Drive
E/W: O Street

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound S La Cadena Drive			Westbound O Street			Northbound S La Cadena Drive			Eastbound O Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound S La Cadena Drive			Westbound O Street			Northbound S La Cadena Drive			Eastbound O Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	0	0	0	0	0	0	0	0	1

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City of Colton
N/S: S La Cadena Drive
E/W: Rancho Avenue
Weather: Clear

File Name : 09_COL_La C_Ran AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	S La Cadena Drive Southbound				S La Cadena Drive Northbound			Rancho Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	115	2	2	117	71	90	161	3	163	85	166	87	444	531
07:15 AM	139	5	2	144	97	122	219	7	188	95	195	97	558	655
07:30 AM	216	10	5	226	82	98	180	4	223	77	227	82	633	715
07:45 AM	152	20	6	172	78	137	215	7	188	91	195	97	582	679
Total	622	37	15	659	328	447	775	21	762	348	783	363	2217	2580
08:00 AM	83	4	1	87	63	87	150	5	151	89	156	90	393	483
08:15 AM	82	0	0	82	68	108	176	3	124	84	127	84	385	469
08:30 AM	94	0	0	94	51	82	133	4	139	78	143	78	370	448
08:45 AM	100	1	1	101	46	102	148	3	131	65	134	66	383	449
Total	359	5	2	364	228	379	607	15	545	316	560	318	1531	1849
Grand Total	981	42	17	1023	556	826	1382	36	1307	664	1343	681	3748	4429
Apprch %	95.9	4.1			40.2	59.8		2.7	97.3					
Total %	26.2	1.1		27.3	14.8	22	36.9	1	34.9		35.8	15.4	84.6	

	S La Cadena Drive Southbound			S La Cadena Drive Northbound			Rancho Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	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 07:00 AM										
07:00 AM	115	2	117	71	90	161	3	163	166	444
07:15 AM	139	5	144	**97**	122	**219**	**7**	188	195	558
07:30 AM	**216**	10	**226**	82	98	180	4	**223**	**227**	**633**
07:45 AM	152	**20**	172	78	**137**	215	7	188	195	582
Total Volume	622	37	659	328	447	775	21	762	783	2217
% App. Total	94.4	5.6		42.3	57.7		2.7	97.3		
PHF	.720	.463	.729	.845	.816	.885	.750	.854	.862	.876

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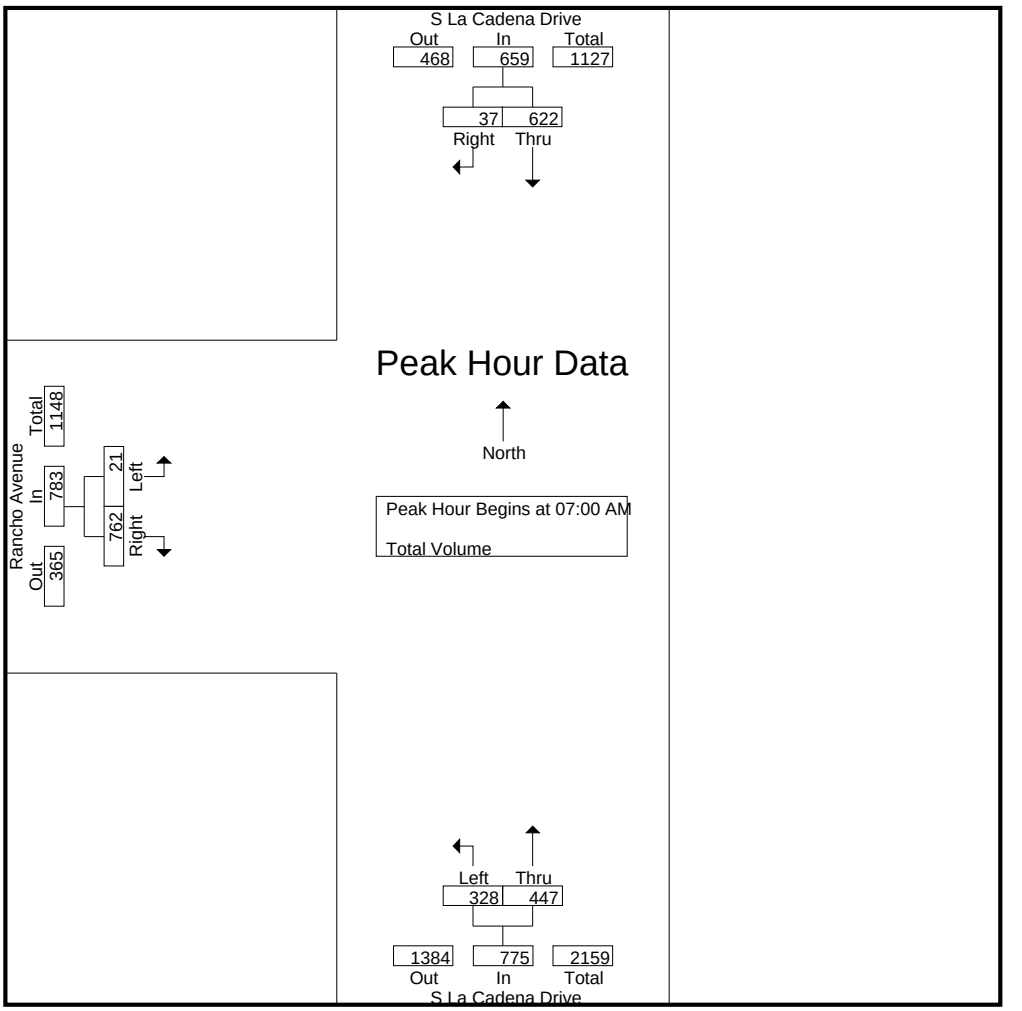
City of Colton
N/S: S La Cadena Drive
E/W: Rancho Avenue
Weather: Clear

File Name : 09_COL_La C_Ran AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	115	2	117	71	90	161	3	163	166
+15 mins.	139	5	144	**97**	122	**219**	**7**	188	195
+30 mins.	**216**	10	**226**	82	98	180	4	**223**	**227**
+45 mins.	152	**20**	172	78	**137**	215	7	188	195
Total Volume	622	37	659	328	447	775	21	762	783
% App. Total	94.4	5.6		42.3	57.7		2.7	97.3	
PHF	.720	.463	.729	.845	.816	.885	.750	.854	.862

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City of Colton
N/S: S La Cadena Drive
E/W: Rancho Avenue
Weather: Clear

File Name : 09_COL_La C_Ran PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	S La Cadena Drive Southbound				S La Cadena Drive Northbound			Rancho Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	225	4	1	229	94	139	233	14	273	103	287	104	749	853
04:15 PM	198	9	6	207	94	148	242	14	211	61	225	67	674	741
04:30 PM	161	2	0	163	103	128	231	18	192	35	210	35	604	639
04:45 PM	152	3	3	155	102	152	254	15	203	85	218	88	627	715
Total	736	18	10	754	393	567	960	61	879	284	940	294	2654	2948
05:00 PM	175	7	0	182	84	160	244	16	220	87	236	87	662	749
05:15 PM	186	9	6	195	110	164	274	12	206	82	218	88	687	775
05:30 PM	143	10	4	153	107	122	229	12	191	95	203	99	585	684
05:45 PM	143	6	4	149	100	143	243	23	147	53	170	57	562	619
Total	647	32	14	679	401	589	990	63	764	317	827	331	2496	2827
Grand Total	1383	50	24	1433	794	1156	1950	124	1643	601	1767	625	5150	5775
Apprch %	96.5	3.5			40.7	59.3		7	93					
Total %	26.9	1		27.8	15.4	22.4	37.9	2.4	31.9		34.3	10.8	89.2	

	S La Cadena Drive Southbound			S La Cadena Drive Northbound			Rancho Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	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	**225**	4	**229**	94	139	233	14	**273**	**287**	**749**
04:15 PM	198	**9**	207	94	148	242	14	211	225	674
04:30 PM	161	2	163	**103**	128	231	**18**	192	210	604
04:45 PM	152	3	155	102	**152**	**254**	15	203	218	627
Total Volume	736	18	754	393	567	960	61	879	940	2654
% App. Total	97.6	2.4		40.9	59.1		6.5	93.5		
PHF	.818	.500	.823	.954	.933	.945	.847	.805	.819	.886

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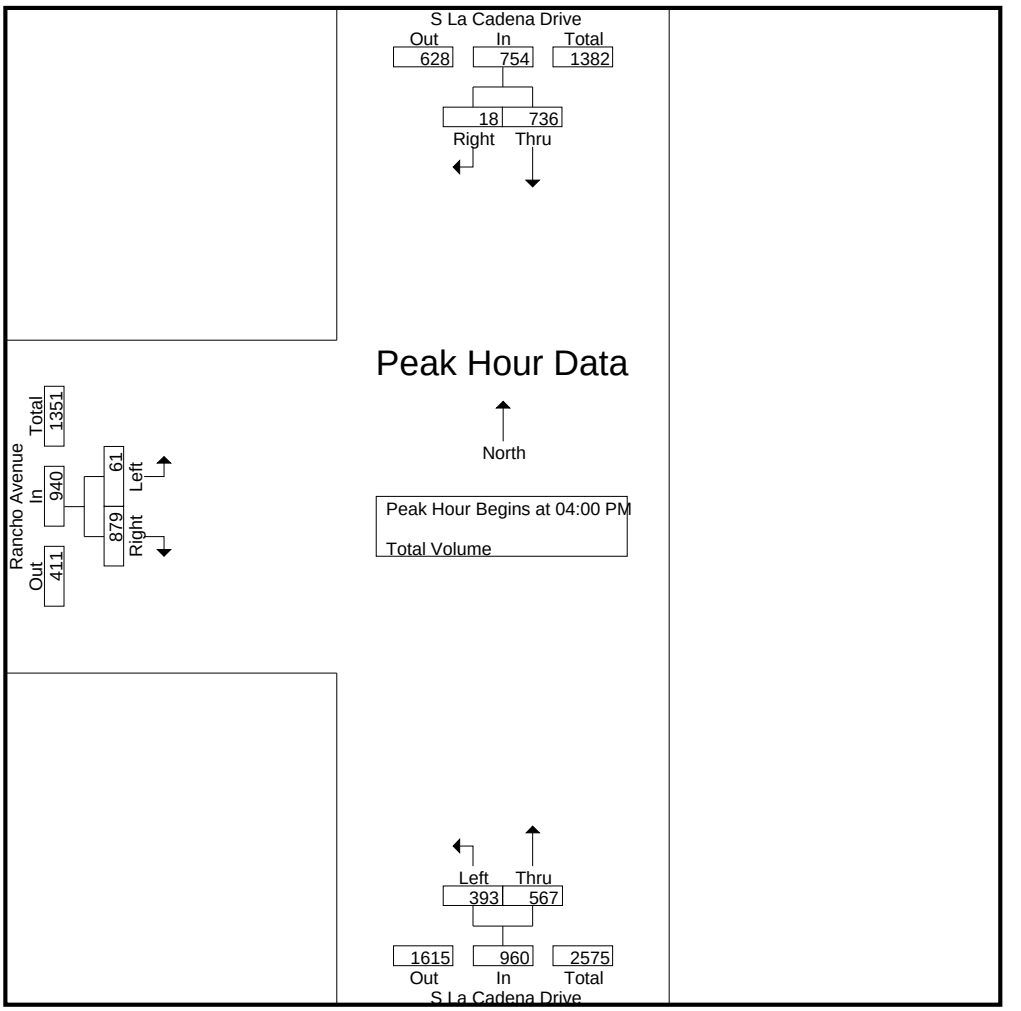
City of Colton
N/S: S La Cadena Drive
E/W: Rancho Avenue
Weather: Clear

File Name : 09_COL_La C_Ran PM
Site Code : 241045
Start Date : 11/21/2024
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			04:00 PM		
+0 mins.	**225**	4	**229**	103	128	231	14	**273**	**287**
+15 mins.	198	**9**	207	102	152	254	14	211	225
+30 mins.	161	2	163	84	160	244	**18**	192	210
+45 mins.	152	3	155	**110**	**164**	**274**	15	203	218
Total Volume	736	18	754	399	604	1003	61	879	940
% App. Total	97.6	2.4		39.8	60.2		6.5	93.5	
PHF	.818	.500	.823	.907	.921	.915	.847	.805	.819

Location: Colton
N/S: S La Cadena Drive
E/W: Rancho Avenue

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg S La Cadena Drive	East Leg Dead End	South Leg S La Cadena Drive	West Leg Rancho Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	3	3
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	3	3

	North Leg S La Cadena Drive	East Leg Dead End	South Leg S La Cadena Drive	West Leg Rancho Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	1	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	1	1

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Location: Colton
N/S: S La Cadena Drive
E/W: Rancho Avenue

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound S La Cadena Drive			Westbound Dead End			Northbound S La Cadena Drive			Eastbound Rancho Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	1	0	0	0	0	2

	Southbound S La Cadena Drive			Westbound Dead End			Northbound S La Cadena Drive			Eastbound Rancho Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

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City of Colton
N/S: S La Cadena Drive
E/W: Litton Avenue
Weather: Clear

File Name : 10_COL_La C_Lit AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	S La Cadena Drive Southbound				S La Cadena Drive Northbound			Litton Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	256	5	0	261	6	161	167	6	7	4	13	4	441	445
07:15 AM	298	0	0	298	5	208	213	12	11	2	23	2	534	536
07:30 AM	337	1	1	338	7	156	163	19	12	6	31	7	532	539
07:45 AM	336	2	0	338	6	207	213	10	4	2	14	2	565	567
Total	1227	8	1	1235	24	732	756	47	34	14	81	15	2072	2087
08:00 AM	298	5	1	303	11	138	149	7	6	2	13	3	465	468
08:15 AM	271	1	0	272	10	165	175	9	6	4	15	4	462	466
08:30 AM	179	4	0	183	6	128	134	5	3	1	8	1	325	326
08:45 AM	290	5	1	295	11	145	156	4	3	2	7	3	458	461
Total	1038	15	2	1053	38	576	614	25	18	9	43	11	1710	1721
Grand Total	2265	23	3	2288	62	1308	1370	72	52	23	124	26	3782	3808
Apprch %	99	1			4.5	95.5		58.1	41.9					
Total %	59.9	0.6		60.5	1.6	34.6	36.2	1.9	1.4		3.3	0.7	99.3	

	S La Cadena Drive Southbound			S La Cadena Drive Northbound			Litton Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	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	298	0	298	5	**208**	**213**	12	11	23	534
07:30 AM	**337**	1	**338**	7	156	163	**19**	**12**	**31**	532
07:45 AM	336	2	338	6	207	213	10	4	14	**565**
08:00 AM	298	**5**	303	**11**	138	149	7	6	13	465
Total Volume	1269	8	1277	29	709	738	48	33	81	2096
% App. Total	99.4	0.6		3.9	96.1		59.3	40.7		
PHF	.941	.400	.945	.659	.852	.866	.632	.688	.653	.927

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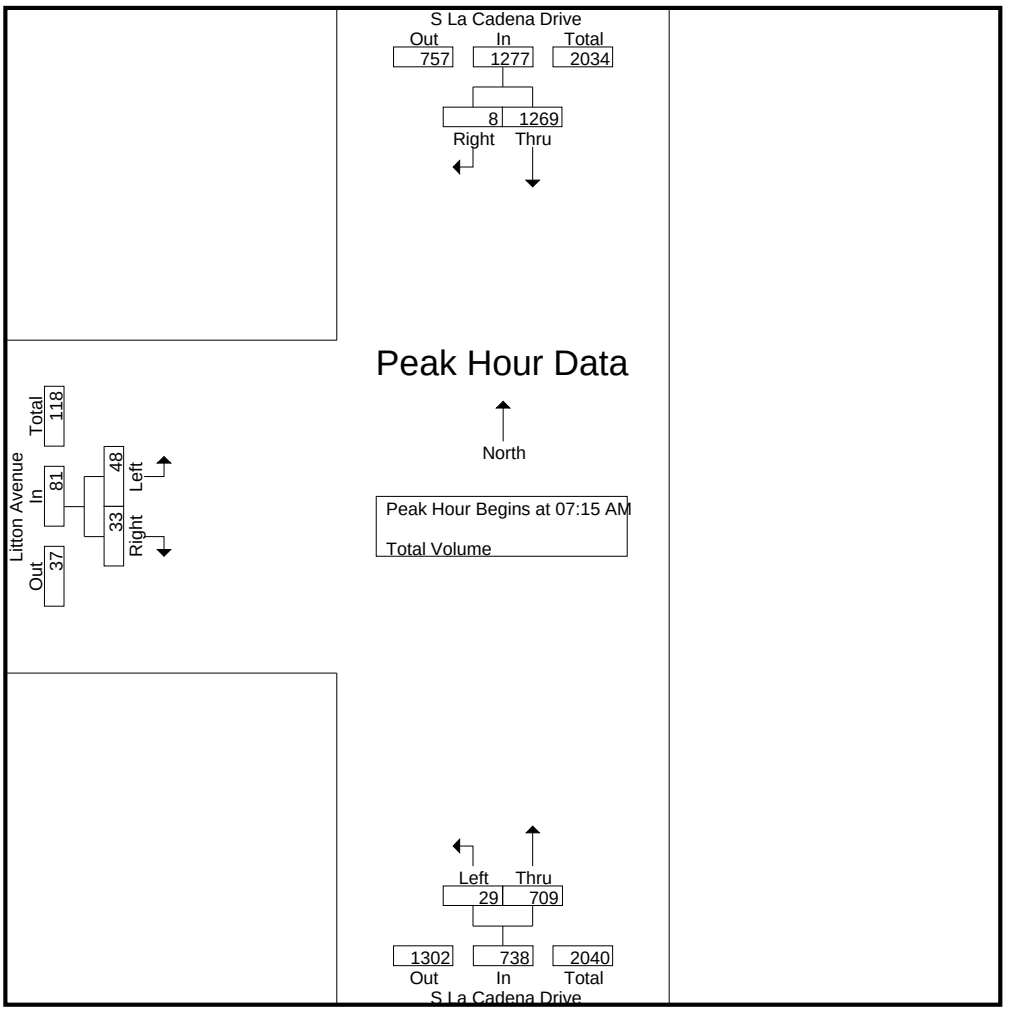
City of Colton
N/S: S La Cadena Drive
E/W: Litton Avenue
Weather: Clear

File Name : 10_COL_La C_Lit AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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

	07:15 AM			07:00 AM			07:00 AM		
+0 mins.	298	0	298	6	161	167	6	7	13
+15 mins.	**337**	1	**338**	5	**208**	**213**	12	11	23
+30 mins.	336	2	338	**7**	156	163	**19**	**12**	**31**
+45 mins.	298	**5**	303	6	207	213	10	4	14
Total Volume	1269	8	1277	24	732	756	47	34	81
% App. Total	99.4	0.6		3.2	96.8		58	42	
PHF	.941	.400	.945	.857	.880	.887	.618	.708	.653

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File Name : 10_COL_La C_Lit PM
Site Code : 241045
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Page No : 1

Groups Printed- Total Volume

	S La Cadena Drive Southbound				S La Cadena Drive Northbound			Litton Avenue Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	499	12	1	511	15	216	231	12	4	1	16	2	758	760
04:15 PM	392	12	0	404	9	242	251	5	10	5	15	5	670	675
04:30 PM	380	10	1	390	11	211	222	15	6	1	21	2	633	635
04:45 PM	329	9	0	338	13	240	253	11	7	3	18	3	609	612
Total	1600	43	2	1643	48	909	957	43	27	10	70	12	2670	2682
05:00 PM	384	9	1	393	12	260	272	4	4	1	8	2	673	675
05:15 PM	393	14	0	407	8	241	249	8	6	1	14	1	670	671
05:30 PM	328	7	1	335	5	234	239	3	1	1	4	2	578	580
05:45 PM	296	6	2	302	5	229	234	8	5	3	13	5	549	554
Total	1401	36	4	1437	30	964	994	23	16	6	39	10	2470	2480
Grand Total	3001	79	6	3080	78	1873	1951	66	43	16	109	22	5140	5162
Apprch %	97.4	2.6			4	96		60.6	39.4					
Total %	58.4	1.5		59.9	1.5	36.4	38	1.3	0.8		2.1	0.4	99.6	

	S La Cadena Drive Southbound			S La Cadena Drive Northbound			Litton Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	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	**499**	**12**	**511**	**15**	216	231	12	4	16	**758**
04:15 PM	392	12	404	9	**242**	251	5	**10**	15	670
04:30 PM	380	10	390	11	211	222	**15**	6	**21**	633
04:45 PM	329	9	338	13	240	**253**	11	7	18	609
Total Volume	1600	43	1643	48	909	957	43	27	70	2670
% App. Total	97.4	2.6		5	95		61.4	38.6		
PHF	.802	.896	.804	.800	.939	.946	.717	.675	.833	.881

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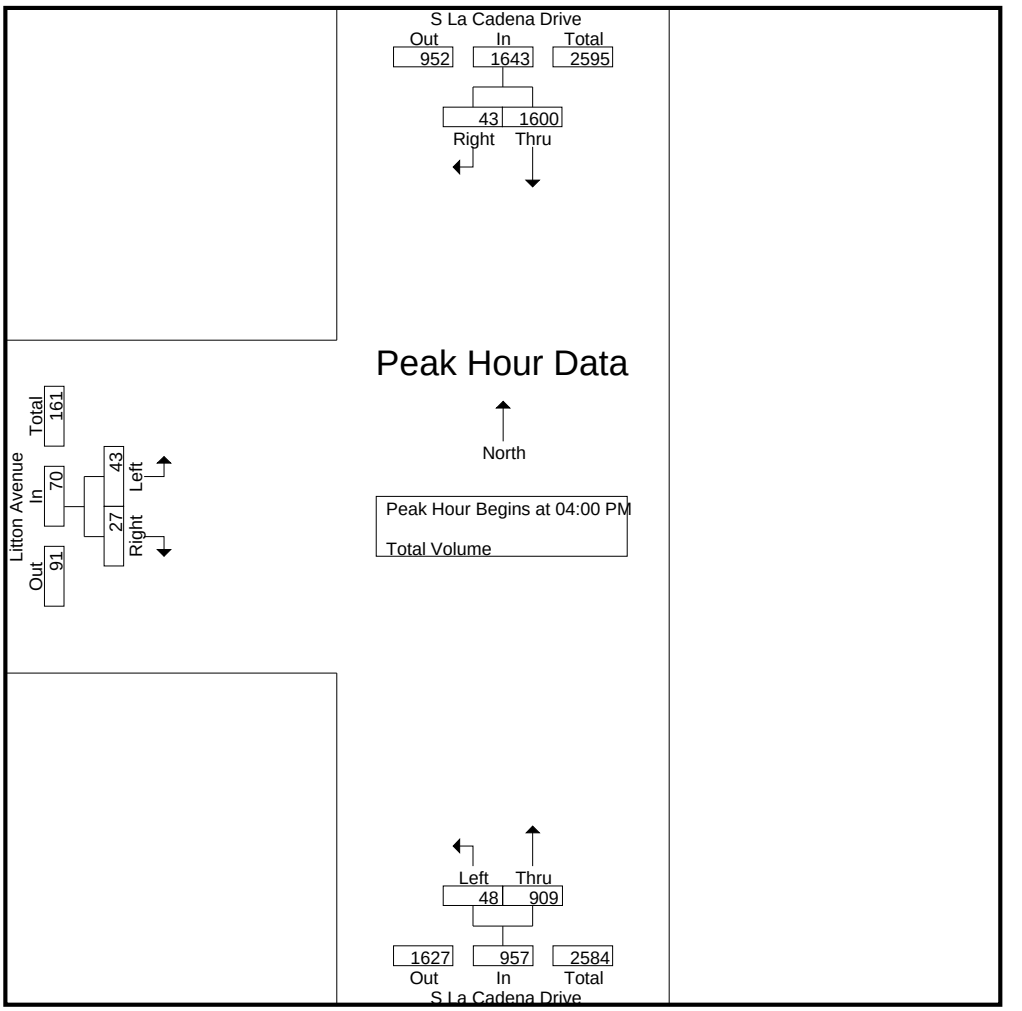
Page No : 2



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			04:45 PM			04:00 PM		
+0 mins.	**499**	**12**	**511**	**13**	240	253	12	4	16
+15 mins.	392	12	404	12	**260**	**272**	5	**10**	15
+30 mins.	380	10	390	8	241	249	**15**	6	**21**
+45 mins.	329	9	338	5	234	239	11	7	18
Total Volume	1600	43	1643	38	975	1013	43	27	70
% App. Total	97.4	2.6		3.8	96.2		61.4	38.6	
PHF	.802	.896	.804	.731	.938	.931	.717	.675	.833

Location: Colton
N/S: S La Cadena Drive
E/W: Litton Avenue

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg S La Cadena Drive	East Leg Dead End	South Leg S La Cadena Drive	West Leg Litton Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	1	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	1	1

	North Leg S La Cadena Drive	East Leg Dead End	South Leg S La Cadena Drive	West Leg Litton Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	1	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	1	1
TOTAL VOLUMES:	0	0	1	1	2

Location: Colton
N/S: S La Cadena Drive
E/W: Litton Avenue

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound S La Cadena Drive			Westbound Dead End			Northbound S La Cadena Drive			Eastbound Litton Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	2	0	0	0	0	3

	Southbound S La Cadena Drive			Westbound Dead End			Northbound S La Cadena Drive			Eastbound Litton Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

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PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Colton
N/S: 8th Street
E/W: Congress Street
Weather: Clear

File Name : 11_COL_8th_Con AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	8th Street Southbound				Congress Street Westbound				8th Street Northbound				Congress 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	4	7	4	15	1	16	5	22	0	1	4	5	0	6	0	6	48
07:15 AM	17	4	6	27	1	22	8	31	0	2	3	5	0	7	1	8	71
07:30 AM	20	1	20	41	4	8	10	22	0	0	11	11	3	12	0	15	89
07:45 AM	6	5	12	23	4	2	2	8	1	3	12	16	0	1	0	1	48
Total	47	17	42	106	10	48	25	83	1	6	30	37	3	26	1	30	256
08:00 AM	4	3	2	9	2	0	5	7	0	1	1	2	0	1	0	1	19
08:15 AM	4	2	1	7	2	4	5	11	0	1	3	4	0	4	0	4	26
08:30 AM	4	0	1	5	3	4	0	7	0	2	1	3	0	5	1	6	21
08:45 AM	1	3	1	5	4	1	1	6	0	0	0	0	1	1	0	2	13
Total	13	8	5	26	11	9	11	31	0	4	5	9	1	11	1	13	79
Grand Total	60	25	47	132	21	57	36	114	1	10	35	46	4	37	2	43	335
Apprch %	45.5	18.9	35.6		18.4	50	31.6		2.2	21.7	76.1		9.3	86	4.7		
Total %	17.9	7.5	14	39.4	6.3	17	10.7	34	0.3	3	10.4	13.7	1.2	11	0.6	12.8	

	8th Street Southbound				Congress Street Westbound				8th Street Northbound				Congress 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 07:00 AM																	
07:00 AM	4	**7**	4	15	1	16	5	22	0	1	4	5	0	6	0	6	48
07:15 AM	17	4	6	27	1	**22**	8	**31**	0	2	3	5	0	7	**1**	8	71
07:30 AM	**20**	1	**20**	**41**	**4**	8	**10**	22	0	0	11	11	**3**	**12**	0	**15**	**89**
07:45 AM	6	5	12	23	4	2	2	8	**1**	**3**	**12**	**16**	0	1	0	1	48
Total Volume	47	17	42	106	10	48	25	83	1	6	30	37	3	26	1	30	256
% App. Total	44.3	16	39.6		12	57.8	30.1		2.7	16.2	81.1		10	86.7	3.3		
PHF	.588	.607	.525	.646	.625	.545	.625	.669	.250	.500	.625	.578	.250	.542	.250	.500	.719

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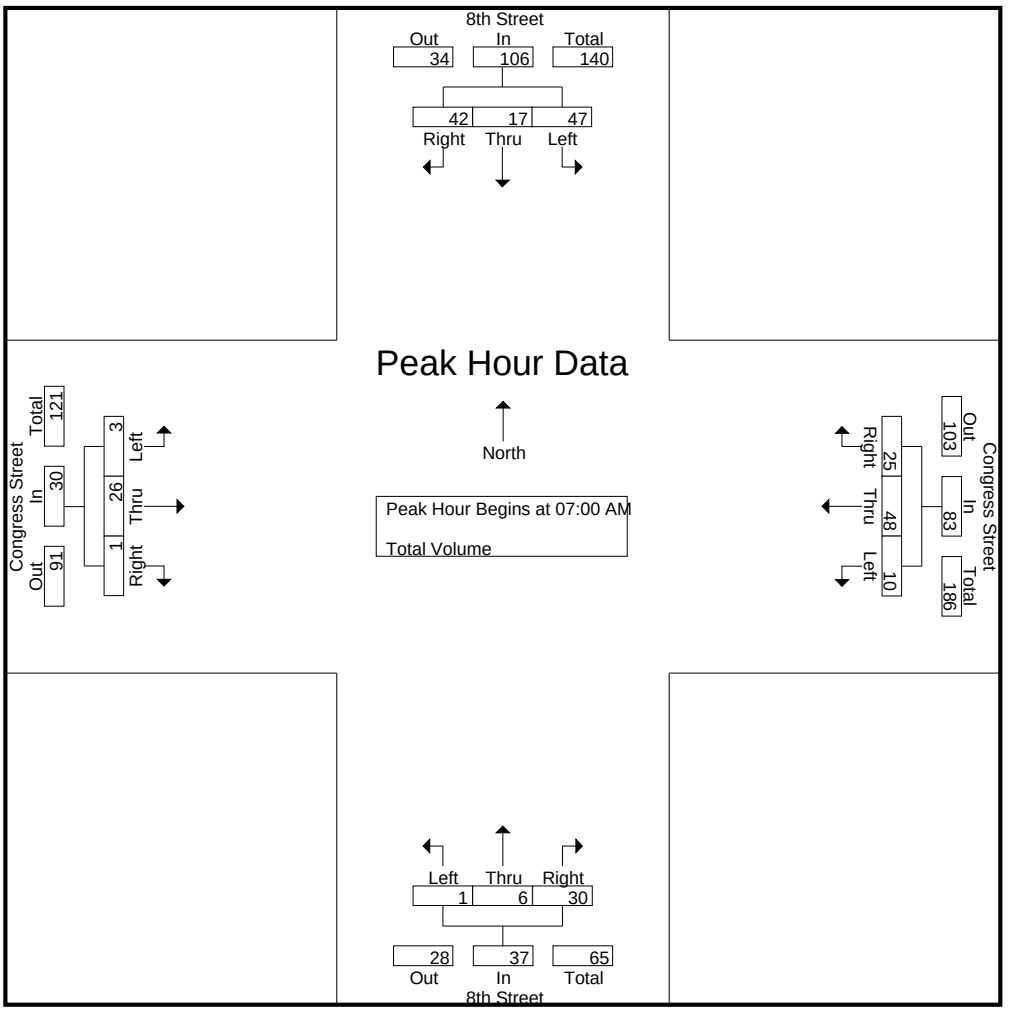

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	4	**7**	4	15	1	16	5	22	0	1	4	5	0	6	0	6
+15 mins.	17	4	6	27	1	**22**	8	**31**	0	2	3	5	0	7	**1**	8
+30 mins.	**20**	1	**20**	**41**	**4**	8	**10**	22	0	0	11	11	**3**	**12**	0	**15**
+45 mins.	6	5	12	23	4	2	2	8	**1**	**3**	**12**	**16**	0	1	0	1
Total Volume	47	17	42	106	10	48	25	83	1	6	30	37	3	26	1	30
% App. Total	44.3	16	39.6		12	57.8	30.1		2.7	16.2	81.1		10	86.7	3.3	
PHF	.588	.607	.525	.646	.625	.545	.625	.669	.250	.500	.625	.578	.250	.542	.250	.500

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N/S: 8th Street
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Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	8th Street Southbound				Congress Street Westbound				8th Street Northbound				Congress 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	4	1	10	3	2	5	10	0	3	6	9	1	3	0	4	33
04:15 PM	4	5	3	12	3	3	7	13	0	1	4	5	1	3	0	4	34
04:30 PM	6	1	1	8	1	3	6	10	1	7	6	14	5	4	0	9	41
04:45 PM	4	4	1	9	4	3	7	14	0	5	6	11	1	5	1	7	41
Total	19	14	6	39	11	11	25	47	1	16	22	39	8	15	1	24	149
05:00 PM	8	2	2	12	3	1	5	9	0	3	7	10	0	2	0	2	33
05:15 PM	11	0	3	14	3	9	3	15	0	3	5	8	1	4	0	5	42
05:30 PM	4	2	0	6	3	5	11	19	0	0	6	6	0	6	0	6	37
05:45 PM	4	0	0	4	7	2	8	17	0	2	2	4	1	2	0	3	28
Total	27	4	5	36	16	17	27	60	0	8	20	28	2	14	0	16	140
Grand Total	46	18	11	75	27	28	52	107	1	24	42	67	10	29	1	40	289
Apprch %	61.3	24	14.7		25.2	26.2	48.6		1.5	35.8	62.7		25	72.5	2.5		
Total %	15.9	6.2	3.8	26	9.3	9.7	18	37	0.3	8.3	14.5	23.2	3.5	10	0.3	13.8	

	8th Street Southbound				Congress Street Westbound				8th Street Northbound				Congress 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 04:30 PM																	
04:30 PM	6	1	1	8	1	3	6	10	**1**	**7**	6	**14**	**5**	4	0	**9**	41
04:45 PM	4	**4**	1	9	**4**	3	**7**	14	0	5	6	11	1	**5**	**1**	7	41
05:00 PM	8	2	2	12	3	1	5	9	0	3	**7**	10	0	2	0	2	33
05:15 PM	**11**	0	**3**	**14**	3	**9**	3	**15**	0	3	5	8	1	4	0	5	**42**
Total Volume	29	7	7	43	11	16	21	48	1	18	24	43	7	15	1	23	157
% App. Total	67.4	16.3	16.3		22.9	33.3	43.8		2.3	41.9	55.8		30.4	65.2	4.3		
PHF	.659	.438	.583	.768	.688	.444	.750	.800	.250	.643	.857	.768	.350	.750	.250	.639	.935

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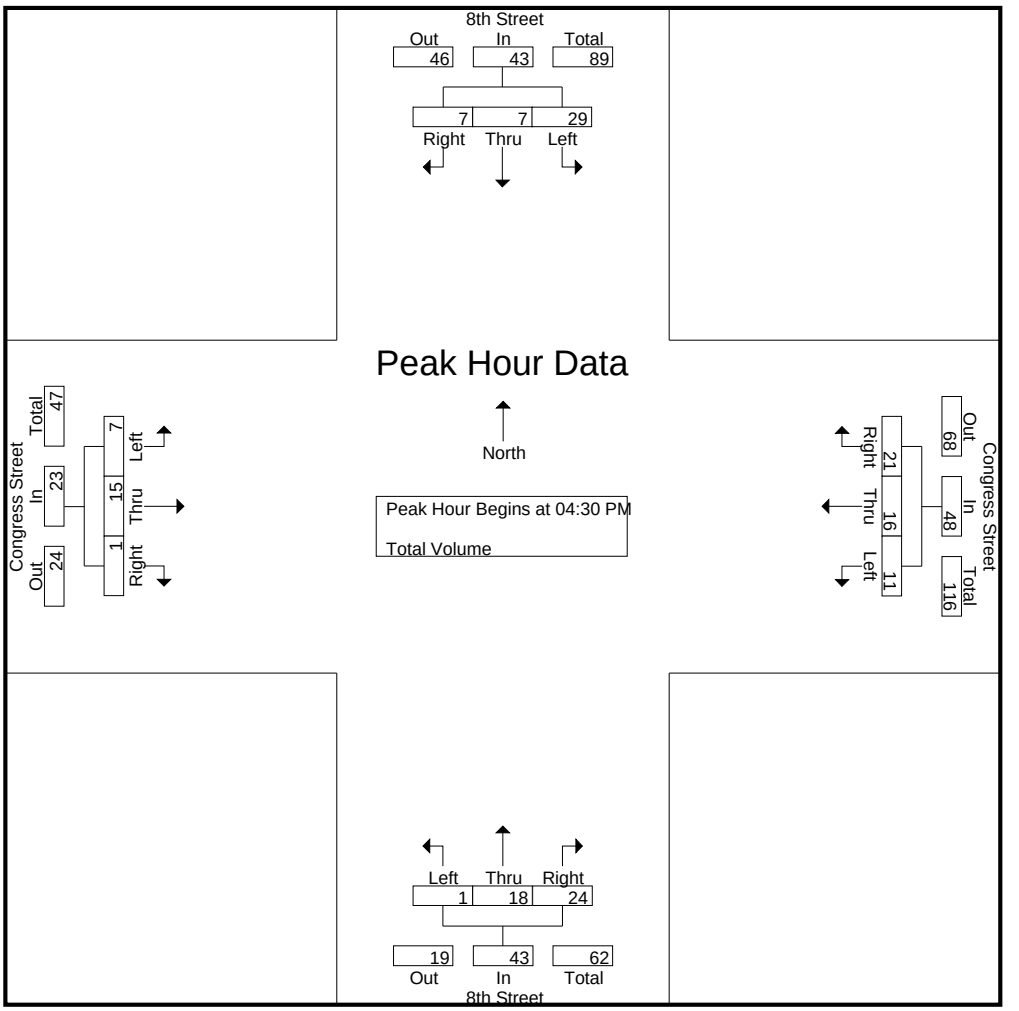
Site Code : 241045
Start Date : 11/21/2024



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

	04:30 PM				05:00 PM				04:30 PM				04:00 PM			
+0 mins.	6	1	1	8	3	1	5	9	**1**	**7**	6	**14**	1	3	0	4
+15 mins.	4	**4**	1	9	3	**9**	3	15	0	5	6	11	1	3	0	4
+30 mins.	8	2	2	12	3	5	**11**	**19**	0	3	**7**	10	**5**	4	0	**9**
+45 mins.	**11**	0	**3**	**14**	**7**	2	8	17	0	3	5	8	1	**5**	**1**	7
Total Volume	29	7	7	43	16	17	27	60	1	18	24	43	8	15	1	24
% App. Total	67.4	16.3	16.3		26.7	28.3	45		2.3	41.9	55.8		33.3	62.5	4.2	
PHF	.659	.438	.583	.768	.571	.472	.614	.789	.250	.643	.857	.768	.400	.750	.250	.667

Location: Colton
N/S: 8th Street
E/W: Congress Street

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg 8th Street Pedestrians	East Leg Congress Street Pedestrians	South Leg 8th Street Pedestrians	West Leg Congress Street Pedestrians	
7:00 AM	2	0	0	0	2
7:15 AM	0	0	0	1	1
7:30 AM	0	0	0	1	1
7:45 AM	0	0	1	2	3
8:00 AM	1	0	3	0	4
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	1	0	2	1	4
TOTAL VOLUMES:	4	0	6	5	15

	North Leg 8th Street Pedestrians	East Leg Congress Street Pedestrians	South Leg 8th Street Pedestrians	West Leg Congress Street Pedestrians	
4:00 PM	2	0	0	0	2
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	1	1	0	2
5:00 PM	4	2	0	0	6
5:15 PM	0	0	0	0	0
5:30 PM	2	0	0	0	2
5:45 PM	0	0	0	1	1
TOTAL VOLUMES:	8	3	1	1	13

Location: Colton
N/S: 8th Street
E/W: Congress Street

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound 8th Street			Westbound Congress Street			Northbound 8th Street			Eastbound Congress Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	1	0	0	2

	Southbound 8th Street			Westbound Congress Street			Northbound 8th Street			Eastbound Congress Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	1	0	0	0	0	0	0	0	2

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City of Colton
N/S: Fogg Street
E/W: M Street
Weather: Clear

File Name : 12_COL_Fogg_M AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	M Street Westbound			Fogg Street Northbound			M Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	12	24	36	0	11	11	18	2	20	67
07:15 AM	22	39	61	1	22	23	37	1	38	122
07:30 AM	14	44	58	5	31	36	44	2	46	140
07:45 AM	9	32	41	6	17	23	57	2	59	123
Total	57	139	196	12	81	93	156	7	163	452
08:00 AM	5	34	39	3	11	14	42	0	42	95
08:15 AM	3	23	26	1	7	8	27	1	28	62
08:30 AM	3	27	30	3	12	15	36	1	37	82
08:45 AM	6	20	26	0	8	8	38	0	38	72
Total	17	104	121	7	38	45	143	2	145	311
Grand Total	74	243	317	19	119	138	299	9	308	763
Apprch %	23.3	76.7		13.8	86.2		97.1	2.9		
Total %	9.7	31.8	41.5	2.5	15.6	18.1	39.2	1.2	40.4	

	M Street Westbound			Fogg Street Northbound			M Street 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	**22**	39	**61**	1	22	23	37	1	38	122
07:30 AM	14	**44**	58	5	**31**	**36**	44	**2**	46	**140**
07:45 AM	9	32	41	**6**	17	23	**57**	2	**59**	123
08:00 AM	5	34	39	3	11	14	42	0	42	95
Total Volume	50	149	199	15	81	96	180	5	185	480
% App. Total	25.1	74.9		15.6	84.4		97.3	2.7		
PHF	.568	.847	.816	.625	.653	.667	.789	.625	.784	.857

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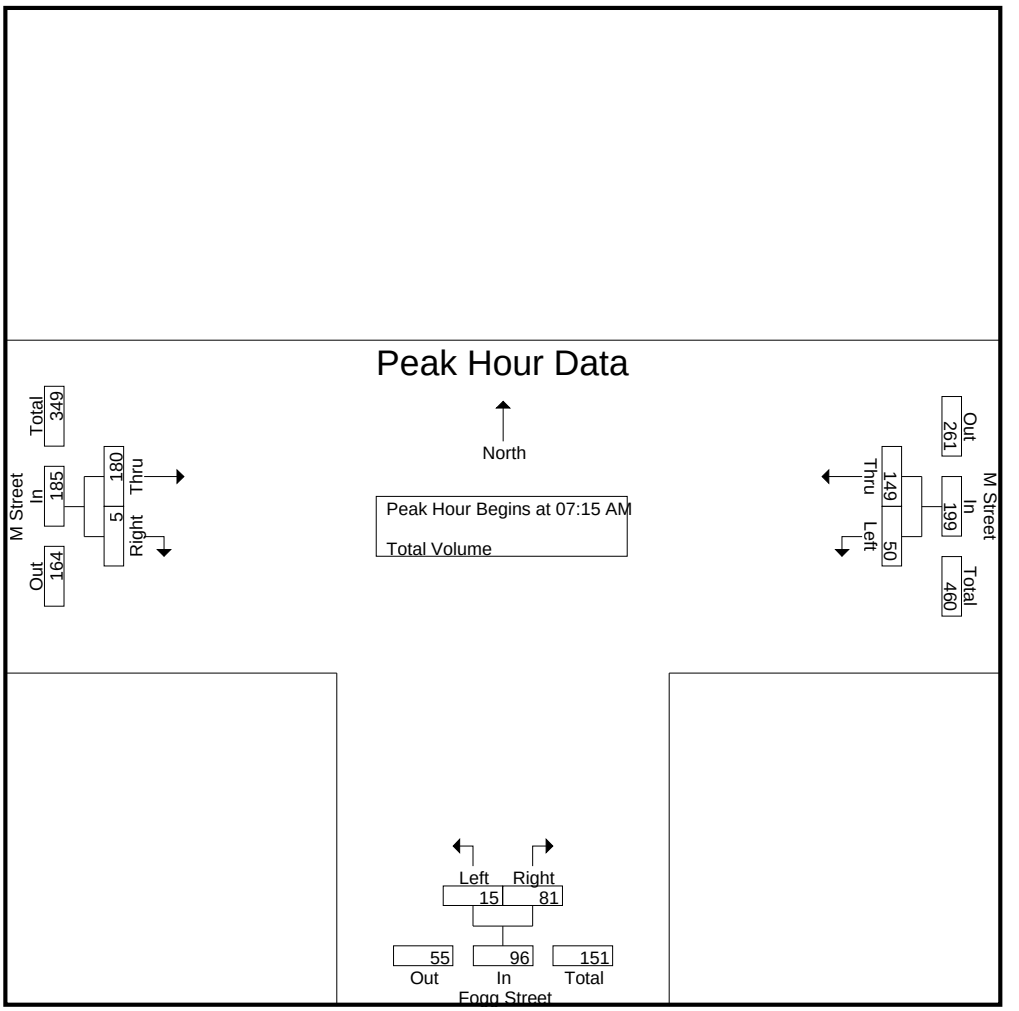
City of Colton
N/S: Fogg Street
E/W: M Street
Weather: Clear

File Name : 12_COL_Fogg_M AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	**22**	39	**61**	1	22	23	37	1	38
+15 mins.	14	**44**	58	5	**31**	**36**	44	**2**	46
+30 mins.	9	32	41	**6**	17	23	**57**	2	**59**
+45 mins.	5	34	39	3	11	14	42	0	42
Total Volume	50	149	199	15	81	96	180	5	185
% App. Total	25.1	74.9		15.6	84.4		97.3	2.7	
PHF	.568	.847	.816	.625	.653	.667	.789	.625	.784

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City of Colton
N/S: Fogg Street
E/W: M Street
Weather: Clear

File Name : 12_COL_Fogg_M PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	M Street Westbound			Fogg Street Northbound			M Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	6	66	72	3	14	17	49	1	50	139
04:15 PM	9	51	60	4	8	12	53	4	57	129
04:30 PM	2	61	63	1	11	12	65	1	66	141
04:45 PM	15	63	78	0	10	10	61	1	62	150
Total	32	241	273	8	43	51	228	7	235	559
05:00 PM	11	64	75	3	9	12	59	1	60	147
05:15 PM	13	70	83	2	11	13	56	1	57	153
05:30 PM	16	68	84	0	17	17	32	1	33	134
05:45 PM	8	46	54	0	6	6	59	1	60	120
Total	48	248	296	5	43	48	206	4	210	554
Grand Total	80	489	569	13	86	99	434	11	445	1113
Apprch %	14.1	85.9		13.1	86.9		97.5	2.5		
Total %	7.2	43.9	51.1	1.2	7.7	8.9	39	1	40	

	M Street Westbound			Fogg Street Northbound			M Street 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 04:30 PM										
04:30 PM	2	61	63	1	**11**	12	**65**	**1**	**66**	141
04:45 PM	**15**	63	78	0	10	10	61	1	62	150
05:00 PM	11	64	75	**3**	9	12	59	1	60	147
05:15 PM	13	**70**	**83**	2	11	**13**	56	1	57	**153**
Total Volume	41	258	299	6	41	47	241	4	245	591
% App. Total	13.7	86.3		12.8	87.2		98.4	1.6		
PHF	.683	.921	.901	.500	.932	.904	.927	1.00	.928	.966

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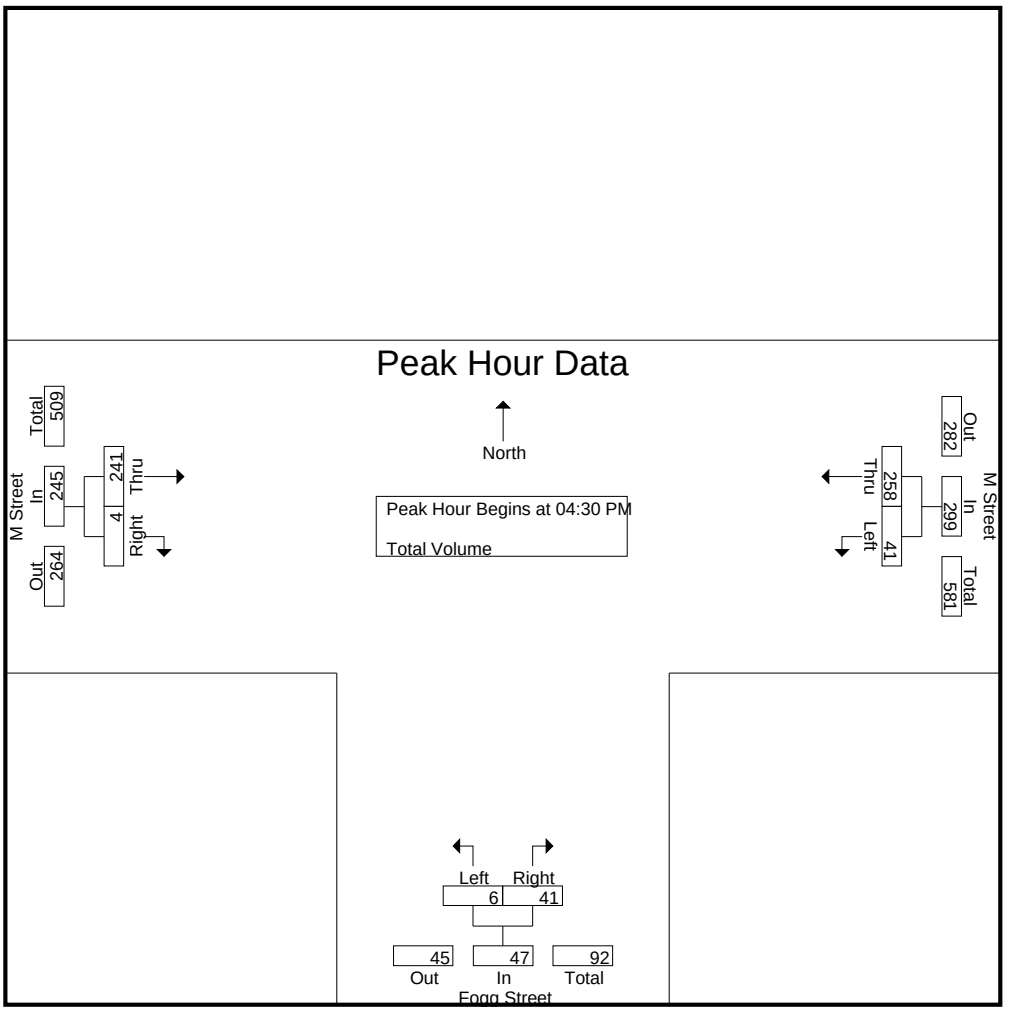

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:15 PM		
+0 mins.	15	63	78	0	10	10	53	**4**	57
+15 mins.	11	64	75	**3**	9	12	**65**	1	**66**
+30 mins.	13	**70**	83	2	11	13	61	1	62
+45 mins.	**16**	68	**84**	0	**17**	**17**	59	1	60
Total Volume	55	265	320	5	47	52	238	7	245
% App. Total	17.2	82.8		9.6	90.4		97.1	2.9	
PHF	.859	.946	.952	.417	.691	.765	.915	.438	.928

Location: Colton
N/S: Fogg Street
E/W: M Street

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg Dead End	East Leg M Street	South Leg Fogg Street	West Leg M Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Dead End	East Leg M Street	South Leg Fogg Street	West Leg M Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	1	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	2	0	2
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	3	0	3

Location: Colton
N/S: Fogg Street
E/W: M Street

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound Dead End			Westbound M Street			Northbound Fogg Street			Eastbound M Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Dead End			Westbound M Street			Northbound Fogg Street			Eastbound M Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	0	0	1	0	2
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	2	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
TOTAL VOLUMES:	0	0	0	0	0	0	2	0	1	0	4	2	9

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City of Colton
N/S: Bordwell Avenue
E/W: Laurel Street/N La Cadena Drive
Weather: Clear

File Name : 13_COL_Bor_Laurel AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Bordwell Avenue Southbound						N La Cadena Drive Southwestbound						Laurel Street Westbound						Bordwell Avenue Northbound							N La Cadena Drive Northeastbound							Laurel Street Eastbound									
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	RTO R	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	RTO R	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	1	2	1	1	6	0	2	20	10	0	32	1	1	11	1	0	14	1	3	0	4	0	0	8	2	0	17	4	0	0	23	1	7	12	3	7	30	0	113	113
07:15 AM	2	0	7	0	1	10	0	11	30	19	3	63	0	2	41	1	0	44	0	12	0	3	0	0	15	4	0	18	3	0	0	25	0	8	20	8	7	43	0	200	200
07:30 AM	4	0	3	1	0	8	0	16	40	18	1	75	0	1	59	0	0	60	0	17	2	7	2	0	28	0	0	34	7	2	0	43	0	25	36	13	13	87	0	301	301
07:45 AM	2	0	1	4	0	7	0	2	40	18	3	63	0	0	43	0	0	43	1	9	1	1	1	0	13	5	1	24	1	1	0	32	0	33	42	8	20	103	0	261	261
Total	9	1	13	6	2	31	0	31	130	65	7	233	1	4	154	2	0	161	2	41	3	15	3	0	64	11	1	93	15	3	0	123	1	73	110	32	47	263	0	875	875
08:00 AM	2	1	2	1	1	7	0	2	21	15	0	38	0	2	19	0	0	21	0	5	1	2	0	0	8	2	0	23	2	0	0	27	0	14	27	5	11	57	0	158	158
08:15 AM	0	0	1	0	1	2	1	3	26	11	0	41	0	3	13	1	0	17	1	3	1	6	0	0	11	2	0	27	6	0	0	35	1	5	8	1	6	21	0	127	127
08:30 AM	0	0	1	2	0	3	0	1	35	11	1	48	0	1	12	0	0	13	0	1	0	4	1	0	6	4	0	35	4	1	0	44	0	19	7	2	3	31	0	145	145
08:45 AM	1	0	0	0	0	1	0	2	24	11	1	38	1	3	5	0	0	9	0	2	0	4	0	0	6	1	2	23	4	0	0	30	0	14	14	3	3	34	0	118	118
Total	3	1	4	3	2	13	1	8	106	48	2	165	1	9	49	1	0	60	1	11	2	16	1	0	31	9	2	108	16	1	0	136	1	52	56	11	23	143	0	548	548
Grand Total	12	2	17	9	4	44	1	39	236	113	9	398	2	13	203	3	0	221	3	52	5	31	4	0	95	20	3	201	31	4	0	259	2	125	166	43	70	406	0	1423	1423
Apprch %	27.3	4.5	38.6	20.5	9.1		0.3	9.8	59.3	28.4	2.3		0.9	5.9	91.9	1.4	0		3.2	54.7	5.3	32.6	4.2			7.7	1.2	77.6	12	1.5			0.5	30.8	40.9	10.6	17.2				
Total %	0.8	0.1	1.2	0.6	0.3	3.1	0.1	2.7	16.6	7.9	0.6	28	0.1	0.9	14.3	0.2	0	15.5	0.2	3.7	0.4	2.2	0.3		6.7	1.4	0.2	14.1	2.2	0.3		18.2	0.1	8.8	11.7	3	4.9	28.5	0	100	

	Bordwell Avenue Southbound						N La Cadena Drive Southwestbound						Laurel Street Westbound						Bordwell Avenue Northbound						N La Cadena Drive Northeastbound						Laurel Street Eastbound						
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard 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	2	0	**7**	0	**1**	**10**	0	11	30	**19**	**3**	63	0	**2**	41	**1**	0	44	0	12	0	3	0	15	4	0	18	3	0	25	0	8	20	8	7	43	200
07:30 AM	**4**	0	3	1	0	8	0	**16**	**40**	18	1	**75**	0	1	**59**	0	0	**60**	0	**17**	**2**	**7**	**2**	**28**	0	0	**34**	**7**	**2**	**43**	0	25	36	**13**	13	87	**301**
07:45 AM	2	0	1	**4**	0	7	0	2	40	18	3	63	0	0	43	0	0	43	**1**	9	1	1	1	13	**5**	**1**	24	1	1	32	0	**33**	**42**	8	**20**	**103**	261
08:00 AM	2	**1**	2	1	1	7	0	2	21	15	0	38	0	2	19	0	0	21	0	5	1	2	0	8	2	0	23	2	0	27	0	14	27	5	11	57	158
Total Volume	10	1	13	6	2	32	0	31	131	70	7	239	0	5	162	1	0	168	1	43	4	13	3	64	11	1	99	13	3	127	0	80	125	34	51	290	920
% App. Total	31.2	3.1	40.6	18.8	6.2		0	13	54.8	29.3	2.9		0	3	96.4	0.6	0		1.6	67.2	6.2	20.3	4.7		8.7	0.8	78	10.2	2.4		0	27.6	43.1	11.7	17.6		
PHF	.625	.250	.464	.375	.500	.800	.000	.484	.819	.921	.583	.797	.000	.625	.686	.250	.000	.700	.250	.632	.500	.464	.375	.571	.550	.250	.728	.464	.375	.738	.000	.606	.744	.654	.638	.704	.764

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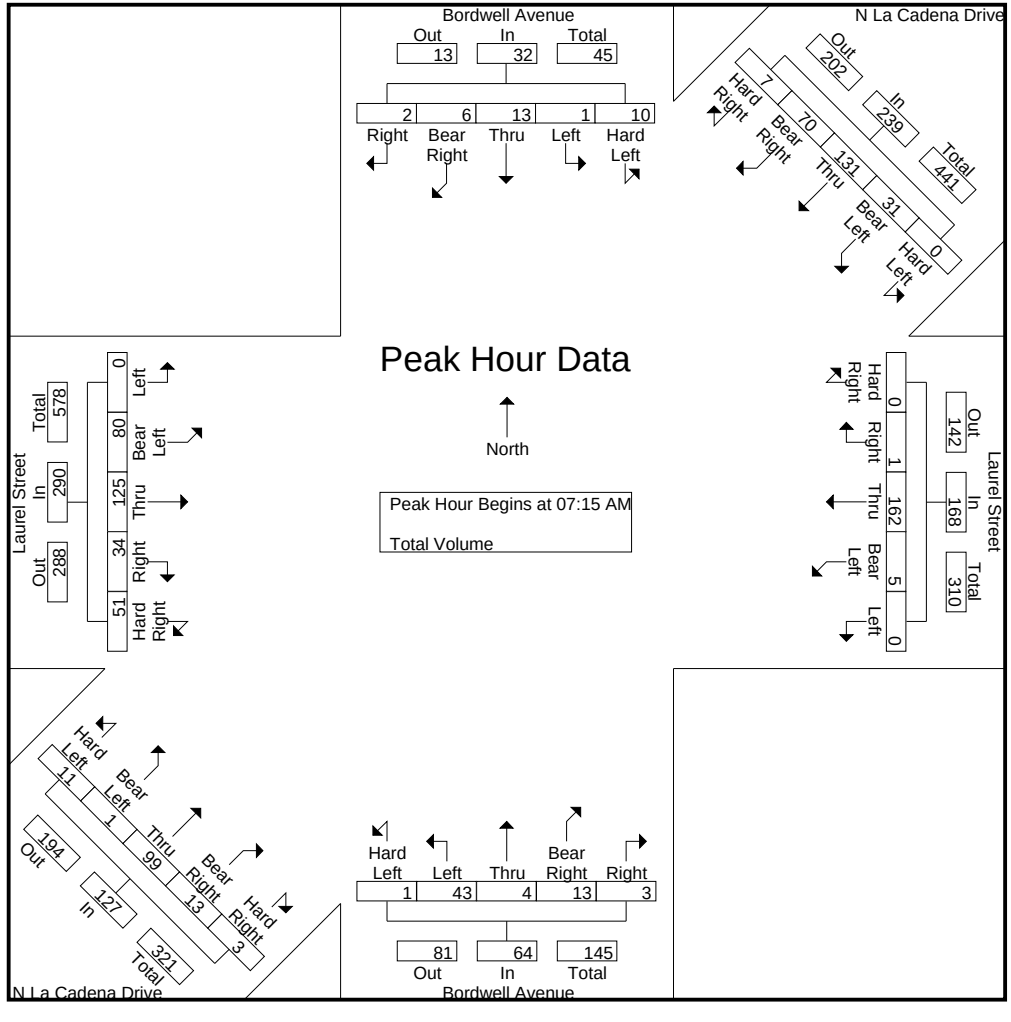
City of Colton
N/S: Bordwell Avenue
E/W: Laurel Street/N La Cadena Drive
Weather: Clear

File Name : 13_COL_Bor_Laurel AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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	Bordwell Avenue Southbound						N La Cadena Drive Southwestbound						Laurel Street Westbound						Bordwell Avenue Northbound						N La Cadena Drive Northeastbound						Laurel Street Eastbound						
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																																				
Peak Hour for Each Approach Begins at:																																				
	07:15 AM						07:15 AM						07:15 AM						07:00 AM						07:45 AM						07:15 AM						
+0 mins.	2	0	**7**	0	**1**	**10**	0	11	30	**19**	**3**	63	0	**2**	41	**1**	0	44	**1**	3	0	4	0	8	**5**	**1**	24	1	**1**	32	0	8	20	8	7	43	
+15 mins.	**4**	0	3	1	0	8	0	**16**	**40**	18	1	**75**	0	1	**59**	0	0	**60**	0	12	0	3	0	15	2	0	23	2	0	27	0	25	36	**13**	13	87	
+30 mins.	2	0	1	**4**	0	7	0	2	40	18	3	63	0	0	43	0	0	43	0	**17**	**2**	**7**	**2**	**28**	2	0	27	**6**	0	35	0	**33**	**42**	8	**20**	**103**	
+45 mins.	2	**1**	2	1	1	7	0	2	21	15	0	38	0	2	19	0	0	21	1	9	1	1	1	13	4	0	**35**	4	1	**44**	0	14	27	5	11	57	
Total Volume	10	1	13	6	2	32	0	31	131	70	7	239	0	5	162	1	0	168	2	41	3	15	3	64	13	1	109	13	2	138	0	80	125	34	51	290	
% App. Total	31.2	3.1	40.6	18.8	6.2		0	13	54.8	29.3	2.9		0	3	96.4	0.6	0		3.1	64.1	4.7	23.4	4.7		9.4	0.7	79	9.4	1.4		0	27.6	43.1	11.7	17.6		
PHF	.625	.250	.464	.375	.500	.800	.000	.484	.819	.921	.583	.797	.000	.625	.686	.250	.000	.700	.500	.603	.375	.536	.375	.571	.650	.250	.779	.542	.500	.784	.000	.606	.744	.654	.638	.704	

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City of Colton
N/S: Bordwell Avenue
E/W: Laurel Street/N La Cadena Drive
Weather: Clear

File Name : 13_COL_Bor_Laurel PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Bordwell Avenue Southbound						N La Cadena Drive Southwestbound						Laurel Street Westbound						Bordwell Avenue Northbound							N La Cadena Drive Northeastbound							Laurel Street Eastbound								
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	RTO R	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	RTO R	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	4	0	0	2	2	8	1	2	68	15	3	89	0	3	35	1	0	39	0	11	4	7	0	0	22	7	1	40	7	0	0	55	1	26	30	9	6	72	0	285	285
04:15 PM	1	1	1	1	2	6	2	5	55	14	5	81	0	3	15	1	0	19	1	6	1	2	0	0	10	6	0	42	2	0	0	50	2	12	21	4	2	41	0	207	207
04:30 PM	2	4	0	2	1	9	1	4	58	17	4	84	0	3	16	0	0	19	0	5	2	3	0	0	10	0	1	40	3	0	0	44	0	11	25	3	8	47	0	213	213
04:45 PM	2	0	1	1	0	4	1	6	59	19	5	90	0	2	18	2	0	22	0	9	2	4	0	0	15	5	0	55	4	0	0	64	0	16	17	3	7	43	0	238	238
Total	9	5	2	6	5	27	5	17	240	65	17	344	0	11	84	4	0	99	1	31	9	16	0	0	57	18	2	177	16	0	0	213	3	65	93	19	23	203	0	943	943
05:00 PM	2	0	0	2	0	4	1	2	61	13	3	80	1	7	22	0	0	30	1	8	1	5	1	1	16	2	2	51	5	1	1	61	0	17	18	5	8	48	2	239	241
05:15 PM	1	1	3	0	0	5	1	5	72	19	2	99	0	3	26	0	1	30	0	8	3	5	1	0	17	1	1	60	5	1	0	68	0	9	19	7	4	39	0	258	258
05:30 PM	2	2	1	0	0	5	0	3	56	14	5	78	0	2	18	0	0	20	0	10	2	7	1	0	20	0	1	37	7	1	0	46	1	13	19	6	3	42	0	211	211
05:45 PM	2	0	1	0	0	3	1	6	66	12	5	90	0	4	24	0	0	28	1	6	4	4	1	0	16	2	1	50	4	1	0	58	0	9	14	3	3	29	0	224	224
Total	7	3	5	2	0	17	3	16	255	58	15	347	1	16	90	0	1	108	2	32	10	21	4	1	69	5	5	198	21	4	1	233	1	48	70	21	18	158	2	932	934
Grand Total	16	8	7	8	5	44	8	33	495	123	32	691	1	27	174	4	1	207	3	63	19	37	4	1	126	23	7	375	37	4	1	446	4	113	163	40	41	361	2	1875	1877
Apprch %	36.4	18.2	15.9	18.2	11.4		1.2	4.8	71.6	17.8	4.6		0.5	13	84.1	1.9	0.5		2.4	50	15.1	29.4	3.2			5.2	1.6	84.1	8.3	0.9			1.1	31.3	45.2	11.1	11.4				
Total %	0.9	0.4	0.4	0.4	0.3	2.3	0.4	1.8	26.4	6.6	1.7	36.9	0.1	1.4	9.3	0.2	0.1	11	0.2	3.4	1	2	0.2		6.7	1.2	0.4	20	2	0.2		23.8	0.2	6	8.7	2.1	2.2	19.3	0.1	99.9	

	Bordwell Avenue Southbound						N La Cadena Drive Southwestbound						Laurel Street Westbound						Bordwell Avenue Northbound						N La Cadena Drive Northeastbound						Laurel Street Eastbound							
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard 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	**2**	**4**	0	**2**	**1**	**9**	**1**	4	58	17	4	84	0	3	16	0	0	19	0	5	2	3	0	10	0	1	40	3	0	44	0	11	**25**	3	**8**	47	213
04:45 PM	2	0	1	1	0	4	1	**6**	59	**19**	**5**	90	0	2	18	**2**	0	22	0	**9**	2	4	0	15	**5**	0	55	4	0	64	0	16	17	3	7	43	238
05:00 PM	2	0	0	2	0	4	1	2	61	13	3	80	**1**	**7**	22	0	0	**30**	**1**	8	1	**5**	**1**	16	2	**2**	51	**5**	**1**	61	0	**17**	18	5	8	**48**	239
05:15 PM	1	1	**3**	0	0	5	1	5	**72**	19	2	**99**	0	3	**26**	0	**1**	30	0	8	**3**	5	1	**17**	1	1	**60**	5	1	**68**	0	9	19	**7**	4	39	**258**
Total Volume	7	5	4	5	1	22	4	17	250	68	14	353	1	15	82	2	1	101	1	30	8	17	2	58	8	4	206	17	2	237	0	53	79	18	27	177	948
% App. Total	31.8	22.7	18.2	22.7	4.5		1.1	4.8	70.8	19.3	4		1	14.9	81.2	2	1		1.7	51.7	13.8	29.3	3.4		3.4	1.7	86.9	7.2	0.8		0	29.9	44.6	10.2	15.3		
PHF	.875	.313	.333	.625	.250	.611	1.00	.708	.868	.895	.700	.891	.250	.536	.788	.250	.250	.842	.250	.833	.667	.850	.500	.853	.400	.500	.858	.850	.500	.871	.000	.779	.790	.643	.844	.922	.919

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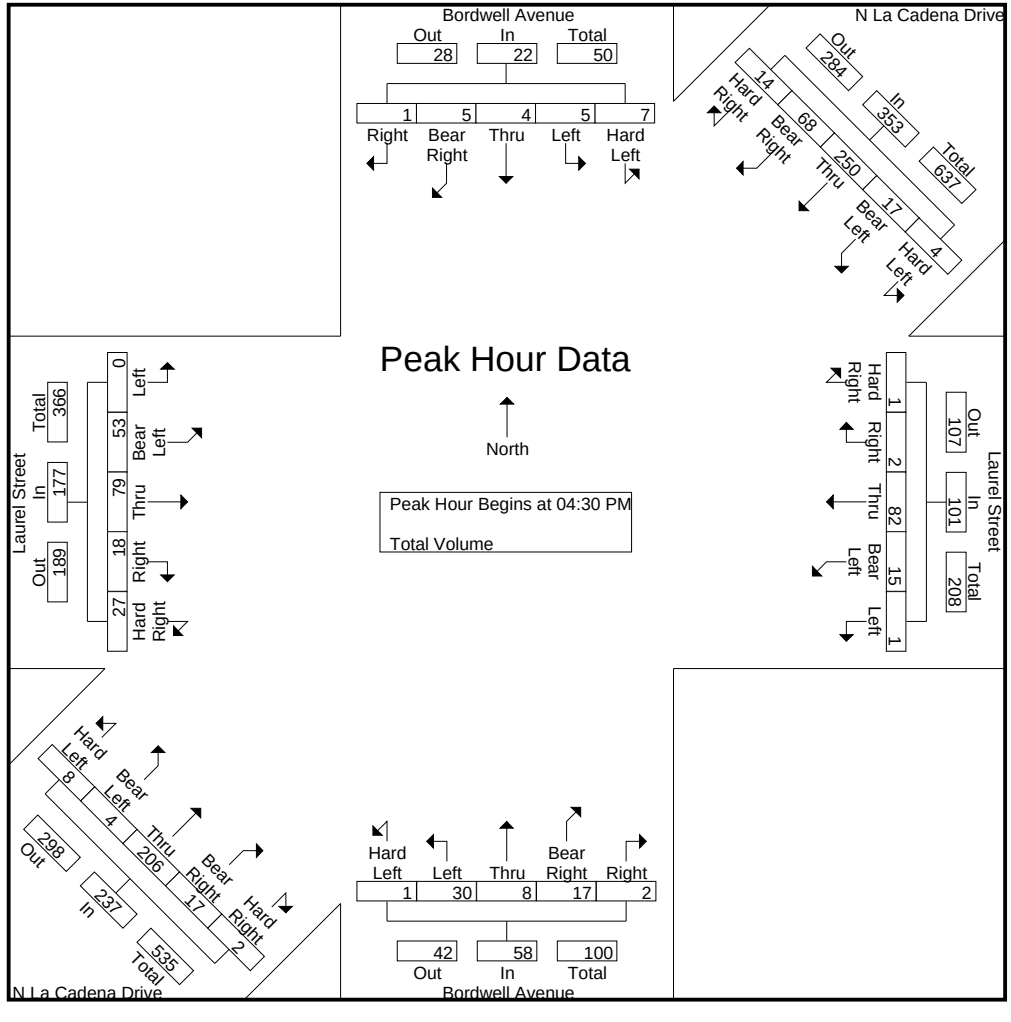

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	Bordwell Avenue Southbound						N La Cadena Drive Southwestbound						Laurel Street Westbound						Bordwell Avenue Northbound						N La Cadena Drive Northeastbound						Laurel Street Eastbound						
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Int. Total
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						05:00 PM						05:00 PM						04:45 PM						04:00 PM						
+0 mins.	**4**	0	0	**2**	**2**	8	**1**	4	58	17	4	84	**1**	**7**	22	0	0	**30**	**1**	8	1	5	**1**	16	**5**	0	55	4	0	64	1	**26**	**30**	**9**	6	**72**	
+15 mins.	1	1	**1**	1	2	6	1	**6**	59	**19**	**5**	90	0	3	**26**	0	**1**	30	0	8	3	5	1	17	2	**2**	51	5	**1**	61	**2**	12	21	4	2	41	
+30 mins.	2	**4**	0	2	1	**9**	1	2	61	13	3	80	0	2	18	0	0	20	0	**10**	2	**7**	1	**20**	1	1	**60**	5	1	**68**	0	11	25	3	**8**	47	
+45 mins.	2	0	1	1	0	4	1	5	**72**	19	2	**99**	0	4	24	0	0	28	1	6	**4**	4	1	16	0	1	37	**7**	1	46	0	16	17	3	7	43	
Total Volume	9	5	2	6	5	27	4	17	250	68	14	353	1	16	90	0	1	108	2	32	10	21	4	69	8	4	203	21	3	239	3	65	93	19	23	203	
% App. Total	33.3	18.5	7.4	22.2	18.5		1.1	4.8	70.8	19.3	4		0.9	14.8	83.3	0	0.9		2.9	46.4	14.5	30.4	5.8		3.3	1.7	84.9	8.8	1.3		1.5	32	45.8	9.4	11.3		
PHF	.563	.313	.500	.750	.625	.750	1.000	.708	.868	.895	.700	.891	.250	.571	.865	.000	.250	.900	.500	.800	.625	.750	1.000	.863	.400	.500	.846	.750	.750	.879	.375	.625	.775	.528	.719	.705	

Location: Colton
N/S: Bordwell Avenue
E/W: Laurel Street
NE-SW: N La Cadena Drive

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg Bordwell Avenue	Northeast Leg N La Cadena Drive	East Leg Laurel Street	South Leg Bordwell Avenue	Southwest Leg N La Cadena Drive	West Leg Laurel Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	1	1	2	4
7:15 AM	0	0	2	2	2	1	7
7:30 AM	4	0	2	2	0	0	8
7:45 AM	2	0	2	1	2	2	9
8:00 AM	4	0	0	1	2	0	7
8:15 AM	1	0	0	0	0	0	1
8:30 AM	2	0	3	1	0	0	6
8:45 AM	0	0	0	1	0	0	1
TOTAL VOLUMES:	13	0	9	9	7	5	43

	North Leg Bordwell Avenue	Northeast Leg N La Cadena Drive	East Leg Laurel Street	South Leg Bordwell Avenue	Southwest Leg N La Cadena Drive	West Leg Laurel Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	1	2	3
4:15 PM	1	0	0	1	1	1	4
4:30 PM	1	0	1	1	0	0	3
4:45 PM	0	0	0	1	1	2	4
5:00 PM	1	0	0	1	0	0	2
5:15 PM	2	0	0	1	0	1	4
5:30 PM	0	0	1	0	0	0	1
5:45 PM	0	0	0	0	0	0	0
TOTAL VOLUMES:	5	0	2	5	3	6	21

Location: Colton
N/S: Bordwell Avenue
E/W: Laurel Street
NE-SW: N La Cadena Drive

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound Bordwell Avenue					Southwestbound N La Cadena Drive					Westbound Laurel Street					Northbound Bordwell Avenue					Northeastbound N La Cadena Drive					Eastbound Laurel Street					
	H Left	Left	Thru	B Right	Right	H Left	B Left	Thru	B Right	H Right	Left	B Lef	Thru	Right	H Right	H Left	Left	Thru	B Right	Right	H Left	B Left	Thru	B Right	H Right	Left	B Left	Thru	Right	H Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

	Southbound Bordwell Avenue					Southwestbound N La Cadena Drive					Westbound Laurel Street					Northbound Bordwell Avenue					Northeastbound N La Cadena Drive					Eastbound Laurel Street					
	H Left	Left	Thru	B Right	Right	H Left	B Left	Thru	B Right	H Right	Left	B Lef	Thru	Right	H Right	H Left	Left	Thru	B Right	Right	H Left	B Left	Thru	B Right	H Right	Left	B Left	Thru	Right	H Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2

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

City of Colton
N/S: Mt Vernon Avenue
E/W: Laurel Street
Weather: Clear

File Name : 14_COL_Mt V_Lau AM
Site Code : 241045
Start Date : 11/21/2024

Groups Printed- Total Volume

	Mt Vernon Avenue Southbound					Private Driveway Westbound					Mt Vernon Avenue Northbound					Laurel Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	60	1	0	61	0	0	0	0	0	10	47	0	0	57	1	0	14	0	15	0	133	133
07:15 AM	1	90	2	0	93	0	0	0	0	0	41	59	0	0	100	2	0	24	0	26	0	219	219
07:30 AM	0	98	5	0	103	1	0	1	0	2	39	79	1	0	119	3	0	38	0	41	0	265	265
07:45 AM	1	81	2	0	84	0	0	0	0	0	39	61	0	0	100	6	0	38	0	44	0	228	228
Total	2	329	10	0	341	1	0	1	0	2	129	246	1	0	376	12	0	114	0	126	0	845	845
08:00 AM	0	76	7	0	83	1	0	0	0	1	16	74	0	0	90	5	0	24	0	29	0	203	203
08:15 AM	0	75	2	0	77	0	0	0	0	0	10	65	0	0	75	2	0	8	0	10	0	162	162
08:30 AM	0	57	5	0	62	0	0	0	0	0	8	60	0	0	68	3	0	5	0	8	0	138	138
08:45 AM	0	98	4	0	102	0	0	0	0	0	10	74	0	0	84	1	0	13	0	14	0	200	200
Total	0	306	18	0	324	1	0	0	0	1	44	273	0	0	317	11	0	50	0	61	0	703	703
Grand Total	2	635	28	0	665	2	0	1	0	3	173	519	1	0	693	23	0	164	0	187	0	1548	1548
Apprch %	0.3	95.5	4.2			66.7	0	33.3			25	74.9	0.1			12.3	0	87.7					
Total %	0.1	41	1.8		43	0.1	0	0.1		0.2	11.2	33.5	0.1		44.8	1.5	0	10.6		12.1	0	100	

	Mt Vernon Avenue Southbound				Private Driveway Westbound				Mt Vernon Avenue Northbound				Laurel 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	**1**	90	2	93	0	0	0	0	**41**	59	0	100	2	0	24	26	219
07:30 AM	0	**98**	5	**103**	**1**	0	**1**	**2**	39	**79**	**1**	**119**	3	0	**38**	41	**265**
07:45 AM	1	81	2	84	0	0	0	0	39	61	0	100	**6**	0	38	**44**	228
08:00 AM	0	76	**7**	83	1	0	0	1	16	74	0	90	5	0	24	29	203
Total Volume	2	345	16	363	2	0	1	3	135	273	1	409	16	0	124	140	915
% App. Total	0.6	95	4.4		66.7	0	33.3		33	66.7	0.2		11.4	0	88.6		
PHF	.500	.880	.571	.881	.500	.000	.250	.375	.823	.864	.250	.859	.667	.000	.816	.795	.863

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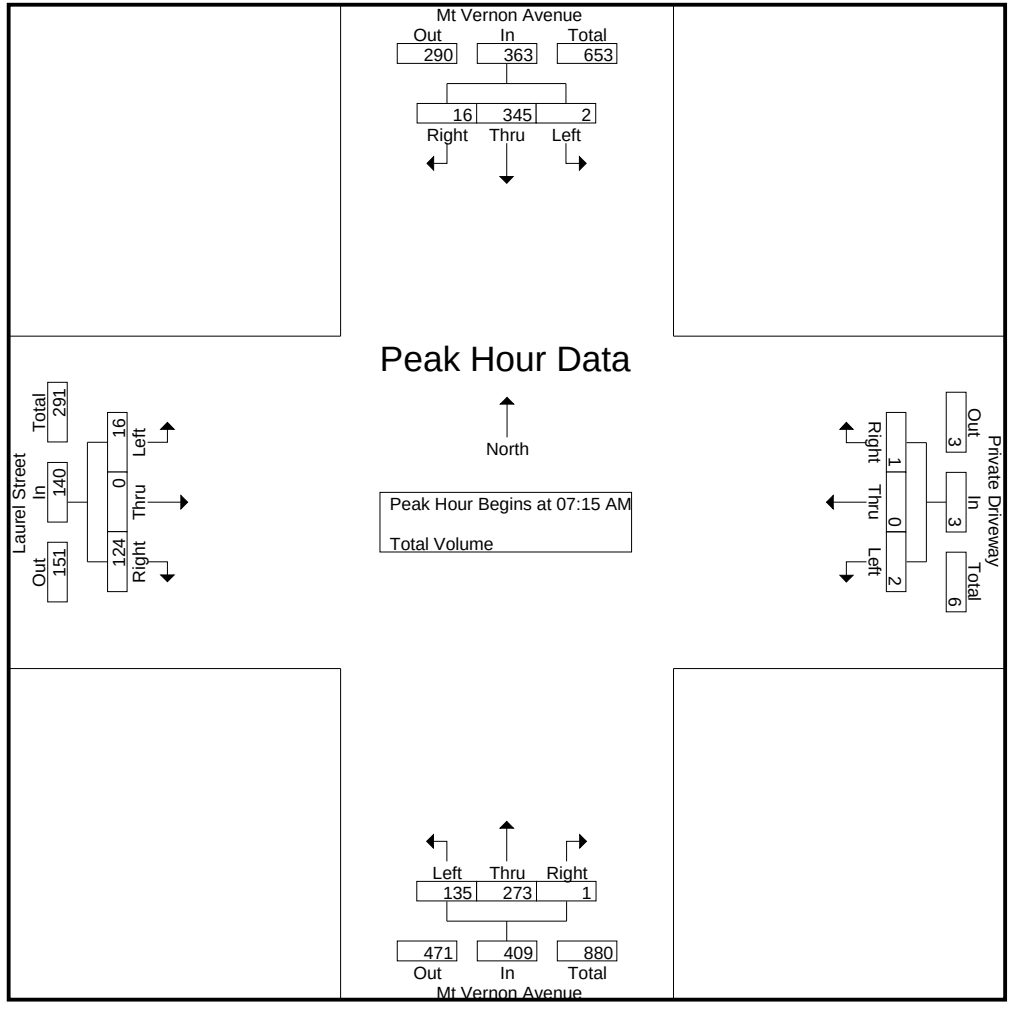
City of Colton
N/S: Mt Vernon Avenue
E/W: Laurel Street
Weather: Clear

File Name : 14_COL_Mt V_Lau AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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City of Colton
N/S: Mt Vernon Avenue
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File Name : 14_COL_Mt V_Lau AM
Site Code : 241045
Start Date : 11/21/2024

	Mt Vernon Avenue Southbound				Private Driveway Westbound				Mt Vernon Avenue Northbound				Laurel 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 Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	**1**	90	2	93	0	0	0	0	**41**	59	0	100	2	0	24	26	
+15 mins.	0	**98**	5	**103**	**1**	0	**1**	**2**	39	**79**	**1**	**119**	3	0	**38**	41	
+30 mins.	1	81	2	84	0	0	0	0	39	61	0	100	**6**	0	38	**44**	
+45 mins.	0	76	**7**	83	1	0	0	1	16	74	0	90	5	0	24	29	
Total Volume	2	345	16	363	2	0	1	3	135	273	1	409	16	0	124	140	
% App. Total	0.6	95	4.4		66.7	0	33.3		33	66.7	0.2		11.4	0	88.6		
PHF	.500	.880	.571	.881	.500	.000	.250	.375	.823	.864	.250	.859	.667	.000	.816	.795	

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City of Colton
N/S: Mt Vernon Avenue
E/W: Laurel Street
Weather: Clear

File Name : 14_COL_Mt V_Lau PM
Site Code : 241045
Start Date : 11/21/2024

Groups Printed- Total Volume

	Mt Vernon Avenue Southbound					Private Driveway Westbound					Mt Vernon Avenue Northbound					Laurel Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	123	6	0	130	0	0	0	0	0	34	124	0	0	158	2	0	28	0	30	0	318	318
04:15 PM	0	126	5	0	131	1	0	0	0	1	18	134	0	0	152	4	0	22	0	26	0	310	310
04:30 PM	0	121	4	0	125	0	0	0	0	0	16	134	0	0	150	5	0	26	0	31	0	306	306
04:45 PM	0	105	6	0	111	0	0	0	0	0	18	140	1	0	159	0	0	19	0	19	0	289	289
Total	1	475	21	0	497	1	0	0	0	1	86	532	1	0	619	11	0	95	0	106	0	1223	1223
05:00 PM	0	119	6	0	125	0	0	1	0	1	23	134	0	0	157	5	0	16	0	21	0	304	304
05:15 PM	2	96	6	0	104	0	0	0	0	0	21	131	0	0	152	6	0	15	0	21	0	277	277
05:30 PM	0	109	4	0	113	0	0	1	0	1	14	128	0	0	142	3	0	19	0	22	0	278	278
05:45 PM	0	108	6	0	114	0	0	0	0	0	24	126	0	0	150	3	0	15	0	18	0	282	282
Total	2	432	22	0	456	0	0	2	0	2	82	519	0	0	601	17	0	65	0	82	0	1141	1141
Grand Total	3	907	43	0	953	1	0	2	0	3	168	1051	1	0	1220	28	0	160	0	188	0	2364	2364
Apprch %	0.3	95.2	4.5			33.3	0	66.7			13.8	86.1	0.1			14.9	0	85.1					
Total %	0.1	38.4	1.8		40.3	0	0	0.1		0.1	7.1	44.5	0		51.6	1.2	0	6.8		8	0	100	

	Mt Vernon Avenue Southbound				Private Driveway Westbound				Mt Vernon Avenue Northbound				Laurel 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	**1**	123	**6**	130	0	0	0	0	**34**	124	0	158	2	0	**28**	30	**318**
04:15 PM	0	**126**	5	**131**	**1**	0	0	**1**	18	134	0	152	4	0	22	26	310
04:30 PM	0	121	4	125	0	0	0	0	16	134	0	150	**5**	0	26	**31**	306
04:45 PM	0	105	6	111	0	0	0	0	18	**140**	**1**	**159**	0	0	19	19	289
Total Volume	1	475	21	497	1	0	0	1	86	532	1	619	11	0	95	106	1223
% App. Total	0.2	95.6	4.2		100	0	0		13.9	85.9	0.2		10.4	0	89.6		
PHF	.250	.942	.875	.948	.250	.000	.000	.250	.632	.950	.250	.973	.550	.000	.848	.855	.961

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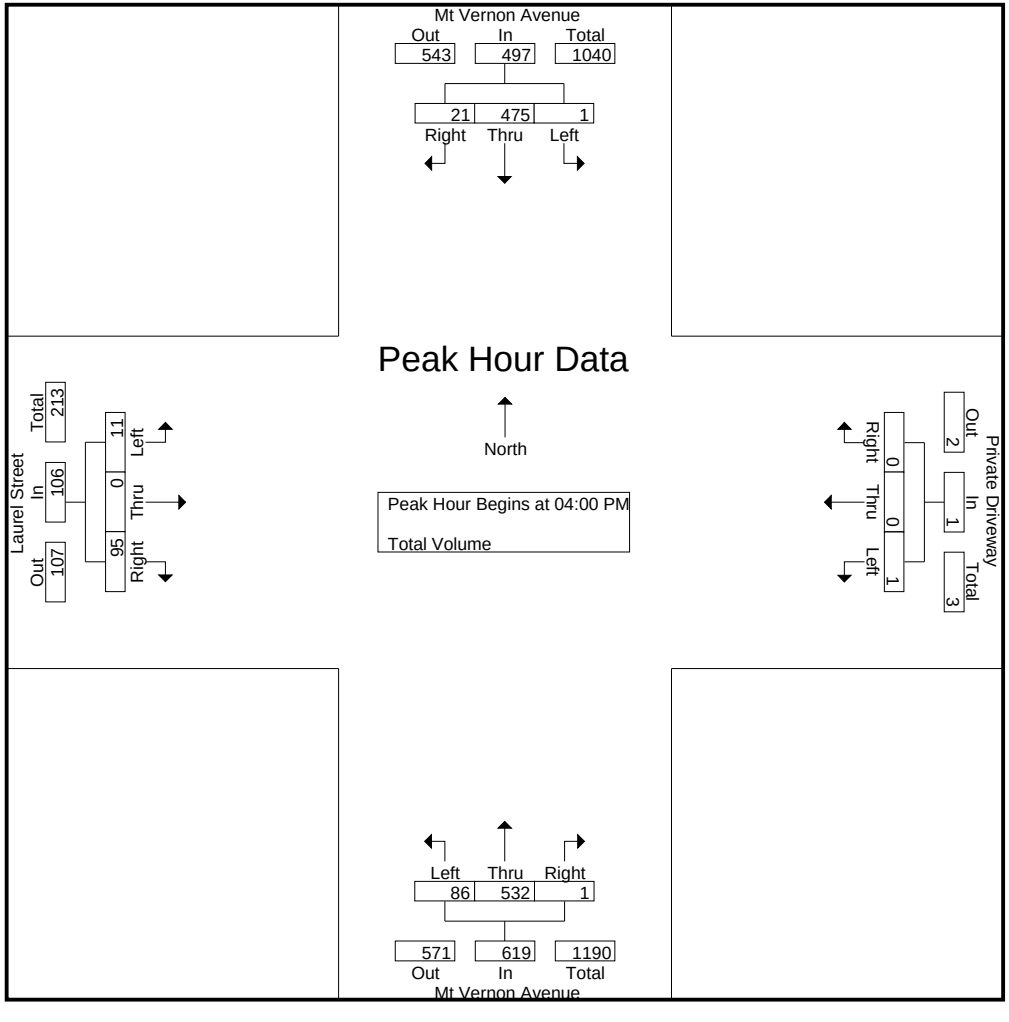
City of Colton
N/S: Mt Vernon Avenue
E/W: Laurel Street
Weather: Clear

File Name : 14_COL_Mt V_Lau PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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City of Colton
N/S: Mt Vernon Avenue
E/W: Laurel Street
Weather: Clear

File Name : 14_COL_Mt V_Lau PM
Site Code : 241045
Start Date : 11/21/2024

	Mt Vernon Avenue Southbound				Private Driveway Westbound				Mt Vernon Avenue Northbound				Laurel 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 Each Approach Begins at:																	
	04:00 PM				04:15 PM				04:00 PM				04:00 PM				
+0 mins.	**1**	123	**6**	130	**1**	0	0	**1**	**34**	124	0	158	2	0	**28**	30	
+15 mins.	0	**126**	5	**131**	0	0	0	0	18	134	0	152	4	0	22	26	
+30 mins.	0	121	4	125	0	0	0	0	16	134	0	150	**5**	0	26	**31**	
+45 mins.	0	105	6	111	0	0	**1**	1	18	**140**	**1**	**159**	0	0	19	19	
Total Volume	1	475	21	497	1	0	1	2	86	532	1	619	11	0	95	106	
% App. Total	0.2	95.6	4.2		50	0	50		13.9	85.9	0.2		10.4	0	89.6		
PHF	.250	.942	.875	.948	.250	.000	.250	.500	.632	.950	.250	.973	.550	.000	.848	.855	

Location: Colton
N/S: Mt Vernon Avenue
E/W: Laurel Street

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg Mt Vernon Avenue	East Leg Private Driveway	South Leg Mt Vernon Avenue	West Leg Laurel Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	2	0	3	5
7:15 AM	0	1	0	3	4
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	1	0	0	1
8:15 AM	0	1	0	1	2
8:30 AM	0	2	0	3	5
8:45 AM	0	1	0	1	2
TOTAL VOLUMES:	0	8	0	11	19

	North Leg Mt Vernon Avenue	East Leg Private Driveway	South Leg Mt Vernon Avenue	West Leg Laurel Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	0	5	6
4:15 PM	1	2	1	3	7
4:30 PM	0	0	0	3	3
4:45 PM	0	0	1	4	5
5:00 PM	0	0	0	3	3
5:15 PM	0	0	0	3	3
5:30 PM	0	0	0	0	0
5:45 PM	0	6	0	0	6
TOTAL VOLUMES:	1	9	2	21	33

Location: Colton
N/S: Mt Vernon Avenue
E/W: Laurel Street

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound Mt Vernon Avenue			Westbound Private Driveway			Northbound Mt Vernon Avenue			Eastbound Laurel Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound Mt Vernon Avenue			Westbound Private Driveway			Northbound Mt Vernon Avenue			Eastbound Laurel Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

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City of Colton
N/S: Mt Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 15_COL_Mt V_Col AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Mt Vernon Avenue Southbound					Colton Avenue Westbound					Mt Vernon Avenue Northbound					Colton Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	4	79	6	0	89	17	29	8	3	54	3	65	13	2	81	3	19	0	0	22	5	246	251
07:15 AM	10	113	20	1	143	27	34	20	10	81	3	126	26	0	155	12	28	0	0	40	11	419	430
07:30 AM	10	158	23	0	191	39	50	12	3	101	0	94	16	3	110	7	28	3	1	38	7	440	447
07:45 AM	20	129	12	0	161	21	42	17	4	80	2	90	11	1	103	2	41	1	0	44	5	388	393
Total	44	479	61	1	584	104	155	57	20	316	8	375	66	6	449	24	116	4	1	144	28	1493	1521
08:00 AM	9	94	11	0	114	20	50	9	3	79	7	83	14	1	104	12	24	3	0	39	4	336	340
08:15 AM	11	97	11	0	119	13	41	12	5	66	4	65	18	2	87	7	25	5	1	37	8	309	317
08:30 AM	3	46	14	1	63	18	44	14	9	76	5	67	13	5	85	10	28	4	0	42	15	266	281
08:45 AM	8	101	10	0	119	12	19	19	12	50	3	86	11	4	100	14	27	3	0	44	16	313	329
Total	31	338	46	1	415	63	154	54	29	271	19	301	56	12	376	43	104	15	1	162	43	1224	1267
Grand Total	75	817	107	2	999	167	309	111	49	587	27	676	122	18	825	67	220	19	2	306	71	2717	2788
Apprch %	7.5	81.8	10.7			28.4	52.6	18.9			3.3	81.9	14.8			21.9	71.9	6.2					
Total %	2.8	30.1	3.9		36.8	6.1	11.4	4.1		21.6	1	24.9	4.5		30.4	2.5	8.1	0.7		11.3	2.5	97.5	

	Mt Vernon Avenue Southbound				Colton Avenue Westbound				Mt Vernon Avenue Northbound				Colton Avenue 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	10	113	20	143	27	34	**20**	81	3	**126**	**26**	**155**	**12**	28	0	40	419
07:30 AM	10	**158**	**23**	**191**	**39**	**50**	12	**101**	0	94	16	110	7	28	**3**	38	**440**
07:45 AM	**20**	129	12	161	21	42	17	80	2	90	11	103	2	**41**	1	**44**	388
08:00 AM	9	94	11	114	20	50	9	79	**7**	83	14	104	12	24	3	39	336
Total Volume	49	494	66	609	107	176	58	341	12	393	67	472	33	121	7	161	1583
% App. Total	8	81.1	10.8		31.4	51.6	17		2.5	83.3	14.2		20.5	75.2	4.3		
PHF	.613	.782	.717	.797	.686	.880	.725	.844	.429	.780	.644	.761	.688	.738	.583	.915	.899

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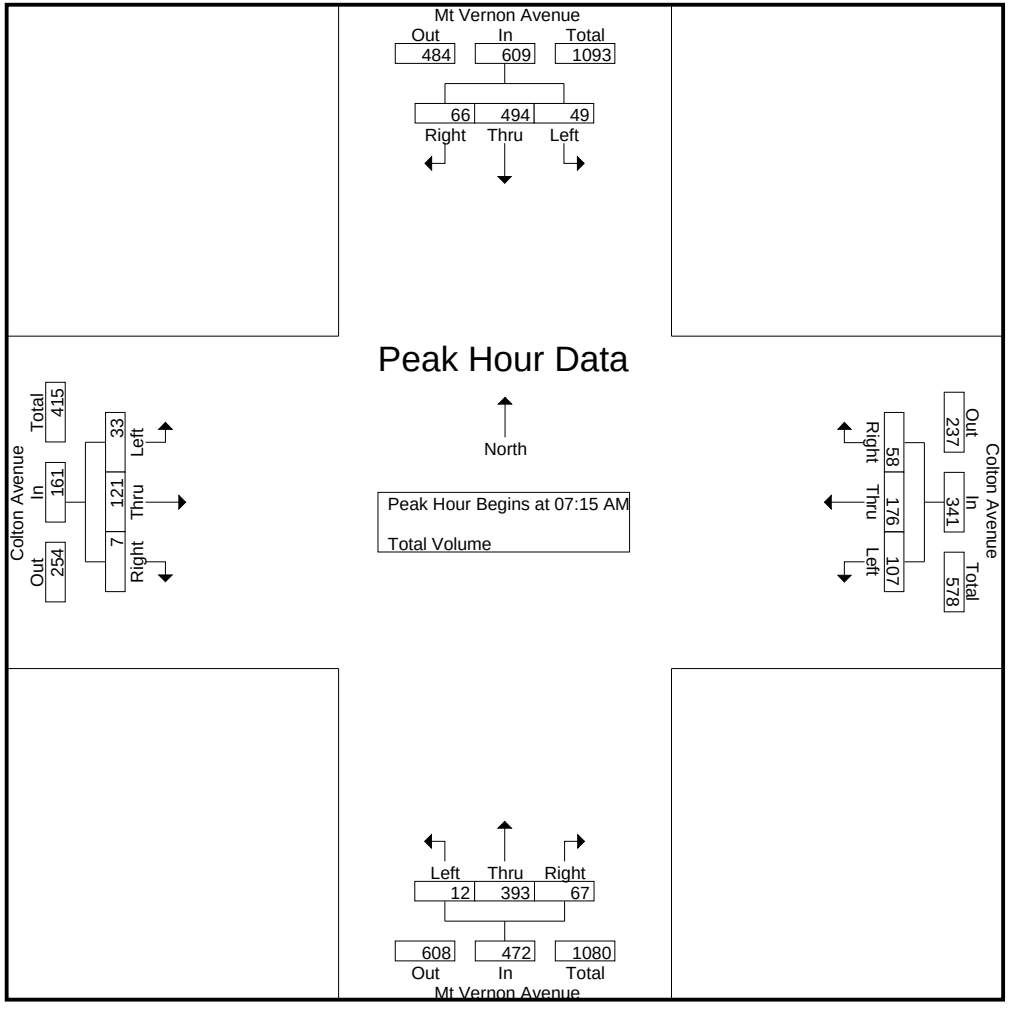
City of Colton
N/S: Mt Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 15_COL_Mt V_Col AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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Start Date : 11/21/2024

	Mt Vernon Avenue Southbound				Colton Avenue Westbound				Mt Vernon Avenue Northbound				Colton Avenue 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 Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:45 AM				
+0 mins.	10	113	20	143	27	34	**20**	81	3	**126**	**26**	**155**	2	**41**	1	**44**	
+15 mins.	10	**158**	**23**	**191**	**39**	**50**	12	**101**	0	94	16	110	**12**	24	3	39	
+30 mins.	**20**	129	12	161	21	42	17	80	2	90	11	103	7	25	**5**	37	
+45 mins.	9	94	11	114	20	50	9	79	**7**	83	14	104	10	28	4	42	
Total Volume	49	494	66	609	107	176	58	341	12	393	67	472	31	118	13	162	
% App. Total	8	81.1	10.8		31.4	51.6	17		2.5	83.3	14.2		19.1	72.8	8		
PHF	.613	.782	.717	.797	.686	.880	.725	.844	.429	.780	.644	.761	.646	.720	.650	.920	

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Groups Printed- Total Volume

	Mt Vernon Avenue Southbound					Colton Avenue Westbound					Mt Vernon Avenue Northbound					Colton Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	20	123	19	4	162	28	45	23	9	96	8	149	43	5	200	17	68	1	0	86	18	544	562
04:15 PM	18	129	6	2	153	26	53	23	9	102	7	159	25	2	191	22	51	3	0	76	13	522	535
04:30 PM	32	128	16	1	176	20	54	13	5	87	16	136	37	2	189	18	57	11	3	86	11	538	549
04:45 PM	22	127	20	2	169	23	70	22	10	115	10	144	31	2	185	12	49	7	1	68	15	537	552
Total	92	507	61	9	660	97	222	81	33	400	41	588	136	11	765	69	225	22	4	316	57	2141	2198
05:00 PM	29	112	16	7	157	29	58	33	15	120	6	147	36	4	189	17	51	7	1	75	27	541	568
05:15 PM	22	83	31	5	136	7	35	17	12	59	9	134	47	5	190	7	31	3	2	41	24	426	450
05:30 PM	24	111	17	3	152	26	55	19	4	100	11	130	37	6	178	10	54	6	2	70	15	500	515
05:45 PM	19	115	13	1	147	27	29	34	10	90	11	146	27	2	184	20	38	2	1	60	14	481	495
Total	94	421	77	16	592	89	177	103	41	369	37	557	147	17	741	54	174	18	6	246	80	1948	2028
Grand Total	186	928	138	25	1252	186	399	184	74	769	78	1145	283	28	1506	123	399	40	10	562	137	4089	4226
Apprch %	14.9	74.1	11			24.2	51.9	23.9			5.2	76	18.8			21.9	71	7.1					
Total %	4.5	22.7	3.4		30.6	4.5	9.8	4.5		18.8	1.9	28	6.9		36.8	3	9.8	1		13.7	3.2	96.8	

	Mt Vernon Avenue Southbound				Colton Avenue Westbound				Mt Vernon Avenue Northbound				Colton Avenue 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	20	123	19	162	**28**	45	**23**	96	8	149	**43**	**200**	17	**68**	1	**86**	**544**
04:15 PM	18	**129**	6	153	26	53	23	102	7	**159**	25	191	**22**	51	3	76	522
04:30 PM	**32**	128	16	**176**	20	54	13	87	**16**	136	37	189	18	57	**11**	86	538
04:45 PM	22	127	**20**	169	23	**70**	22	**115**	10	144	31	185	12	49	7	68	537
Total Volume	92	507	61	660	97	222	81	400	41	588	136	765	69	225	22	316	2141
% App. Total	13.9	76.8	9.2		24.2	55.5	20.2		5.4	76.9	17.8		21.8	71.2	7		
PHF	.719	.983	.763	.938	.866	.793	.880	.870	.641	.925	.791	.956	.784	.827	.500	.919	.984

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Site Code : 241045
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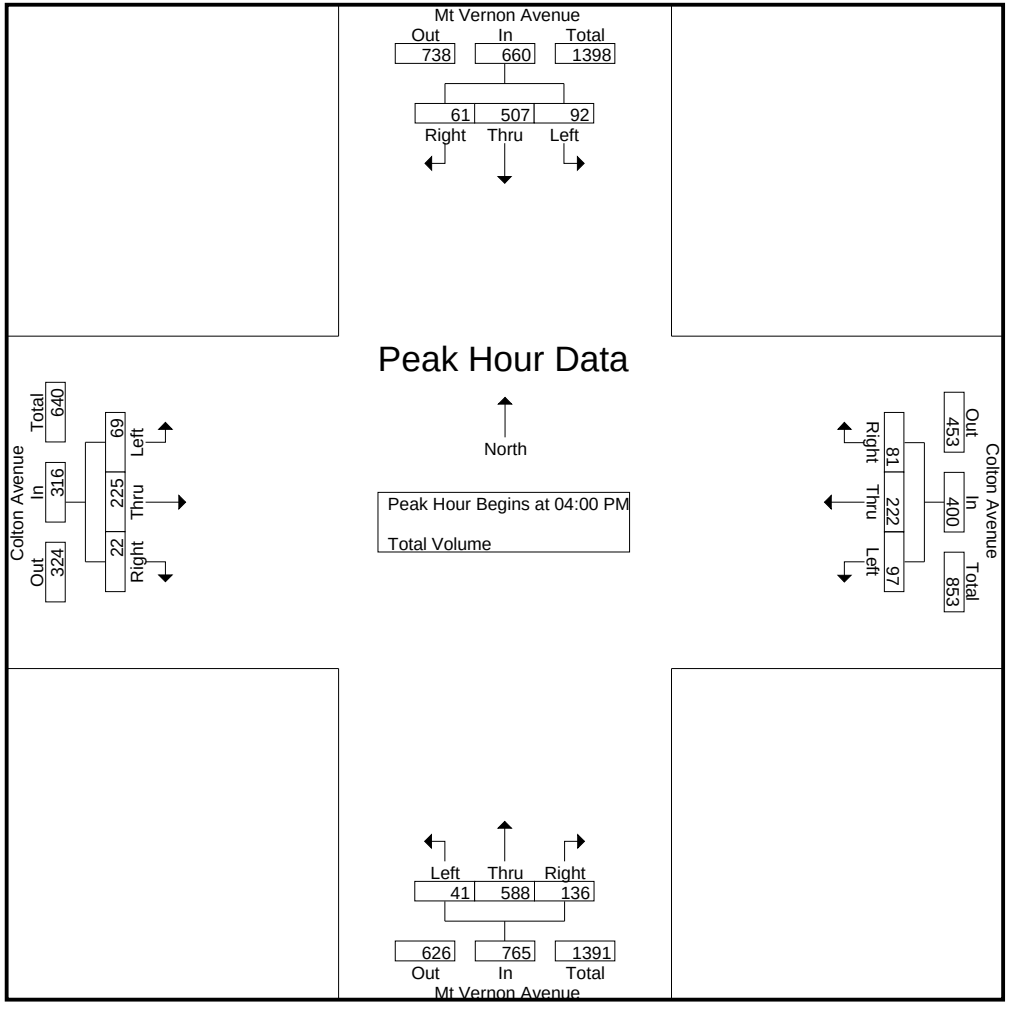
Page No : 2



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	Mt Vernon Avenue Southbound				Colton Avenue Westbound				Mt Vernon Avenue Northbound				Colton Avenue 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 Each Approach Begins at:																	
	04:00 PM				04:15 PM				04:00 PM				04:00 PM				
+0 mins.	20	123	19	162	26	53	23	102	8	149	**43**	**200**	17	**68**	1	**86**	
+15 mins.	18	**129**	6	153	20	54	13	87	7	**159**	25	191	**22**	51	3	76	
+30 mins.	**32**	128	16	**176**	23	**70**	22	115	**16**	136	37	189	18	57	**11**	86	
+45 mins.	22	127	**20**	169	**29**	58	**33**	**120**	10	144	31	185	12	49	7	68	
Total Volume	92	507	61	660	98	235	91	424	41	588	136	765	69	225	22	316	
% App. Total	13.9	76.8	9.2		23.1	55.4	21.5		5.4	76.9	17.8		21.8	71.2	7		
PHF	.719	.983	.763	.938	.845	.839	.689	.883	.641	.925	.791	.956	.784	.827	.500	.919	

Location: Colton
N/S: Mt Vernon Avenue
E/W: Colton Avenue

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg Mt Vernon Avenue Pedestrians	East Leg Colton Avenue Pedestrians	South Leg Mt Vernon Avenue Pedestrians	West Leg Colton Avenue Pedestrians	
7:00 AM	1	1	1	0	3
7:15 AM	1	1	0	2	4
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	1	1
8:15 AM	3	0	0	3	6
8:30 AM	1	0	0	1	2
8:45 AM	2	0	1	2	5
TOTAL VOLUMES:	8	2	2	9	21

	North Leg Mt Vernon Avenue Pedestrians	East Leg Colton Avenue Pedestrians	South Leg Mt Vernon Avenue Pedestrians	West Leg Colton Avenue Pedestrians	
4:00 PM	2	2	6	4	14
4:15 PM	4	7	1	10	22
4:30 PM	2	10	3	5	20
4:45 PM	1	15	1	1	18
5:00 PM	1	0	0	1	2
5:15 PM	1	4	5	9	19
5:30 PM	1	2	0	3	6
5:45 PM	0	3	0	0	3
TOTAL VOLUMES:	12	43	16	33	104

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Location: Colton
N/S: Mt Vernon Avenue
E/W: Colton Avenue

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound Mt Vernon Avenue			Westbound Colton Avenue			Northbound Mt Vernon Avenue			Eastbound Colton Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1	0	0	1	0	0	0	0	3

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

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City of Colton
N/S: Mt Vernon Avenue
E/W: F Street/Fairway Drive
Weather: Clear

File Name : 16_COL_Mt V_Fair AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Mt Vernon Avenue Southbound					Fairway Drive Westbound					Mt Vernon Avenue Northbound					F Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	27	79	0	0	106	16	9	35	23	60	0	59	14	4	73	2	9	4	1	15	28	254	282
07:15 AM	45	130	3	0	178	17	9	58	31	84	3	88	11	1	102	7	15	4	3	26	35	390	425
07:30 AM	62	160	5	1	227	24	9	54	33	87	0	61	12	2	73	3	17	5	1	25	37	412	449
07:45 AM	73	119	0	0	192	26	14	49	30	89	1	67	11	1	79	5	17	3	0	25	31	385	416
Total	207	488	8	1	703	83	41	196	117	320	4	275	48	8	327	17	58	16	5	91	131	1441	1572
08:00 AM	50	85	4	1	139	23	10	48	25	81	1	76	32	5	109	5	9	1	0	15	31	344	375
08:15 AM	30	105	3	1	138	14	12	34	16	60	0	58	20	4	78	2	10	0	0	12	21	288	309
08:30 AM	21	71	0	0	92	20	5	40	21	65	0	57	6	2	63	1	8	2	0	11	23	231	254
08:45 AM	30	96	1	0	127	23	10	50	23	83	2	62	14	2	78	4	8	3	1	15	26	303	329
Total	131	357	8	2	496	80	37	172	85	289	3	253	72	13	328	12	35	6	1	53	101	1166	1267
Grand Total	338	845	16	3	1199	163	78	368	202	609	7	528	120	21	655	29	93	22	6	144	232	2607	2839
Apprch %	28.2	70.5	1.3			26.8	12.8	60.4			1.1	80.6	18.3			20.1	64.6	15.3					
Total %	13	32.4	0.6		46	6.3	3	14.1		23.4	0.3	20.3	4.6		25.1	1.1	3.6	0.8		5.5	8.2	91.8	

	Mt Vernon Avenue Southbound				Fairway Drive Westbound				Mt Vernon Avenue Northbound				F 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	45	130	3	178	17	9	**58**	84	**3**	**88**	11	102	**7**	15	4	**26**	390
07:30 AM	62	**160**	**5**	**227**	24	9	54	87	0	61	12	73	3	**17**	**5**	25	**412**
07:45 AM	**73**	119	0	192	**26**	**14**	49	**89**	1	67	11	79	5	17	3	25	385
08:00 AM	50	85	4	139	23	10	48	81	1	76	**32**	**109**	5	9	1	15	344
Total Volume	230	494	12	736	90	42	209	341	5	292	66	363	20	58	13	91	1531
% App. Total	31.2	67.1	1.6		26.4	12.3	61.3		1.4	80.4	18.2		22	63.7	14.3		
PHF	.788	.772	.600	.811	.865	.750	.901	.958	.417	.830	.516	.833	.714	.853	.650	.875	.929

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City of Colton
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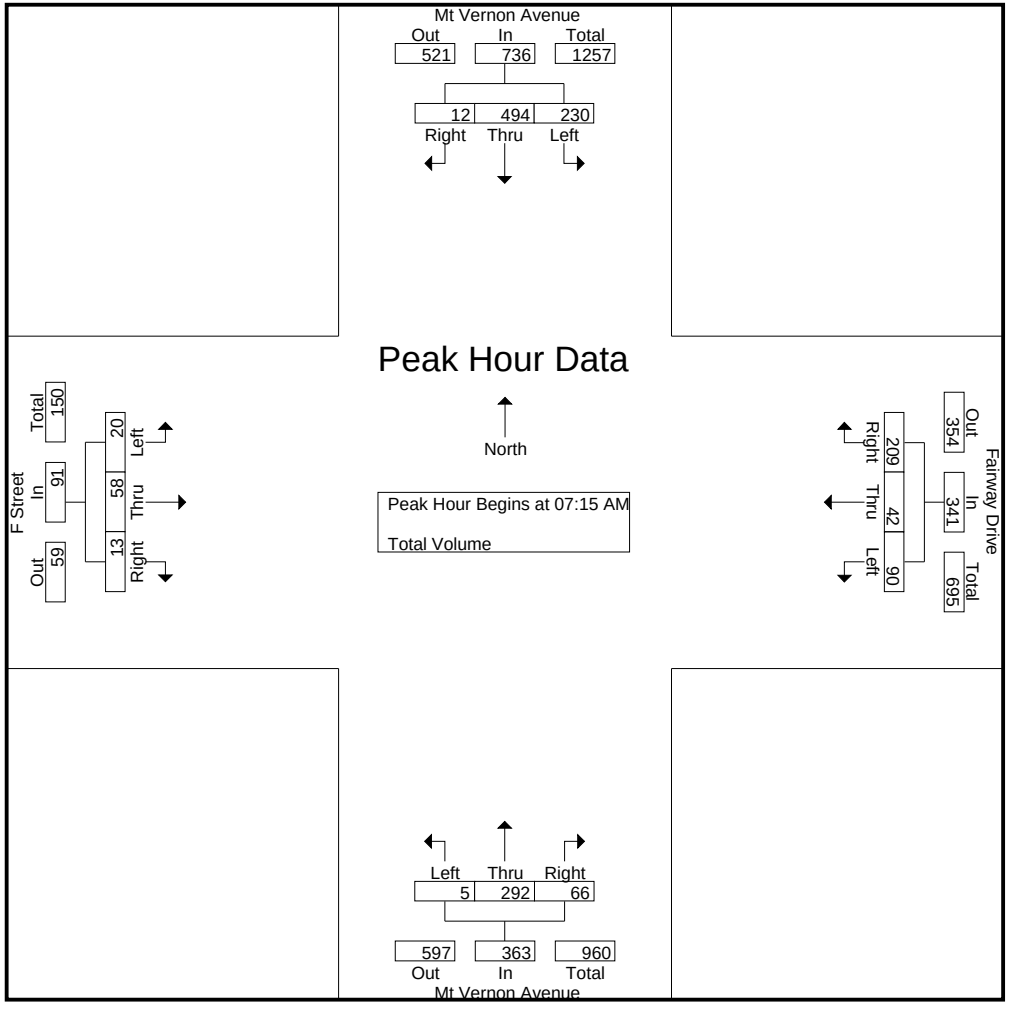

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	Mt Vernon Avenue Southbound				Fairway Drive Westbound				Mt Vernon Avenue Northbound				F Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:00 AM				
+0 mins.	45	130	3	178	17	9	**58**	84	**3**	**88**	11	102	2	9	4	15	
+15 mins.	62	**160**	**5**	**227**	24	9	54	87	0	61	12	73	**7**	15	4	**26**	
+30 mins.	**73**	119	0	192	**26**	**14**	49	**89**	1	67	11	79	3	**17**	**5**	25	
+45 mins.	50	85	4	139	23	10	48	81	1	76	**32**	**109**	5	17	3	25	
Total Volume	230	494	12	736	90	42	209	341	5	292	66	363	17	58	16	91	
% App. Total	31.2	67.1	1.6		26.4	12.3	61.3		1.4	80.4	18.2		18.7	63.7	17.6		
PHF	.788	.772	.600	.811	.865	.750	.901	.958	.417	.830	.516	.833	.607	.853	.800	.875	

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	Mt Vernon Avenue Southbound					Fairway Drive Westbound					Mt Vernon Avenue Northbound					F Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	48	136	5	0	189	50	33	91	27	174	4	135	11	5	150	2	23	2	0	27	32	540	572
04:15 PM	51	127	6	3	184	53	34	83	28	170	4	128	14	3	146	3	18	6	1	27	35	527	562
04:30 PM	43	115	3	1	161	37	40	102	36	179	5	119	13	4	137	7	24	5	2	36	43	513	556
04:45 PM	63	102	7	3	172	30	37	84	29	151	3	126	22	1	151	5	30	4	0	39	33	513	546
Total	205	480	21	7	706	170	144	360	120	674	16	508	60	13	584	17	95	17	3	129	143	2093	2236
05:00 PM	51	110	2	1	163	51	40	89	24	180	1	132	16	3	149	6	19	4	0	29	28	521	549
05:15 PM	43	100	2	1	145	50	35	90	31	175	4	104	15	3	123	9	14	2	0	25	35	468	503
05:30 PM	46	119	7	1	172	52	36	79	24	167	2	121	19	10	142	7	20	1	0	28	35	509	544
05:45 PM	43	119	2	1	164	45	35	88	28	168	2	127	14	3	143	1	19	3	0	23	32	498	530
Total	183	448	13	4	644	198	146	346	107	690	9	484	64	19	557	23	72	10	0	105	130	1996	2126
Grand Total	388	928	34	11	1350	368	290	706	227	1364	25	992	124	32	1141	40	167	27	3	234	273	4089	4362
Apprch %	28.7	68.7	2.5			27	21.3	51.8			2.2	86.9	10.9			17.1	71.4	11.5					
Total %	9.5	22.7	0.8		33	9	7.1	17.3		33.4	0.6	24.3	3		27.9	1	4.1	0.7		5.7	6.3	93.7	

	Mt Vernon Avenue Southbound				Fairway Drive Westbound				Mt Vernon Avenue Northbound				F 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	48	**136**	5	**189**	50	33	91	174	4	**135**	11	150	2	23	2	27	**540**
04:15 PM	51	127	6	184	**53**	34	83	170	4	128	14	146	3	18	**6**	27	527
04:30 PM	43	115	3	161	37	**40**	**102**	**179**	**5**	119	13	137	**7**	24	5	36	513
04:45 PM	**63**	102	**7**	172	30	37	84	151	3	126	**22**	**151**	5	**30**	4	**39**	513
Total Volume	205	480	21	706	170	144	360	674	16	508	60	584	17	95	17	129	2093
% App. Total	29	68	3		25.2	21.4	53.4		2.7	87	10.3		13.2	73.6	13.2		
PHF	.813	.882	.750	.934	.802	.900	.882	.941	.800	.941	.682	.967	.607	.792	.708	.827	.969

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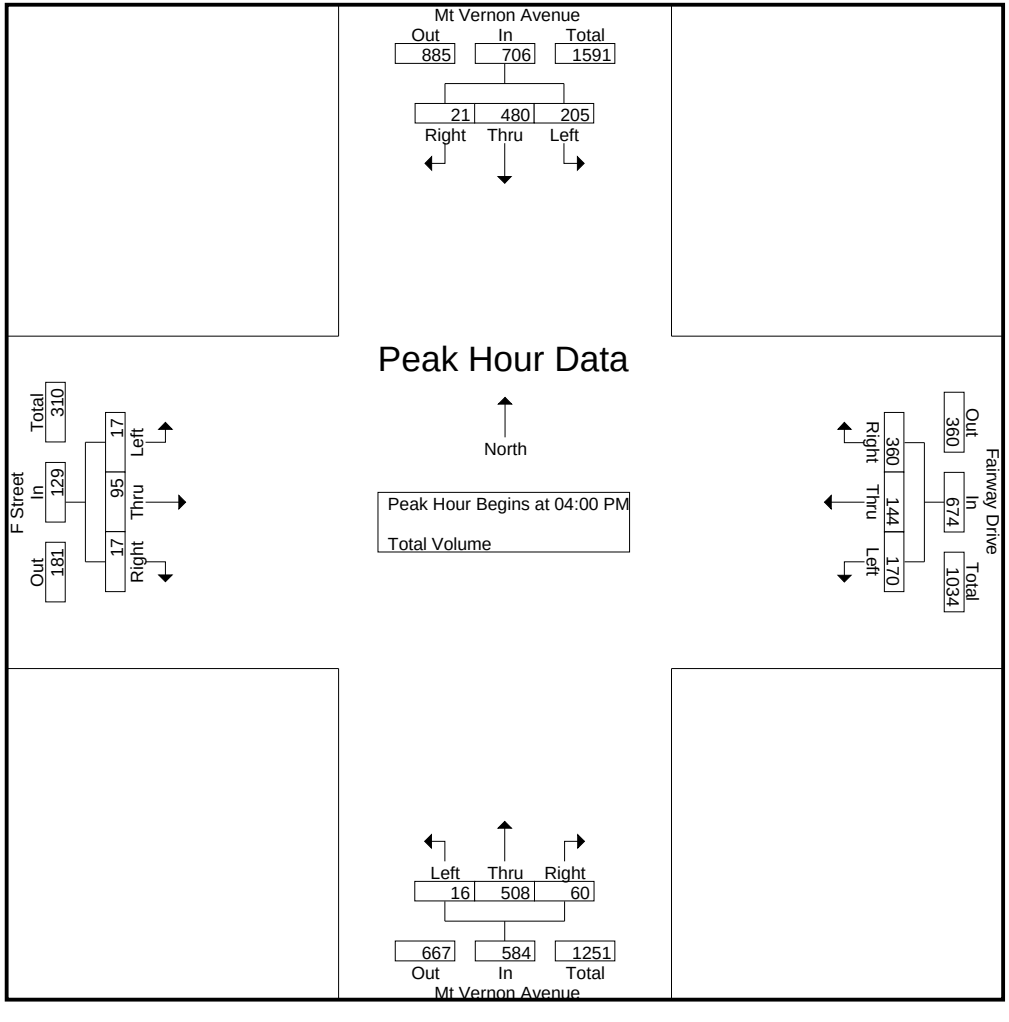
City of Colton
N/S: Mt Vernon Avenue
E/W: F Street/Fairway Drive
Weather: Clear

File Name : 16_COL_Mt V_Fair PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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City of Colton
N/S: Mt Vernon Avenue
E/W: F Street/Fairway Drive
Weather: Clear

File Name : 16_COL_Mt V_Fair PM
Site Code : 241045
Start Date : 11/21/2024

	Mt Vernon Avenue Southbound				Fairway Drive Westbound				Mt Vernon Avenue Northbound				F 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 Each Approach Begins at:																	
	04:00 PM				05:00 PM				04:00 PM				04:15 PM				
+0 mins.	48	**136**	5	**189**	51	**40**	89	**180**	4	**135**	11	150	3	18	**6**	27	
+15 mins.	51	127	6	184	50	35	**90**	175	4	128	14	146	**7**	24	5	36	
+30 mins.	43	115	3	161	**52**	36	79	167	**5**	119	13	137	5	**30**	4	**39**	
+45 mins.	**63**	102	**7**	172	45	35	88	168	3	126	**22**	**151**	6	19	4	29	
Total Volume	205	480	21	706	198	146	346	690	16	508	60	584	21	91	19	131	
% App. Total	29	68	3		28.7	21.2	50.1		2.7	87	10.3		16	69.5	14.5		
PHF	.813	.882	.750	.934	.952	.913	.961	.958	.800	.941	.682	.967	.750	.758	.792	.840	

Location: Colton
N/S: Mt Vernon Avenue
E/W: F Street/Fairway Drive

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg Mt Vernon Avenue	East Leg Fairway Drive	South Leg Mt Vernon Avenue	West Leg F Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	3	0	0	3
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	2	1	3
8:00 AM	3	0	2	1	6
8:15 AM	2	0	0	1	3
8:30 AM	2	2	3	2	9
8:45 AM	3	0	0	4	7
TOTAL VOLUMES:	10	5	7	9	31

	North Leg Mt Vernon Avenue	East Leg Fairway Drive	South Leg Mt Vernon Avenue	West Leg F Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	5	5	0	2	12
4:15 PM	3	0	4	2	9
4:30 PM	0	3	0	1	4
4:45 PM	3	1	0	0	4
5:00 PM	0	3	1	3	7
5:15 PM	3	1	5	3	12
5:30 PM	1	0	2	3	6
5:45 PM	3	2	2	4	11
TOTAL VOLUMES:	18	15	14	18	65

Location: Colton
N/S: Mt Vernon Avenue
E/W: F Street/Fairway Drive

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound Mt Vernon Avenue			Westbound Fairway Drive			Northbound Mt Vernon Avenue			Eastbound F Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
8:30 AM	1	0	0	0	0	0	1	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	0	0	2	0	0	0	0	0	3

	Southbound Mt Vernon Avenue			Westbound Fairway Drive			Northbound Mt Vernon Avenue			Eastbound F Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	1	0	0	0	0	0	0	0	0	0	0	2

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City of Colton
N/S: Mt Vernon Avenue
E/W: Valley Blvd/I-10 WB On Ramp
Weather: Clear

File Name : 17_COL_Mt V_Val AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Mt Vernon Avenue Southbound						Valley Boulevard Westbound						Mt Vernon Avenue Northbound						I-10 Westbound On Ramp Northeastbound						Valley Boulevard Eastbound								
Start Time	Left	Thru	Bear Right	Right	RTOR	App. Total	Left	Bear Left	Thru	Right	RTOR	App. Total	Hard Left	Left	Thru	Right	RTOR	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	App. Total	Left	Thru	Right	Hard Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	55	42	9	3	106	24	7	10	3	0	44	40	1	47	3	0	91	0	0	0	0	0	0	13	8	2	0	0	23	3	264	267
07:15 AM	0	49	57	19	5	125	34	16	21	7	4	78	53	14	67	6	0	140	0	0	0	0	0	0	12	9	10	1	1	32	10	375	385
07:30 AM	0	97	59	19	6	175	57	7	33	1	0	98	25	15	42	3	0	85	0	0	0	0	0	0	16	14	9	1	0	40	6	398	404
07:45 AM	1	80	48	15	2	144	63	8	39	2	0	112	38	8	46	6	0	98	0	0	0	0	0	0	21	16	23	2	1	62	3	416	419
Total	1	281	206	62	16	550	178	38	103	13	4	332	156	38	202	18	0	414	0	0	0	0	0	0	62	47	44	4	2	157	22	1453	1475
08:00 AM	3	42	39	13	5	97	46	3	15	9	4	73	25	8	76	5	1	114	0	0	0	0	0	0	25	22	18	0	0	65	10	349	359
08:15 AM	1	55	39	22	3	117	60	1	15	3	1	79	46	7	46	10	2	109	0	0	0	0	0	0	26	15	20	2	2	63	8	368	376
08:30 AM	1	51	30	15	1	97	45	9	14	4	3	72	37	16	39	3	0	95	0	0	0	0	0	0	27	15	15	0	1	57	5	321	326
08:45 AM	0	59	40	15	7	114	32	11	11	3	1	57	39	11	74	6	0	130	0	0	0	0	0	0	18	14	24	1	0	57	8	358	366
Total	5	207	148	65	16	425	183	24	55	19	9	281	147	42	235	24	3	448	0	0	0	0	0	0	96	66	77	3	3	242	31	1396	1427
Grand Total	6	488	354	127	32	975	361	62	158	32	13	613	303	80	437	42	3	862	0	0	0	0	0	0	158	113	121	7	5	399	53	2849	2902
Apprch %	0.6	50.1	36.3	13			58.9	10.1	25.8	5.2			35.2	9.3	50.7	4.9			0	0	0	0			39.6	28.3	30.3	1.8					
Total %	0.2	17.1	12.4	4.5		34.2	12.7	2.2	5.5	1.1		21.5	10.6	2.8	15.3	1.5		30.3	0	0	0	0		0	5.5	4	4.2	0.2		14	1.8	98.2	

	Mt Vernon Avenue Southbound					Valley Boulevard Westbound					Mt Vernon Avenue Northbound					I-10 Westbound On Ramp Northeastbound					Valley Boulevard Eastbound					
Start Time	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard 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	49	57	**19**	125	34	**16**	21	7	78	**53**	14	67	**6**	**140**	0	0	0	0	0	12	9	10	1	32	375
07:30 AM	0	**97**	**59**	19	**175**	57	7	33	1	98	25	**15**	42	3	85	0	0	0	0	0	16	14	9	1	40	398
07:45 AM	1	80	48	15	144	**63**	8	**39**	2	**112**	38	8	46	6	98	0	0	0	0	0	21	16	**23**	**2**	62	**416**
08:00 AM	**3**	42	39	13	97	46	3	15	**9**	73	25	8	**76**	5	114	0	0	0	0	0	**25**	**22**	18	0	**65**	349
Total Volume	4	268	203	66	541	200	34	108	19	361	141	45	231	20	437	0	0	0	0	0	74	61	60	4	199	1538
% App. Total	0.7	49.5	37.5	12.2		55.4	9.4	29.9	5.3		32.3	10.3	52.9	4.6		0	0	0	0		37.2	30.7	30.2	2		
PHF	.333	.691	.860	.868	.773	.794	.531	.692	.528	.806	.665	.750	.760	.833	.780	.000	.000	.000	.000	.000	.740	.693	.652	.500	.765	.924

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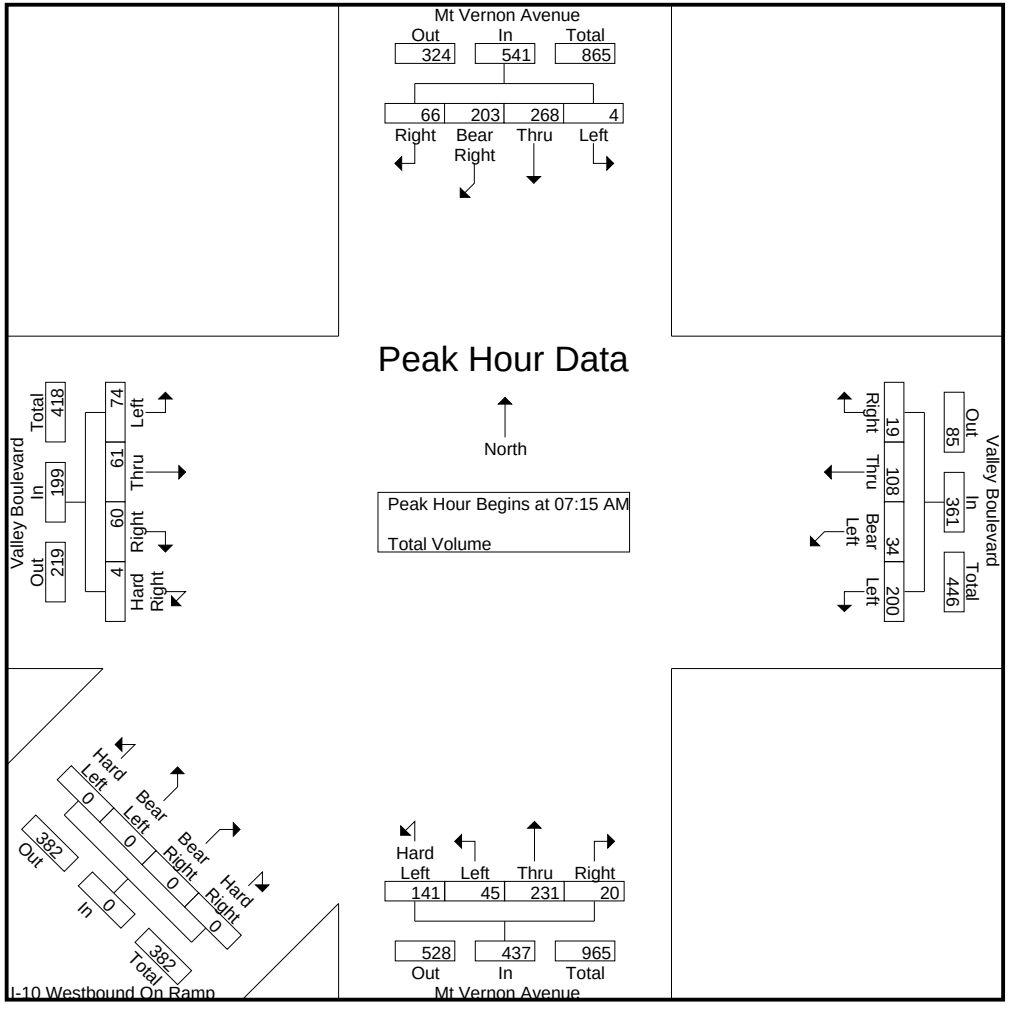
City of Colton
N/S: Mt Vernon Avenue
E/W: Valley Blvd/I-10 WB On Ramp
Weather: Clear

File Name : 17_COL_Mt V_Val AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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File Name : 17_COL_Mt V_Val AM
Site Code : 241045
Start Date : 11/21/2024

	Mt Vernon Avenue Southbound					Valley Boulevard Westbound					Mt Vernon Avenue Northbound					I-10 Westbound On Ramp Northeastbound					Valley Boulevard Eastbound					
Start Time	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Int. Total
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					08:00 AM					07:00 AM					07:45 AM					
+0 mins.	0	55	42	9	106	57	7	33	1	98	25	8	**76**	5	114	0	0	0	0	0	21	16	**23**	**2**	62	
+15 mins.	0	49	57	**19**	125	**63**	**8**	**39**	2	**112**	**46**	7	46	**10**	109	0	0	0	0	0	25	**22**	18	0	**65**	
+30 mins.	0	**97**	**59**	19	**175**	46	3	15	**9**	73	37	**16**	39	3	95	0	0	0	0	0	26	15	20	2	63	
+45 mins.	**1**	80	48	15	144	60	1	15	3	79	39	11	74	6	**130**	0	0	0	0	0	**27**	15	15	0	57	
Total Volume	1	281	206	62	550	226	19	102	15	362	147	42	235	24	448	0	0	0	0	0	99	68	76	4	247	
% App. Total	0.2	51.1	37.5	11.3		62.4	5.2	28.2	4.1		32.8	9.4	52.5	5.4		0	0	0	0		40.1	27.5	30.8	1.6		
PHF	.250	.724	.873	.816	.786	.897	.594	.654	.417	.808	.799	.656	.773	.600	.862	.000	.000	.000	.000	.000	.917	.773	.826	.500	.950	

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Groups Printed- Total Volume

	Mt Vernon Avenue Southbound						Valley Boulevard Westbound						Mt Vernon Avenue Northbound						I-10 Westbound On Ramp Northeastbound						Valley Boulevard Eastbound								
Start Time	Left	Thru	Bear Right	Right	RTOR	App. Total	Left	Bear Left	Thru	Right	RTOR	App. Total	Hard Left	Left	Thru	Right	RTOR	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	RTOR	App. Total	Left	Thru	Right	Hard Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	2	80	54	47	13	183	39	8	40	9	4	96	49	31	111	8	0	199	0	0	0	0	0	0	43	21	22	0	1	86	18	564	582
04:15 PM	4	98	51	31	6	184	41	10	37	4	1	92	49	19	86	11	0	165	0	0	0	0	0	0	39	27	19	3	1	88	8	529	537
04:30 PM	2	83	39	23	5	147	34	14	43	2	0	93	54	9	86	7	0	156	0	0	0	0	0	0	38	38	18	3	1	97	6	493	499
04:45 PM	2	73	44	24	4	143	39	10	49	0	0	98	57	17	88	13	0	175	0	0	0	0	0	0	49	45	15	0	1	109	5	525	530
Total	10	334	188	125	28	657	153	42	169	15	5	379	209	76	371	39	0	695	0	0	0	0	0	0	169	131	74	6	4	380	37	2111	2148
05:00 PM	1	66	52	19	3	138	22	10	39	5	0	76	54	16	117	8	0	195	0	0	0	0	0	0	33	23	22	2	1	80	4	489	493
05:15 PM	0	77	49	35	3	161	24	7	47	0	0	78	70	14	92	12	1	188	0	0	0	0	0	0	33	41	16	0	2	90	6	517	523
05:30 PM	1	73	66	26	1	166	32	9	44	3	0	88	50	16	114	9	0	189	0	0	0	0	0	0	35	27	14	0	0	76	1	519	520
05:45 PM	1	74	41	42	6	158	18	9	38	2	1	67	43	18	93	6	1	160	0	0	0	0	0	0	30	35	13	3	0	81	8	466	474
Total	3	290	208	122	13	623	96	35	168	10	1	309	217	64	416	35	2	732	0	0	0	0	0	0	131	126	65	5	3	327	19	1991	2010
Grand Total	13	624	396	247	41	1280	249	77	337	25	6	688	426	140	787	74	2	1427	0	0	0	0	0	0	300	257	139	11	7	707	56	4102	4158
Apprch %	1	48.8	30.9	19.3			36.2	11.2	49	3.6			29.9	9.8	55.2	5.2			0	0	0	0			42.4	36.4	19.7	1.6					
Total %	0.3	15.2	9.7	6		31.2	6.1	1.9	8.2	0.6		16.8	10.4	3.4	19.2	1.8		34.8	0	0	0	0		0	7.3	6.3	3.4	0.3		17.2	1.3	98.7	

	Mt Vernon Avenue Southbound					Valley Boulevard Westbound					Mt Vernon Avenue Northbound					I-10 Westbound On Ramp Northeastbound					Valley Boulevard Eastbound					
Start Time	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard 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	80	**54**	**47**	183	39	8	40	**9**	96	49	**31**	**111**	8	**199**	0	0	0	0	0	43	21	**22**	0	86	**564**
04:15 PM	**4**	**98**	51	31	**184**	**41**	10	37	4	92	49	19	86	11	165	0	0	0	0	0	39	27	19	**3**	88	529
04:30 PM	2	83	39	23	147	34	**14**	43	2	93	54	9	86	7	156	0	0	0	0	0	38	38	18	3	97	493
04:45 PM	2	73	44	24	143	39	10	**49**	0	**98**	**57**	17	88	**13**	175	0	0	0	0	0	**49**	**45**	15	0	**109**	525
Total Volume	10	334	188	125	657	153	42	169	15	379	209	76	371	39	695	0	0	0	0	0	169	131	74	6	380	2111
% App. Total	1.5	50.8	28.6	19		40.4	11.1	44.6	4		30.1	10.9	53.4	5.6		0	0	0	0		44.5	34.5	19.5	1.6		
PHF	.625	.852	.870	.665	.893	.933	.750	.862	.417	.967	.917	.613	.836	.750	.873	.000	.000	.000	.000	.000	.862	.728	.841	.500	.872	.936

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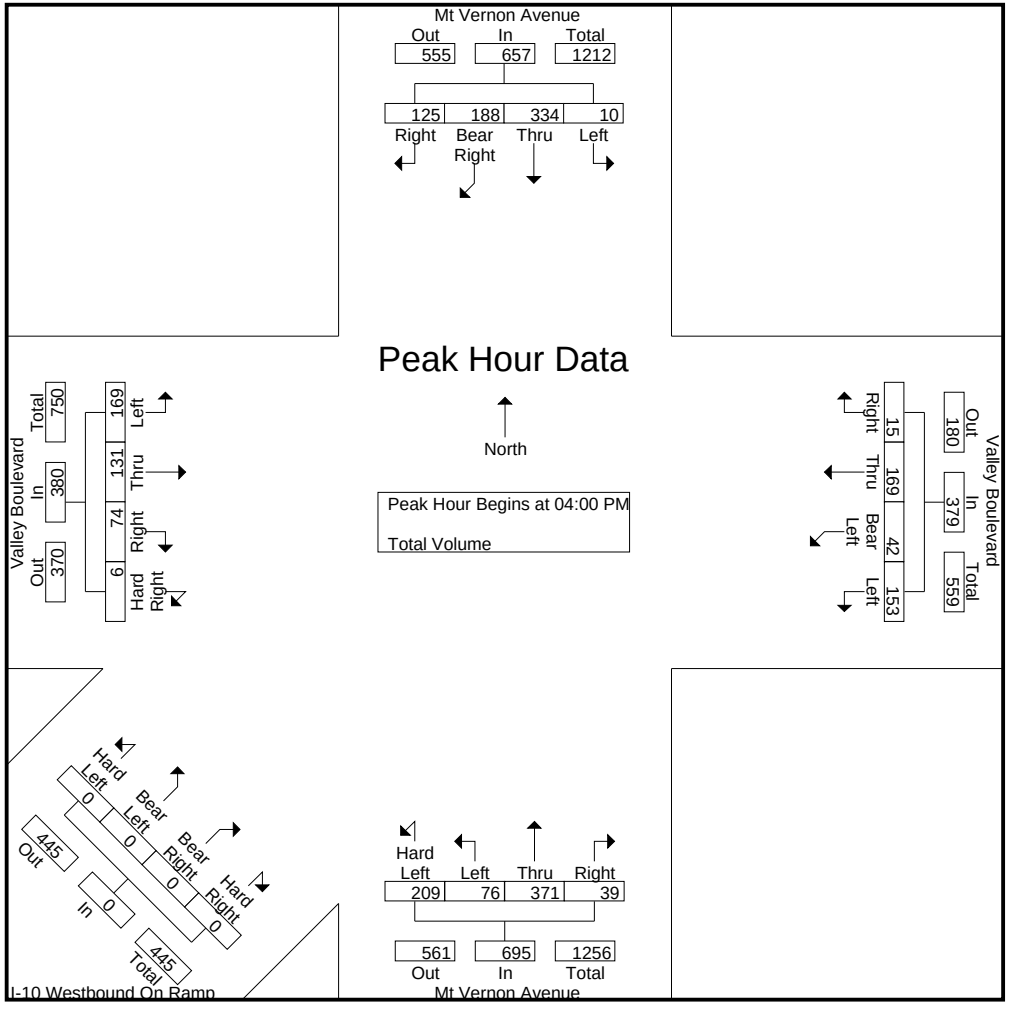

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	Mt Vernon Avenue Southbound					Valley Boulevard Westbound					Mt Vernon Avenue Northbound					I-10 Westbound On Ramp Northeastbound					Valley Boulevard Eastbound					
Start Time	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Left	Thru	Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																										
Peak Hour for Each Approach Begins at:																										
	04:00 PM					04:00 PM					04:45 PM					04:00 PM					04:00 PM					
+0 mins.	2	80	**54**	**47**	183	39	8	40	**9**	96	57	**17**	88	**13**	175	0	0	0	0	0	43	21	**22**	0	86	
+15 mins.	**4**	**98**	51	31	**184**	**41**	10	37	4	92	54	16	**117**	8	**195**	0	0	0	0	0	39	27	19	**3**	88	
+30 mins.	2	83	39	23	147	34	**14**	43	2	93	**70**	14	92	12	188	0	0	0	0	0	38	38	18	3	97	
+45 mins.	2	73	44	24	143	39	10	**49**	0	**98**	50	16	114	9	189	0	0	0	0	0	**49**	**45**	15	0	**109**	
Total Volume	10	334	188	125	657	153	42	169	15	379	231	63	411	42	747	0	0	0	0	0	169	131	74	6	380	
% App. Total	1.5	50.8	28.6	19		40.4	11.1	44.6	4		30.9	8.4	55	5.6		0	0	0	0		44.5	34.5	19.5	1.6		
PHF	.625	.852	.870	.665	.893	.933	.750	.862	.417	.967	.825	.926	.878	.808	.958	.000	.000	.000	.000	.000	.862	.728	.841	.500	.872	

Location: Colton
N/S: Mt Vernon Avenue
E/W: Valley Blvd/I-10W On Ramp

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg Mt Vernon Avenue	East Leg Valley Boulevard	South Leg Mt Vernon Avenue	West Leg Valley Blvd/I-10W On Ramp	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	1	0	1	0	2
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1
TOTAL VOLUMES:	1	1	1	0	3

	North Leg Mt Vernon Avenue	East Leg Valley Boulevard	South Leg Mt Vernon Avenue	West Leg Valley Blvd/I-10W On Ramp	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	0	1	0	2
4:15 PM	2	0	1	2	5
4:30 PM	0	1	0	0	1
4:45 PM	0	1	0	0	1
5:00 PM	0	2	0	0	2
5:15 PM	1	0	0	0	1
5:30 PM	1	0	1	1	3
5:45 PM	0	0	1	1	2
TOTAL VOLUMES:	5	4	4	4	17

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Location: Colton
N/S: Mt Vernon Avenue
E/W: Valley Blvd/I-10W On Ramp

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound Mt Vernon Avenue			Westbound Valley Boulevard			Northbound Mt Vernon Avenue			Eastbound Valley Blvd/I-10W On Ramp			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound Mt Vernon Avenue			Westbound Valley Boulevard			Northbound Mt Vernon Avenue			Eastbound Valley Blvd/I-10W On Ramp			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	0	0	1

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City of Colton
N/S: Mt Vernon Avenue/I-215 SB Ramps
E/W: Washington Street
Weather: Clear

File Name : 18_COL_Mt V_Wash AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Mt Vernon Avenue Southbound					Washington Street Westbound					I-215 Southbound Ramps Northbound					Washington Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	48	22	7	0	77	104	31	57	0	192	22	35	117	0	174	7	37	27	17	71	17	514	531
07:15 AM	48	33	3	0	84	77	29	75	0	181	23	22	140	0	185	6	60	26	14	92	14	542	556
07:30 AM	60	32	18	0	110	94	43	86	0	223	24	37	126	0	187	3	59	29	14	91	14	611	625
07:45 AM	69	35	23	0	127	90	45	73	0	208	29	40	120	0	189	10	46	16	11	72	11	596	607
Total	225	122	51	0	398	365	148	291	0	804	98	134	503	0	735	26	202	98	56	326	56	2263	2319
08:00 AM	69	45	9	0	123	78	39	100	0	217	32	49	130	0	211	13	28	17	11	58	11	609	620
08:15 AM	48	36	19	0	103	76	48	86	0	210	21	56	115	0	192	14	39	25	9	78	9	583	592
08:30 AM	61	37	19	0	117	79	52	84	0	215	29	60	116	0	205	13	44	19	16	76	16	613	629
08:45 AM	69	28	19	0	116	46	51	112	0	209	35	75	133	0	243	13	48	18	11	79	11	647	658
Total	247	146	66	0	459	279	190	382	0	851	117	240	494	0	851	53	159	79	47	291	47	2452	2499
Grand Total	472	268	117	0	857	644	338	673	0	1655	215	374	997	0	1586	79	361	177	103	617	103	4715	4818
Apprch %	55.1	31.3	13.7			38.9	20.4	40.7			13.6	23.6	62.9			12.8	58.5	28.7					
Total %	10	5.7	2.5		18.2	13.7	7.2	14.3		35.1	4.6	7.9	21.1		33.6	1.7	7.7	3.8		13.1	2.1	97.9	

	Mt Vernon Avenue Southbound				Washington Street Westbound				I-215 Southbound Ramps Northbound				Washington 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 08:00 AM																	
08:00 AM	**69**	**45**	9	**123**	78	39	100	**217**	32	49	130	211	13	28	17	58	609
08:15 AM	48	36	**19**	103	76	48	86	210	21	56	115	192	**14**	39	**25**	78	583
08:30 AM	61	37	19	117	**79**	**52**	84	215	29	60	116	205	13	44	19	76	613
08:45 AM	69	28	19	116	46	51	**112**	209	**35**	**75**	**133**	**243**	13	**48**	18	**79**	**647**
Total Volume	247	146	66	459	279	190	382	851	117	240	494	851	53	159	79	291	2452
% App. Total	53.8	31.8	14.4		32.8	22.3	44.9		13.7	28.2	58		18.2	54.6	27.1		
PHF	.895	.811	.868	.933	.883	.913	.853	.980	.836	.800	.929	.876	.946	.828	.790	.921	.947

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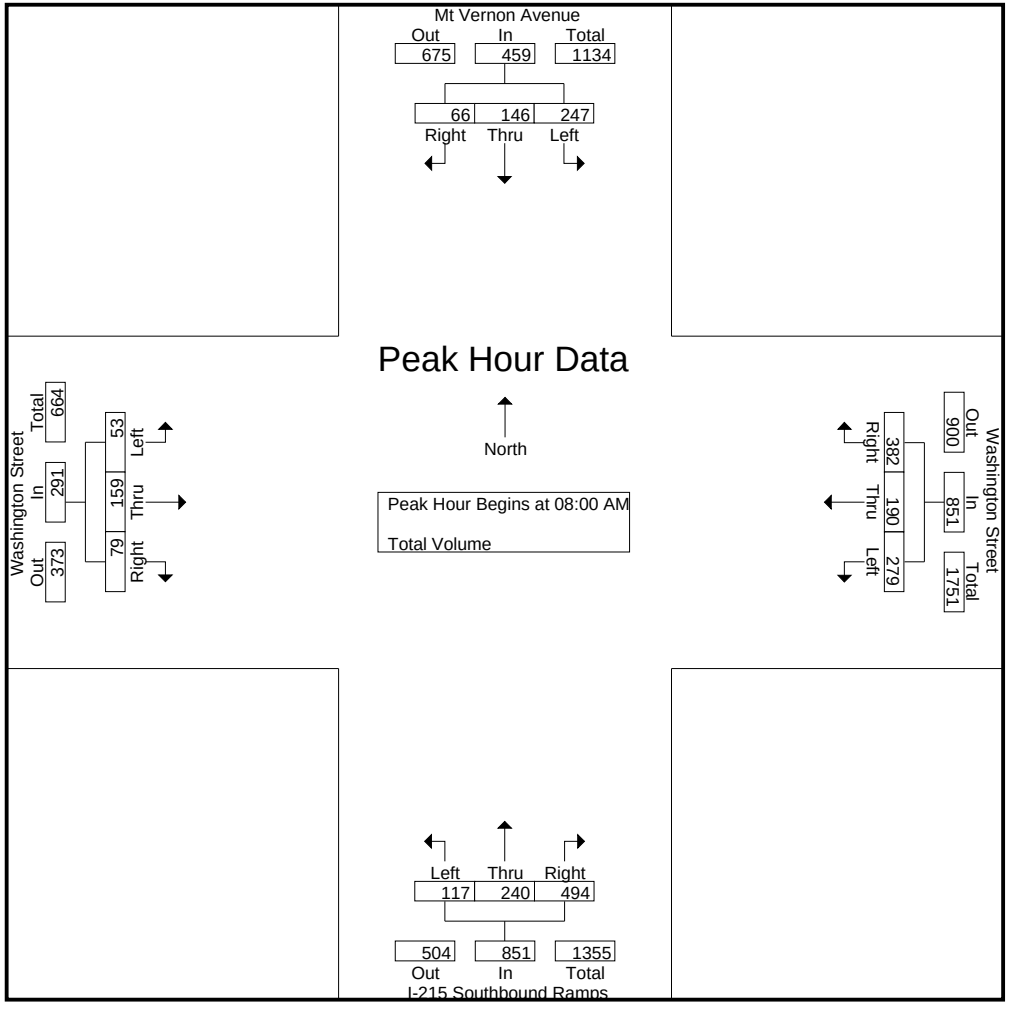
City of Colton
N/S: Mt Vernon Avenue/I-215 SB Ramps
E/W: Washington Street
Weather: Clear

File Name : 18_COL_Mt V_Wash AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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City of Colton
N/S: Mt Vernon Avenue/I-215 SB Ramps
E/W: Washington Street
Weather: Clear

File Name : 18_COL_Mt V_Wash AM
Site Code : 241045
Start Date : 11/21/2024

	Mt Vernon Avenue Southbound				Washington Street Westbound				I-215 Southbound Ramps Northbound				Washington 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 Each Approach Begins at:																	
	07:45 AM				07:30 AM				08:00 AM				07:00 AM				
+0 mins.	**69**	35	**23**	**127**	**94**	43	86	**223**	32	49	130	211	7	37	27	71	
+15 mins.	69	**45**	9	123	90	45	73	208	21	56	115	192	6	**60**	26	**92**	
+30 mins.	48	36	19	103	78	39	**100**	217	29	60	116	205	3	59	**29**	91	
+45 mins.	61	37	19	117	76	**48**	86	210	**35**	**75**	**133**	**243**	**10**	46	16	72	
Total Volume	247	153	70	470	338	175	345	858	117	240	494	851	26	202	98	326	
% App. Total	52.6	32.6	14.9		39.4	20.4	40.2		13.7	28.2	58		8	62	30.1		
PHF	.895	.850	.761	.925	.899	.911	.863	.962	.836	.800	.929	.876	.650	.842	.845	.886	

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City of Colton
N/S: Mt Vernon Avenue/I-215 SB Ramps
E/W: Washington Street
Weather: Clear

File Name : 18_COL_Mt V_Wash PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Mt Vernon Avenue Southbound					Washington Street Westbound					I-215 Southbound Ramps Northbound					Washington Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	122	51	19	0	192	64	51	103	0	218	22	29	193	0	244	12	60	25	9	97	9	751	760
04:15 PM	123	89	23	0	235	82	35	103	0	220	24	36	204	0	264	14	38	18	7	70	7	789	796
04:30 PM	122	94	19	0	235	42	51	93	0	186	20	36	193	0	249	20	76	29	14	125	14	795	809
04:45 PM	113	72	20	0	205	74	39	87	0	200	19	42	179	0	240	21	48	21	11	90	11	735	746
Total	480	306	81	0	867	262	176	386	0	824	85	143	769	0	997	67	222	93	41	382	41	3070	3111
05:00 PM	121	105	18	0	244	57	53	114	0	224	20	39	171	0	230	13	57	28	18	98	18	796	814
05:15 PM	118	90	26	0	234	59	43	113	0	215	21	39	208	0	268	15	37	23	11	75	11	792	803
05:30 PM	126	82	20	0	228	48	27	103	0	178	23	24	185	0	232	14	45	13	8	72	8	710	718
05:45 PM	100	84	20	0	204	59	42	115	0	216	16	40	177	0	233	13	40	23	10	76	10	729	739
Total	465	361	84	0	910	223	165	445	0	833	80	142	741	0	963	55	179	87	47	321	47	3027	3074
Grand Total	945	667	165	0	1777	485	341	831	0	1657	165	285	1510	0	1960	122	401	180	88	703	88	6097	6185
Apprch %	53.2	37.5	9.3			29.3	20.6	50.2			8.4	14.5	77			17.4	57	25.6					
Total %	15.5	10.9	2.7		29.1	8	5.6	13.6		27.2	2.7	4.7	24.8		32.1	2	6.6	3		11.5	1.4	98.6	

	Mt Vernon Avenue Southbound				Washington Street Westbound				I-215 Southbound Ramps Northbound				Washington 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 04:30 PM																	
04:30 PM	**122**	94	19	235	42	51	93	186	20	36	193	249	20	**76**	**29**	**125**	795
04:45 PM	113	72	20	205	**74**	39	87	200	19	**42**	179	240	**21**	48	21	90	735
05:00 PM	121	**105**	18	**244**	57	**53**	**114**	**224**	20	39	171	230	13	57	28	98	**796**
05:15 PM	118	90	**26**	234	59	43	113	215	**21**	39	**208**	**268**	15	37	23	75	792
Total Volume	474	361	83	918	232	186	407	825	80	156	751	987	69	218	101	388	3118
% App. Total	51.6	39.3	9		28.1	22.5	49.3		8.1	15.8	76.1		17.8	56.2	26		
PHF	.971	.860	.798	.941	.784	.877	.893	.921	.952	.929	.903	.921	.821	.717	.871	.776	.979

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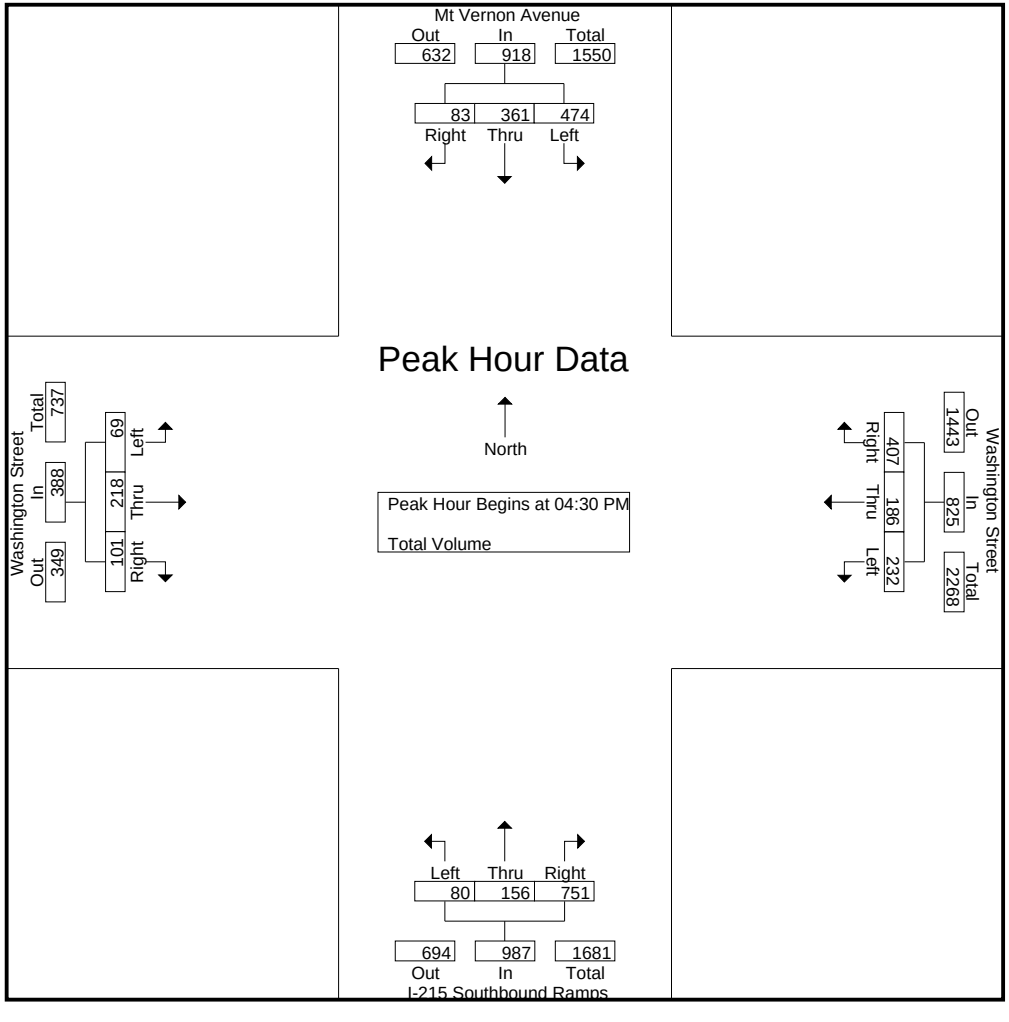
City of Colton
N/S: Mt Vernon Avenue/I-215 SB Ramps
E/W: Washington Street
Weather: Clear

File Name : 18_COL_Mt V_Wash PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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City of Colton
N/S: Mt Vernon Avenue/I-215 SB Ramps
E/W: Washington Street
Weather: Clear

File Name : 18_COL_Mt V_Wash PM
Site Code : 241045
Start Date : 11/21/2024

	Mt Vernon Avenue Southbound				Washington Street Westbound				I-215 Southbound Ramps Northbound				Washington 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 Each Approach Begins at:																	
	04:15 PM				05:00 PM				04:00 PM				04:30 PM				
+0 mins.	**123**	89	**23**	235	57	**53**	114	**224**	22	29	193	244	20	**76**	**29**	**125**	
+15 mins.	122	94	19	235	**59**	43	113	215	**24**	36	**204**	**264**	**21**	48	21	90	
+30 mins.	113	72	20	205	48	27	103	178	20	36	193	249	13	57	28	98	
+45 mins.	121	**105**	18	**244**	59	42	**115**	216	19	**42**	179	240	15	37	23	75	
Total Volume	479	360	80	919	223	165	445	833	85	143	769	997	69	218	101	388	
% App. Total	52.1	39.2	8.7		26.8	19.8	53.4		8.5	14.3	77.1		17.8	56.2	26		
PHF	.974	.857	.870	.942	.945	.778	.967	.930	.885	.851	.942	.944	.821	.717	.871	.776	

Location: Colton
N/S: Mt Vernon Ave/I-215 SB Ramps
E/W: Washington Street

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg Mt Vernon Avenue	East Leg Washington Street	South Leg I-215 SB Ramps	West Leg Washington Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	1	0	0	1	2
7:15 AM	0	0	0	1	1
7:30 AM	2	0	0	3	5
7:45 AM	2	0	0	0	2
8:00 AM	0	0	0	2	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	2	2
8:45 AM	1	0	0	1	2
TOTAL VOLUMES:	6	0	0	10	16

	North Leg Mt Vernon Avenue	East Leg Washington Street	South Leg I-215 SB Ramps	West Leg Washington Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	2	0	1	3	6
4:15 PM	0	0	1	0	1
4:30 PM	1	0	1	0	2
4:45 PM	1	0	0	2	3
5:00 PM	2	0	2	0	4
5:15 PM	0	0	0	0	0
5:30 PM	3	0	0	0	3
5:45 PM	1	0	0	0	1
TOTAL VOLUMES:	10	0	5	5	20

Location: Colton
N/S: Mt Vernon Ave/I-215 SB Ramps
E/W: Washington Street

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound Mt Vernon Avenue			Westbound Washington Street			Northbound I-215 SB Ramps			Eastbound Washington Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	1	0	3

	Southbound Mt Vernon Avenue			Westbound Washington Street			Northbound I-215 SB Ramps			Eastbound Washington Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	0	0	0	0	0	0	1	0	2

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City of Colton
N/S: Reche Canyon Road
E/W: Washington Street
Weather: Clear

File Name : 20_COL_RC_Wash AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Washington Street Westbound			Reche Canyon Road Northbound				Washington Street Eastbound						
Start Time	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	74	136	210	115	166	48	281	177	78	39	255	87	746	833
07:15 AM	131	161	292	170	219	14	389	219	69	32	288	46	969	1015
07:30 AM	101	193	294	153	234	38	387	266	76	34	342	72	1023	1095
07:45 AM	102	236	338	145	245	29	390	291	63	40	354	69	1082	1151
Total	408	726	1134	583	864	129	1447	953	286	145	1239	274	3820	4094
08:00 AM	78	181	259	140	195	19	335	297	62	31	359	50	953	1003
08:15 AM	71	180	251	186	183	21	369	252	54	25	306	46	926	972
08:30 AM	80	156	236	174	204	37	378	230	54	20	284	57	898	955
08:45 AM	80	146	226	163	170	34	333	186	61	23	247	57	806	863
Total	309	663	972	663	752	111	1415	965	231	99	1196	210	3583	3793
Grand Total	717	1389	2106	1246	1616	240	2862	1918	517	244	2435	484	7403	7887
Apprch %	34	66		43.5	56.5			78.8	21.2					
Total %	9.7	18.8	28.4	16.8	21.8		38.7	25.9	7		32.9	6.1	93.9	

	Washington Street Westbound			Reche Canyon Road Northbound			Washington Street 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	**131**	161	292	**170**	219	389	219	69	288	969
07:30 AM	101	193	294	153	234	387	266	**76**	342	1023
07:45 AM	102	**236**	**338**	145	**245**	**390**	291	63	354	**1082**
08:00 AM	78	181	259	140	195	335	**297**	62	**359**	953
Total Volume	412	771	1183	608	893	1501	1073	270	1343	4027
% App. Total	34.8	65.2		40.5	59.5		79.9	20.1		
PHF	.786	.817	.875	.894	.911	.962	.903	.888	.935	.930

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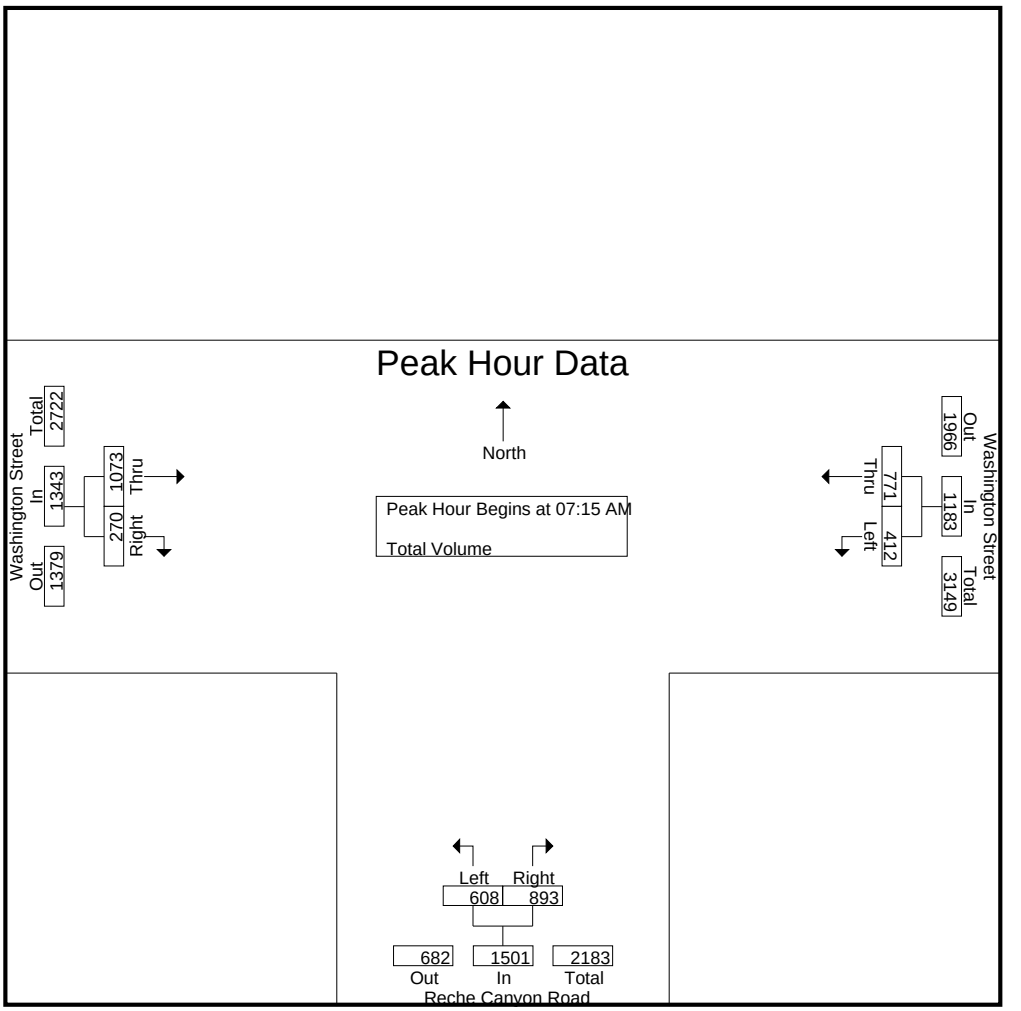
City of Colton
N/S: Reche Canyon Road
E/W: Washington Street
Weather: Clear

File Name : 20_COL_RC_Wash AM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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

	07:15 AM			07:15 AM			07:30 AM		
+0 mins.	**131**	161	292	**170**	219	389	266	**76**	342
+15 mins.	101	193	294	153	234	387	291	63	354
+30 mins.	102	**236**	**338**	145	**245**	**390**	**297**	62	**359**
+45 mins.	78	181	259	140	195	335	252	54	306
Total Volume	412	771	1183	608	893	1501	1106	255	1361
% App. Total	34.8	65.2		40.5	59.5		81.3	18.7	
PHF	.786	.817	.875	.894	.911	.962	.931	.839	.948

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City of Colton
N/S: Reche Canyon Road
E/W: Washington Street
Weather: Clear

File Name : 20_COL_RC_Wash PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 1

Groups Printed- Total Volume

	Washington Street Westbound			Reche Canyon Road Northbound				Washington Street Eastbound						
Start Time	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	125	98	223	121	93	14	214	189	199	92	388	106	825	931
04:15 PM	117	61	178	134	86	16	220	128	193	86	321	102	719	821
04:30 PM	104	56	160	164	119	12	283	164	207	101	371	113	814	927
04:45 PM	100	62	162	122	101	14	223	134	165	80	299	94	684	778
Total	446	277	723	541	399	56	940	615	764	359	1379	415	3042	3457
05:00 PM	100	57	157	153	129	25	282	132	215	89	347	114	786	900
05:15 PM	126	63	189	129	93	14	222	129	197	90	326	104	737	841
05:30 PM	121	72	193	144	98	12	242	124	226	102	350	114	785	899
05:45 PM	114	87	201	114	137	15	251	175	199	78	374	93	826	919
Total	461	279	740	540	457	66	997	560	837	359	1397	425	3134	3559
Grand Total	907	556	1463	1081	856	122	1937	1175	1601	718	2776	840	6176	7016
Apprch %	62	38		55.8	44.2			42.3	57.7					
Total %	14.7	9	23.7	17.5	13.9		31.4	19	25.9		44.9	12	88	

	Washington Street Westbound			Reche Canyon Road Northbound			Washington Street 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 05:00 PM										
05:00 PM	100	57	157	**153**	129	**282**	132	215	347	786
05:15 PM	**126**	63	189	129	93	222	129	197	326	737
05:30 PM	121	72	193	144	98	242	124	**226**	350	785
05:45 PM	114	**87**	**201**	114	**137**	251	**175**	199	**374**	**826**
Total Volume	461	279	740	540	457	997	560	837	1397	3134
% App. Total	62.3	37.7		54.2	45.8		40.1	59.9		
PHF	.915	.802	.920	.882	.834	.884	.800	.926	.934	.949

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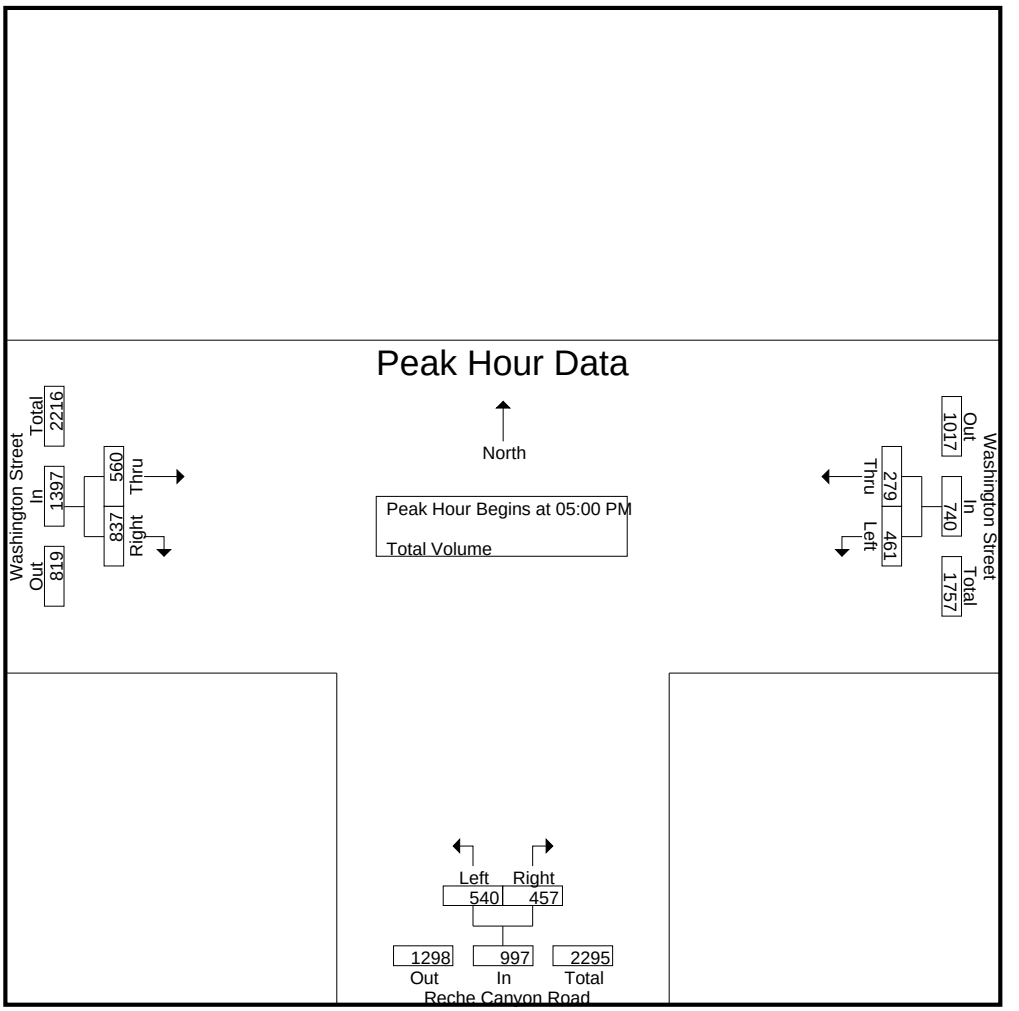
City of Colton
N/S: Reche Canyon Road
E/W: Washington Street
Weather: Clear

File Name : 20_COL_RC_Wash PM
Site Code : 241045
Start Date : 11/21/2024
Page No : 2



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

	05:00 PM			04:30 PM			05:00 PM		
+0 mins.	100	57	157	**164**	119	**283**	132	215	347
+15 mins.	**126**	63	189	122	101	223	129	197	326
+30 mins.	121	72	193	153	**129**	282	124	**226**	350
+45 mins.	114	**87**	**201**	129	93	222	**175**	199	**374**
Total Volume	461	279	740	568	442	1010	560	837	1397
% App. Total	62.3	37.7		56.2	43.8		40.1	59.9	
PHF	.915	.802	.920	.866	.857	.892	.800	.926	.934

Location: Colton
N/S: Reche Canyon Road
E/W: Washington Street

Date: 11/21/2024
Day: Thursday

PEDESTRIANS

	North Leg Dead End	East Leg Washington Street	South Leg Reche Canyon Road	West Leg Washington Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Dead End	East Leg Washington Street	South Leg Reche Canyon Road	West Leg Washington Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	1	1
4:15 PM	0	0	0	1	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	1	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	3	3

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Location: Colton
N/S: Reche Canyon Road
E/W: Washington Street

Date: 11/21/2024
Day: Thursday

BICYCLES

	Southbound Dead End			Westbound Washington Street			Northbound Reche Canyon Road			Eastbound Washington Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	18	0	0	0	0	0	0	0	18
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	19	0	0	0	0	0	3	0	22

	Southbound Dead End			Westbound Washington Street			Northbound Reche Canyon Road			Eastbound Washington Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	2	0	3

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APPENDIX 3.2:

EXISTING (2024) INTERSECTION ANALYSIS

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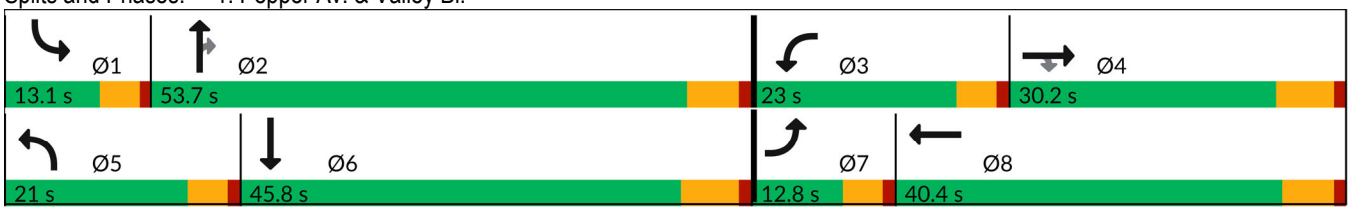
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	87	181	294	309	261	271	765	81	94	1151
Future Volume (vph)	87	181	294	309	261	271	765	81	94	1151
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8	5	2		1	6
Permitted Phases			4					2		
Detector Phase	7	4	4	3	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	30.2	30.2	9.6	29.8	9.6	40.8	40.8	9.6	41.2
Total Split (s)	12.8	30.2	30.2	23.0	40.4	21.0	53.7	53.7	13.1	45.8
Total Split (%)	10.7%	25.2%	25.2%	19.2%	33.7%	17.5%	44.8%	44.8%	10.9%	38.2%
Yellow Time (s)	3.6	5.2	5.2	3.6	4.8	3.6	4.8	4.8	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	5.8	4.6	5.8	5.8	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	7.2	14.8	14.8	15.2	25.8	13.8	43.2	43.2	7.4	33.8
Actuated g/C Ratio	0.07	0.15	0.15	0.15	0.26	0.14	0.43	0.43	0.07	0.34
v/c Ratio	0.44	0.38	0.76	0.74	0.37	0.72	0.39	0.12	0.46	0.79
Control Delay (s/veh)	56.0	42.4	27.2	53.5	32.2	54.4	21.6	0.3	56.1	34.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.0	42.4	27.2	53.5	32.2	54.4	21.6	0.3	56.1	34.7
LOS	E	D	C	D	C	D	C	A	E	C
Approach Delay (s/veh)		36.6			43.0		28.0			36.2
Approach LOS		D			D		C			D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 99.9	
Natural Cycle: 95	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay (s/veh): 34.9	Intersection LOS: C
Intersection Capacity Utilization 71.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Pepper Av. & Valley Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	181	294	309	261	42	271	765	81	94	1151	61
Future Volume (veh/h)	87	181	294	309	261	42	271	765	81	94	1151	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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	1575	1772	1772	1575	1772	1772	1575	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	92	191	201	325	275	27	285	805	51	99	1212	62
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	147	558	249	393	775	75	352	1956	605	150	1578	81
Arrive On Green	0.05	0.17	0.17	0.14	0.25	0.25	0.12	0.40	0.40	0.05	0.33	0.33
Sat Flow, veh/h	2910	3367	1502	2910	3093	301	2910	4837	1496	2910	4712	241
Grp Volume(v), veh/h	92	191	201	325	149	153	285	805	51	99	829	445
Grp Sat Flow(s),veh/h/ln	1455	1683	1502	1455	1683	1711	1455	1612	1496	1455	1612	1728
Q Serve(g_s), s	2.8	4.5	11.4	9.7	6.4	6.6	8.5	10.6	1.9	3.0	20.4	20.5
Cycle Q Clear(g_c), s	2.8	4.5	11.4	9.7	6.4	6.6	8.5	10.6	1.9	3.0	20.4	20.5
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	147	558	249	393	422	428	352	1956	605	150	1080	579
V/C Ratio(X)	0.63	0.34	0.81	0.83	0.35	0.36	0.81	0.41	0.08	0.66	0.77	0.77
Avail Cap(c_a), veh/h	269	910	406	603	656	667	538	2611	807	279	1439	771
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	41.3	32.7	35.7	37.4	27.3	27.4	38.0	18.9	16.3	41.3	26.4	26.4
Incr Delay (d2), s/veh	1.6	0.4	6.1	3.2	0.5	0.5	2.9	0.1	0.1	1.9	1.8	3.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.7	4.3	3.4	2.5	2.5	3.0	3.6	0.6	1.0	7.3	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.9	33.1	41.8	40.5	27.9	27.9	40.9	19.0	16.4	43.2	28.3	29.8
LnGrp LOS	D	C	D	D	C	C	D	B	B	D	C	C
Approach Vol, veh/h		484			627			1141			1373	
Approach Delay, s/veh		38.6			34.4			24.4			29.8	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	42.1	16.6	20.9	15.3	35.9	9.1	28.4
Change Period (Y+Rc), s	4.6	* 6.2	4.6	6.2	4.6	6.2	4.6	* 6.2
Max Green Setting (Gmax), s	8.5	* 48	18.4	24.0	16.4	39.6	8.2	* 35
Max Q Clear Time (g_c+I1), s	5.0	12.6	11.7	13.4	10.5	22.5	4.8	8.6
Green Ext Time (p_c), s	0.0	6.0	0.3	1.3	0.3	7.2	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	30.1
HCM 7th LOS	C

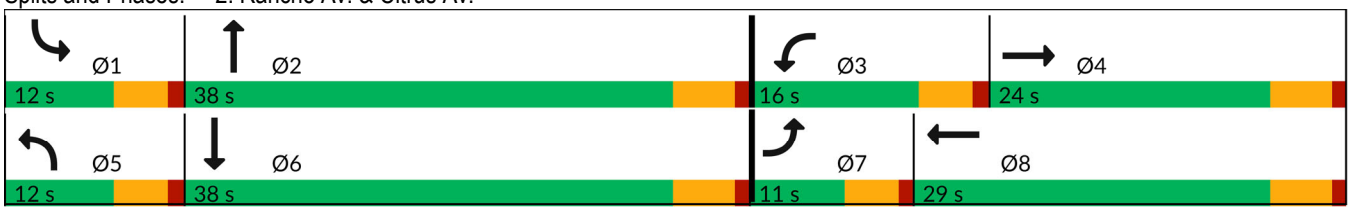
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	23	26	72	15	36	346	31	595
Future Volume (vph)	23	26	72	15	36	346	31	595
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	23.1	9.6	23.1	9.6	23.1	9.6	23.1
Total Split (s)	11.0	24.0	16.0	29.0	12.0	38.0	12.0	38.0
Total Split (%)	12.2%	26.7%	17.8%	32.2%	13.3%	42.2%	13.3%	42.2%
Yellow Time (s)	3.6	4.1	3.6	4.1	3.6	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	4.6	5.1	4.6	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	7.8	19.3	9.7	20.4	8.2	27.7	8.1	25.8
Actuated g/C Ratio	0.15	0.36	0.18	0.38	0.15	0.52	0.15	0.48
v/c Ratio	0.11	0.26	0.29	0.07	0.17	0.28	0.15	0.43
Control Delay (s/veh)	34.2	10.0	31.7	14.8	33.5	13.9	33.5	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.2	10.0	31.7	14.8	33.5	13.9	33.5	17.5
LOS	C	A	C	B	C	B	C	B
Approach Delay (s/veh)		13.3		26.1		15.5		18.3
Approach LOS		B		C		B		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 53.6	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay (s/veh): 17.4	Intersection LOS: B
Intersection Capacity Utilization 52.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Rancho Av. & Citrus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	26	119	72	15	21	36	346	65	31	595	12
Future Volume (veh/h)	23	26	119	72	15	21	36	346	65	31	595	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	26	30	50	83	17	6	41	398	64	36	684	13
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	85	141	114	228	81	71	925	147	64	1062	20
Arrive On Green	0.03	0.14	0.14	0.07	0.18	0.18	0.04	0.32	0.32	0.04	0.31	0.31
Sat Flow, veh/h	1594	596	994	1594	1251	442	1594	2903	463	1594	3379	64
Grp Volume(v), veh/h	26	0	80	83	0	23	41	229	233	36	341	356
Grp Sat Flow(s),veh/h/ln	1594	0	1590	1594	0	1692	1594	1683	1683	1594	1683	1760
Q Serve(g_s), s	0.7	0.0	2.1	2.3	0.0	0.5	1.1	4.9	5.0	1.0	7.9	7.9
Cycle Q Clear(g_c), s	0.7	0.0	2.1	2.3	0.0	0.5	1.1	4.9	5.0	1.0	7.9	7.9
Prop In Lane	1.00		0.63	1.00		0.26	1.00		0.28	1.00		0.04
Lane Grp Cap(c), veh/h	49	0	225	114	0	309	71	536	536	64	529	553
V/C Ratio(X)	0.53	0.00	0.35	0.73	0.00	0.07	0.58	0.43	0.43	0.56	0.64	0.64
Avail Cap(c_a), veh/h	225	0	663	401	0	893	260	1222	1221	260	1222	1278
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	0.0	17.6	20.6	0.0	15.4	21.2	12.2	12.2	21.4	13.4	13.4
Incr Delay (d2), s/veh	3.3	0.0	0.9	3.3	0.0	0.1	2.8	0.5	0.6	2.8	1.3	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.7	0.9	0.0	0.2	0.4	1.5	1.6	0.4	2.6	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.9	0.0	18.5	23.9	0.0	15.5	24.0	12.7	12.8	24.2	14.7	14.6
LnGrp LOS	C		B	C		B	C	B	B	C	B	B
Approach Vol, veh/h		106			106			503			733	
Approach Delay, s/veh		20.1			22.1			13.7			15.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	19.5	7.8	11.5	6.6	19.3	6.0	13.4
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1	4.6	5.1	4.6	5.1
Max Green Setting (Gmax), s	7.4	32.9	11.4	18.9	7.4	32.9	6.4	23.9
Max Q Clear Time (g_c+I1), s	3.0	7.0	4.3	4.1	3.1	9.9	2.7	2.5
Green Ext Time (p_c), s	0.0	2.7	0.0	0.3	0.0	4.3	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	15.5
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	58	545	1	43	1111
Future Vol, veh/h	16	58	545	1	43	1111
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	100	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	64	599	1	47	1221

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1916	301	0	0	601	0
Stage 1	600	-	-	-	-	-
Stage 2	1315	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	66	696	-	-	974	-
Stage 1	511	-	-	-	-	-
Stage 2	250	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	63	695	-	-	973	-
Mov Cap-2 Maneuver	209	-	-	-	-	-
Stage 1	511	-	-	-	-	-
Stage 2	238	-	-	-	-	-

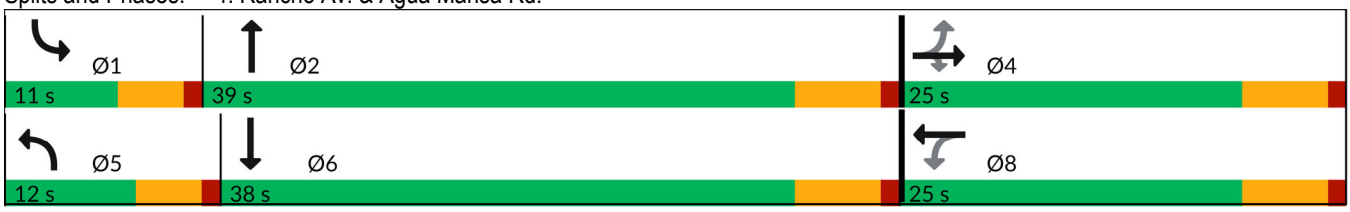
Approach	WB	NB	SB
HCM Control Delay, s/v	13.52	0	0.33
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	209	695	973	-
HCM Lane V/C Ratio	-	-	0.084	0.092	0.049	-
HCM Control Delay (s/veh)	-	-	23.8	10.7	8.9	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.3	0.2	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	220	22	71	10	46	97	308	32	759
Future Volume (vph)	220	22	71	10	46	97	308	32	759
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4			8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	4	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.8	23.8	23.8	23.8	23.8	9.6	27.8	9.6	23.8
Total Split (s)	25.0	25.0	25.0	25.0	25.0	12.0	39.0	11.0	38.0
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	16.0%	52.0%	14.7%	50.7%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.8	5.8		5.8	4.6	5.8	4.6	5.8
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		17.9	17.9		17.2	7.2	32.8	6.0	30.0
Actuated g/C Ratio		0.26	0.26		0.25	0.10	0.48	0.09	0.44
v/c Ratio		0.82	0.18		0.26	0.67	0.23	0.27	0.87
Control Delay (s/veh)		48.6	4.1		24.4	55.2	11.9	37.6	25.6
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		48.6	4.1		24.4	55.2	11.9	37.6	25.6
LOS		D	A		C	E	B	D	C
Approach Delay (s/veh)		38.4			24.4		21.9		25.9
Approach LOS		D			C		C		C

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 68.8	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay (s/veh): 27.0	Intersection LOS: C
Intersection Capacity Utilization 74.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: Rancho Av. & Agua Mansa Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	22	71	10	46	33	97	308	15	32	759	331
Future Volume (veh/h)	220	22	71	10	46	33	97	308	15	32	759	331
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.96
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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	253	25	82	11	53	38	111	354	17	37	872	380
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	11	388	55	157	93	137	1558	75	58	962	416
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.09	0.48	0.48	0.04	0.43	0.43
Sat Flow, veh/h	408	40	1468	0	595	353	1594	3270	157	1594	2254	975
Grp Volume(v), veh/h	278	0	82	102	0	0	111	182	189	37	649	603
Grp Sat Flow(s),veh/h/ln	448	0	1468	948	0	0	1594	1683	1743	1594	1683	1546
Q Serve(g_s), s	0.0	0.0	3.2	0.0	0.0	0.0	5.0	4.6	4.6	1.7	26.1	26.6
Cycle Q Clear(g_c), s	19.2	0.0	3.2	19.2	0.0	0.0	5.0	4.6	4.6	1.7	26.1	26.6
Prop In Lane	0.91		1.00	0.11		0.37	1.00		0.09	1.00		0.63
Lane Grp Cap(c), veh/h	213	0	388	306	0	0	137	802	830	58	718	660
V/C Ratio(X)	1.30	0.00	0.21	0.33	0.00	0.00	0.81	0.23	0.23	0.64	0.90	0.91
Avail Cap(c_a), veh/h	213	0	388	306	0	0	162	802	830	140	746	685
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	0.0	20.8	21.4	0.0	0.0	32.6	11.2	11.2	34.5	19.4	19.6
Incr Delay (d2), s/veh	166.8	0.0	0.3	0.6	0.0	0.0	19.3	0.1	0.1	4.4	14.2	16.4
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	13.4	0.0	1.0	1.3	0.0	0.0	2.5	1.5	1.5	0.7	11.3	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	197.8	0.0	21.1	22.0	0.0	0.0	51.9	11.3	11.3	38.9	33.6	36.0
LnGrp LOS	F		C	C			D	B	B	D	C	D
Approach Vol, veh/h		360			102			482			1289	
Approach Delay, s/veh		157.5			22.0			20.7			34.9	
Approach LOS		F			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	40.4		25.0	10.8	36.8		25.0				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		5.8				
Max Green Setting (Gmax), s	6.4	33.2		19.2	7.4	32.2		19.2				
Max Q Clear Time (g_c+I1), s	3.7	6.6		21.2	7.0	28.6		21.2				
Green Ext Time (p_c), s	0.0	1.9		0.0	0.0	2.4		0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			51.0									
HCM 7th LOS			D									

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	11	6	0	0	1
Future Vol, veh/h	0	11	6	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	15	8	0	0	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	17	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	16	-	-	-	-	-
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	1001	1084	1621	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1007	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	997	1084	1621	-	-	-
Mov Cap-2 Maneuver	997	-	-	-	-	-
Stage 1	1018	-	-	-	-	-
Stage 2	1007	-	-	-	-	-

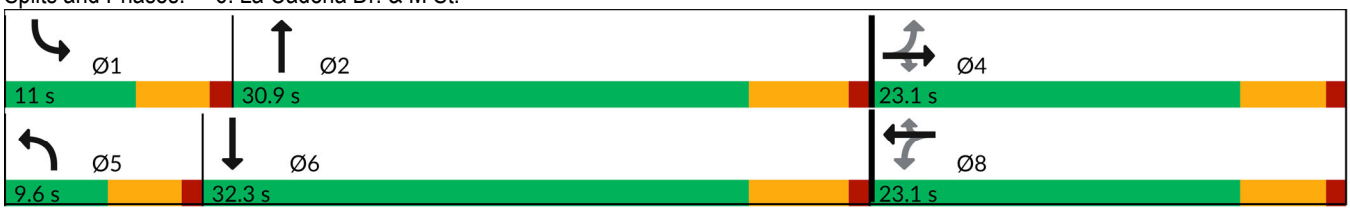
Approach	EB	NB	SB
HCM Control Delay, s/v	8.37	7.23	0
HCM LOS	A		

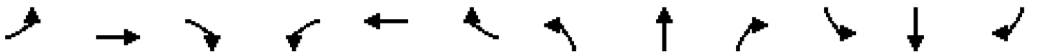
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1621	-	1084	-	-
HCM Lane V/C Ratio	0.005	-	0.014	-	-
HCM Control Delay (s/veh)	7.2	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	11	6	6	63	4	50	6	543	54	666
Future Volume (vph)	11	6	6	63	4	50	6	543	54	666
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.1	23.1	23.1	23.1	23.1	23.1	9.6	30.8	9.6	27.8
Total Split (s)	23.1	23.1	23.1	23.1	23.1	23.1	9.6	30.9	11.0	32.3
Total Split (%)	35.5%	35.5%	35.5%	35.5%	35.5%	35.5%	14.8%	47.5%	16.9%	49.7%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1	5.1		5.1	5.1	4.6	5.8	4.6	5.8
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.7	14.7		14.7	14.7	6.9	24.1	7.6	27.8
Actuated g/C Ratio		0.38	0.38		0.38	0.38	0.18	0.61	0.19	0.71
v/c Ratio		0.04	0.01		0.16	0.09	0.03	0.34	0.21	0.33
Control Delay (s/veh)		17.1	0.0		17.3	0.7	24.8	10.9	24.1	7.6
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		17.1	0.0		17.3	0.7	24.8	10.9	24.1	7.6
LOS		B	A		B	A	C	B	C	A
Approach Delay (s/veh)		12.6			10.2			11.1		8.8
Approach LOS		B			B			B		A

Intersection Summary			
Cycle Length: 65			
Actuated Cycle Length: 39.2			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay (s/veh): 9.9		Intersection LOS: A	
Intersection Capacity Utilization 50.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: La Cadena Dr. & M St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	6	6	63	4	50	6	543	53	54	666	8
Future Volume (veh/h)	11	6	6	63	4	50	6	543	53	54	666	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	13	7	1	73	5	20	7	631	53	63	774	9
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	51	264	192	7	264	15	1039	87	103	1319	15
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.01	0.33	0.33	0.06	0.39	0.39
Sat Flow, veh/h	0	288	1500	0	38	1498	1594	3135	263	1594	3408	40
Grp Volume(v), veh/h	20	0	1	78	0	20	7	338	346	63	382	401
Grp Sat Flow(s),veh/h/ln	288	0	1500	38	0	1498	1594	1683	1715	1594	1683	1765
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.4	0.2	6.1	6.1	1.4	6.5	6.5
Cycle Q Clear(g_c), s	6.4	0.0	0.0	6.4	0.0	0.4	0.2	6.1	6.1	1.4	6.5	6.5
Prop In Lane	0.65		1.00	0.94		1.00	1.00		0.15	1.00		0.02
Lane Grp Cap(c), veh/h	215	0	264	199	0	264	15	558	568	103	651	683
V/C Ratio(X)	0.09	0.00	0.00	0.39	0.00	0.08	0.47	0.61	0.61	0.61	0.59	0.59
Avail Cap(c_a), veh/h	694	0	745	655	0	744	220	1165	1187	281	1230	1290
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.8	0.0	12.3	17.6	0.0	12.5	17.9	10.1	10.1	16.5	8.8	8.8
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.3	0.0	0.1	8.2	1.1	1.1	2.2	0.8	0.8
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	0.0	0.0	0.6	0.0	0.1	0.1	1.5	1.5	0.4	1.4	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.0	0.0	12.3	18.8	0.0	12.6	26.1	11.2	11.2	18.7	9.7	9.6
LnGrp LOS	B		B	B		B	C	B	B	B	A	A
Approach Vol, veh/h		21			98			691			846	
Approach Delay, s/veh		13.0			17.6			11.4			10.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	17.8		11.5	4.9	19.8		11.5				
Change Period (Y+Rc), s	4.6	5.8		5.1	4.6	5.8		5.1				
Max Green Setting (Gmax), s	6.4	25.1		18.0	5.0	26.5		18.0				
Max Q Clear Time (g_c+I1), s	3.4	8.1		8.4	2.2	8.5		8.4				
Green Ext Time (p_c), s	0.0	3.5		0.0	0.0	4.2		0.2				

Intersection Summary												
HCM 7th Control Delay, s/veh			11.2									
HCM 7th LOS			B									

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	1	0	2	13	0	27	2	462	26	102	668	8
Future Vol, veh/h	1	0	2	13	0	27	2	462	26	102	668	8
Conflicting Peds, #/hr	0	0	3	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	80	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	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	1	0	2	15	0	32	2	544	31	120	786	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1308	1610	402	1199	1600	287	796	0	0	574	0	0
Stage 1	1032	1032	-	564	564	-	-	-	-	-	-	-
Stage 2	276	579	-	636	1036	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	117	104	598	141	105	710	821	-	-	995	-	-
Stage 1	249	308	-	478	507	-	-	-	-	-	-	-
Stage 2	706	499	-	433	307	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	98	91	596	123	92	710	821	-	-	995	-	-
Mov Cap-2 Maneuver	177	184	-	247	196	-	-	-	-	-	-	-
Stage 1	219	271	-	477	505	-	-	-	-	-	-	-
Stage 2	673	498	-	378	270	-	-	-	-	-	-	-

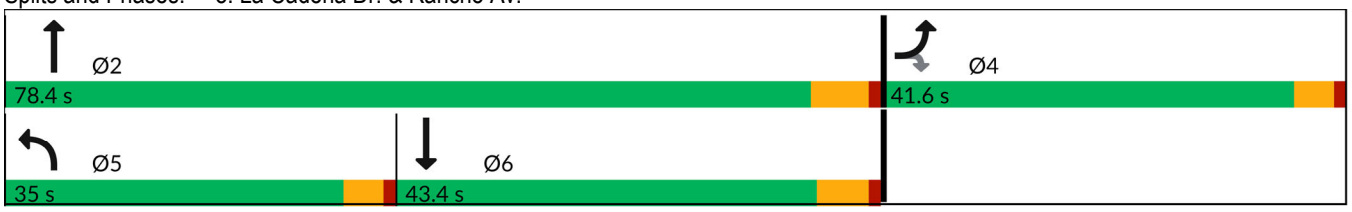
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	15.94	14.14	0.04	1.19
HCM LOS	C	B		

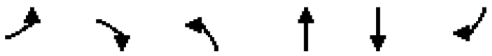
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	821	-	-	333	441	995	-	-
HCM Lane V/C Ratio	0.003	-	-	0.011	0.107	0.121	-	-
HCM Control Delay (s/veh)	9.4	-	-	15.9	14.1	9.1	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0.4	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	21	762	328	447	622
Future Volume (vph)	21	762	328	447	622
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	41.6	41.6	9.6	24.2	42.8
Total Split (s)	41.6	41.6	35.0	78.4	43.4
Total Split (%)	34.7%	34.7%	29.2%	65.3%	36.2%
Yellow Time (s)	3.6	3.6	3.6	5.2	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	6.2	5.8
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	13.5	13.5	26.1	55.4	25.0
Actuated g/C Ratio	0.17	0.17	0.33	0.69	0.31
v/c Ratio	0.76	0.73	0.72	0.22	0.72
Control Delay (s/veh)	13.8	11.3	35.7	5.0	29.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.8	11.3	35.7	5.0	29.6
LOS	B	B	D	A	C
Approach Delay (s/veh)	12.6			18.0	29.6
Approach LOS	B			B	C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 80.1	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay (s/veh): 19.5	Intersection LOS: B
Intersection Capacity Utilization 72.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: La Cadena Dr. & Rancho Av.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	762	328	447	622	37
Future Volume (veh/h)	21	762	328	447	622	37
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
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	1673	1772	1673	1772	1772	1772
Adj Flow Rate, veh/h	0	496	373	508	707	25
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	343	646	417	2096	967	34
Arrive On Green	0.00	0.22	0.26	0.62	0.29	0.29
Sat Flow, veh/h	1594	3003	1594	3455	3405	117
Grp Volume(v), veh/h	0	496	373	508	359	373
Grp Sat Flow(s),veh/h/ln	1594	1502	1594	1683	1683	1750
Q Serve(g_s), s	0.0	10.3	15.0	4.5	12.8	12.8
Cycle Q Clear(g_c), s	0.0	10.3	15.0	4.5	12.8	12.8
Prop In Lane	1.00	1.00	1.00			0.07
Lane Grp Cap(c), veh/h	343	646	417	2096	491	510
V/C Ratio(X)	0.00	0.77	0.89	0.24	0.73	0.73
Avail Cap(c_a), veh/h	886	1669	728	3651	951	988
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	24.6	23.7	5.6	21.2	21.2
Incr Delay (d2), s/veh	0.0	2.0	3.5	0.1	2.1	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.4	5.2	1.0	4.6	4.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	26.5	27.2	5.6	23.3	23.3
LnGrp LOS		C	C	A	C	C
Approach Vol, veh/h	496			881	732	
Approach Delay, s/veh	26.5			14.8	23.3	
Approach LOS	C			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		47.7		18.9	22.0	25.6
Change Period (Y+Rc), s		6.2		4.6	4.6	* 6.2
Max Green Setting (Gmax), s		72.2		37.0	30.4	* 38
Max Q Clear Time (g_c+I1), s		6.5		12.3	17.0	14.8
Green Ext Time (p_c), s		3.3		2.0	0.4	4.1

Intersection Summary	
HCM 7th Control Delay, s/veh	20.5
HCM 7th LOS	C

Notes

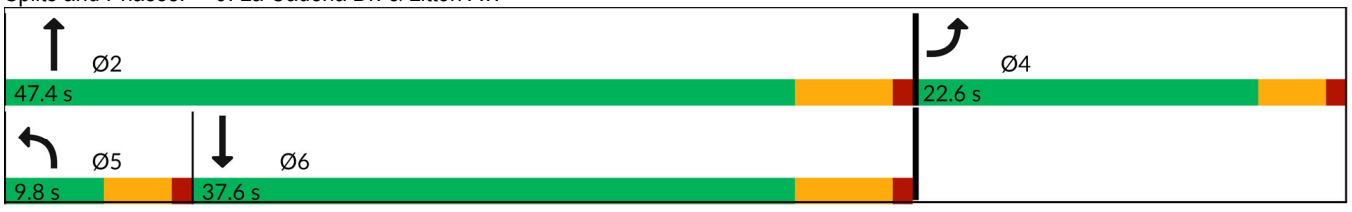
User approved volume balancing among the lanes for turning movement.

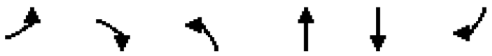
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	48	29	709	1269
Future Volume (vph)	48	29	709	1269
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	10.0	10.0
Minimum Split (s)	22.6	9.6	24.2	24.2
Total Split (s)	22.6	9.8	47.4	37.6
Total Split (%)	32.3%	14.0%	67.7%	53.7%
Yellow Time (s)	3.6	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	6.2	6.2
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	7.2	6.0	34.6	31.8
Actuated g/C Ratio	0.17	0.14	0.80	0.73
v/c Ratio	0.31	0.14	0.29	0.56
Control Delay (s/veh)	18.0	26.3	3.4	9.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.0	26.3	3.4	9.0
LOS	B	C	A	A
Approach Delay (s/veh)	18.0		4.3	9.0
Approach LOS	B		A	A

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 43.5	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay (s/veh): 7.7	Intersection LOS: A
Intersection Capacity Utilization 51.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: La Cadena Dr. & Litton Av.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	48	33	29	709	1269	8
Future Volume (veh/h)	48	33	29	709	1269	8
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
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	1673	1772	1673	1772	1772	1772
Adj Flow Rate, veh/h	52	22	31	762	1365	7
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	74	31	57	2282	1833	9
Arrive On Green	0.07	0.07	0.04	0.68	0.53	0.53
Sat Flow, veh/h	1067	451	1594	3455	3523	18
Grp Volume(v), veh/h	75	0	31	762	669	703
Grp Sat Flow(s),veh/h/ln	1539	0	1594	1683	1683	1768
Q Serve(g_s), s	2.0	0.0	0.8	4.0	13.1	13.1
Cycle Q Clear(g_c), s	2.0	0.0	0.8	4.0	13.1	13.1
Prop In Lane	0.69	0.29	1.00			0.01
Lane Grp Cap(c), veh/h	106	0	57	2282	899	944
V/C Ratio(X)	0.71	0.00	0.54	0.33	0.74	0.74
Avail Cap(c_a), veh/h	649	0	194	3252	1239	1302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	20.2	2.9	7.7	7.7
Incr Delay (d2), s/veh	3.2	0.0	2.9	0.1	1.6	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.3	0.0	2.3	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.6	0.0	23.1	2.9	9.3	9.2
LnGrp LOS	C		C	A	A	A
Approach Vol, veh/h	75			793	1372	
Approach Delay, s/veh	22.6			3.7	9.3	
Approach LOS	C			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		35.1		7.5	6.1	29.0
Change Period (Y+Rc), s		6.2		4.6	4.6	6.2
Max Green Setting (Gmax), s		41.2		18.0	5.2	31.4
Max Q Clear Time (g_c+I1), s		6.0		4.0	2.8	15.1
Green Ext Time (p_c), s		5.2		0.1	0.0	7.7

Intersection Summary	
HCM 7th Control Delay, s/veh	7.7
HCM 7th LOS	A

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	26	1	10	48	25	1	6	30	47	17	42
Future Vol, veh/h	3	26	1	10	48	25	1	6	30	47	17	42
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	36	1	14	67	35	1	8	42	65	24	58
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	7.8	7.9	7.2	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	10%	12%	44%
Vol Thru, %	16%	87%	58%	16%
Vol Right, %	81%	3%	30%	40%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	37	30	83	106
LT Vol	1	3	10	47
Through Vol	6	26	48	17
RT Vol	30	1	25	42
Lane Flow Rate	51	42	115	147
Geometry Grp	1	1	1	1
Degree of Util (X)	0.057	0.052	0.136	0.172
Departure Headway (Hd)	3.961	4.49	4.255	4.201
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	907	800	845	860
Service Time	1.973	2.504	2.268	2.201
HCM Lane V/C Ratio	0.056	0.053	0.136	0.171
HCM Control Delay, s/veh	7.2	7.8	7.9	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.2	0.5	0.6

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	180	5	50	149	15	81
Future Vol, veh/h	180	5	50	149	15	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	209	6	58	173	17	94

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	215	0	502	212
Stage 1	-	-	-	-	212	-
Stage 2	-	-	-	-	290	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1355	-	529	828
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	760	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1355	-	504	828
Mov Cap-2 Maneuver	-	-	-	-	579	-
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	724	-

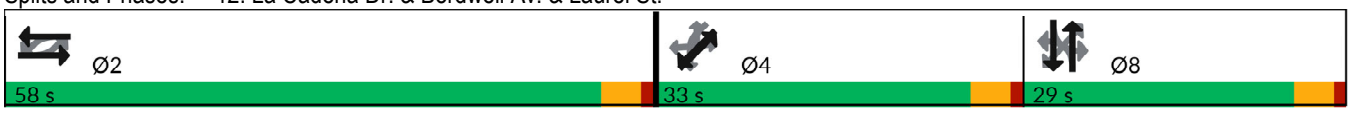
Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.95	10.14
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	579	828	-	-	452	-
HCM Lane V/C Ratio	0.03	0.114	-	-	0.043	-
HCM Control Delay (s/veh)	11.4	9.9	-	-	7.8	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.4	-	-	0.1	-

Lane Group	EBL	EBT	WBL	WBT	NBL2	NBL	NBT	SBL2	SBL	SBT	NEL2	NEL
Lane Configurations												
Traffic Volume (vph)	80	125	5	162	1	43	4	10	1	13	11	1
Future Volume (vph)	80	125	5	162	1	43	4	10	1	13	11	1
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm
Protected Phases		2		2			8			8		
Permitted Phases	2		2		8	8		8	8		4	4
Detector Phase	2	2	2	2	8	8	8	8	8	8	4	4
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	31.6	31.6
Total Split (s)	58.0	58.0	58.0	58.0	29.0	29.0	29.0	29.0	29.0	29.0	33.0	33.0
Total Split (%)	48.3%	48.3%	48.3%	48.3%	24.2%	24.2%	24.2%	24.2%	24.2%	24.2%	27.5%	27.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0			0.0			0.0		0.0
Total Lost Time (s)		4.6		4.6			4.6			4.6		4.6
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		23.9		23.9			13.8			13.8		15.1
Actuated g/C Ratio		0.38		0.38			0.22			0.22		0.24
v/c Ratio		0.68		0.34			0.29			0.13		0.06
Control Delay (s/veh)		24.6		17.3			30.5			27.4		26.9
Queue Delay		0.0		0.0			0.0			0.0		0.0
Total Delay (s/veh)		24.6		17.3			30.5			27.4		26.9
LOS		C		B			C			C		C
Approach Delay (s/veh)		24.6		17.3			30.5			27.4		
Approach LOS		C		B			C			C		

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 63	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 24.2	Intersection LOS: C
Intersection Capacity Utilization 61.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: La Cadena Dr. & Bordwell Av. & Laurel St.



Lane Group	NET	SWL	SWT
Lane Configurations			
Traffic Volume (vph)	99	31	131
Future Volume (vph)	99	31	131
Turn Type	NA	Perm	NA
Protected Phases	4		4
Permitted Phases		4	
Detector Phase	4	4	4
Switch Phase			
Minimum Initial (s)	10.0	10.0	10.0
Minimum Split (s)	31.6	31.6	31.6
Total Split (s)	33.0	33.0	33.0
Total Split (%)	27.5%	27.5%	27.5%
Yellow Time (s)	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	None	None	None
Act Effct Green (s)	15.1	15.1	15.1
Actuated g/C Ratio	0.24	0.24	0.24
v/c Ratio	0.19	0.16	0.36
Control Delay (s/veh)	25.0	27.4	25.6
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	25.0	27.4	25.6
LOS	C	C	C
Approach Delay (s/veh)	25.1		25.8
Approach LOS	C		C

Intersection Summary

Movement	EBL	EBT	EBR	EBR2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	80	125	34	51	5	162	1	1	43	4	13	3
Future Volume (vph)	80	125	34	51	5	162	1	1	43	4	13	3
Ideal Flow (vphpl)	1700	1800	1800	1800	1700	1800	1800	1700	1700	1800	1800	1800
Total Lost time (s)		4.6				4.6				4.6		
Lane Util. Factor		1.00				1.00				1.00		
Frt		0.96				1.00				0.97		
Flt Protected		0.99				1.00				0.97		
Satd. Flow (prot)		1672				1761				1648		
Flt Permitted		0.86				0.99				0.77		
Satd. Flow (perm)		1461				1741				1309		
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	105	164	45	67	7	213	1	1	57	5	17	4
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	2	0	0
Lane Group Flow (vph)	0	374	0	0	0	221	0	0	0	82	0	0
Turn Type	Perm	NA			Perm	NA		Perm	Perm	NA		
Protected Phases		2				2				8		
Permitted Phases	2				2			8	8			
Actuated Green, G (s)		23.8				23.8				9.5		
Effective Green, g (s)		23.8				23.8				9.5		
Actuated g/C Ratio		0.38				0.38				0.15		
Clearance Time (s)		4.6				4.6				4.6		
Vehicle Extension (s)		3.0				3.0				3.0		
Lane Grp Cap (vph)		559				666				199		
v/s Ratio Prot												
v/s Ratio Perm		c0.26				0.13				c0.06		
v/c Ratio		0.67				0.33				0.41		
Uniform Delay, d1		15.9				13.6				23.8		
Progression Factor		1.00				1.00				1.00		
Incremental Delay, d2		3.0				0.3				1.4		
Delay (s)		19.0				13.9				25.2		
Level of Service		B				B				C		
Approach Delay (s/veh)		19.0				13.9				25.2		
Approach LOS		B				B				C		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	62.2	Sum of lost time (s)	13.8
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL2	SBL	SBT	SBR	SBR2	NEL2	NEL	NET	NER	NER2	SWL	SWT
Lane Configurations												
Traffic Volume (vph)	10	1	13	6	2	11	1	99	13	3	31	131
Future Volume (vph)	10	1	13	6	2	11	1	99	13	3	31	131
Ideal Flow (vphpl)	1700	1700	1800	1800	1800	1700	1700	1800	1800	1800	1700	1800
Total Lost time (s)			4.6				4.6	4.6			4.6	4.6
Lane Util. Factor			1.00				1.00	0.95			1.00	0.95
Frt			0.96				1.00	0.98			1.00	0.94
Flt Protected			0.98				0.95	1.00			0.95	1.00
Satd. Flow (prot)			1674				1583	3283			1583	3167
Flt Permitted			0.89				0.58	1.00			0.66	1.00
Satd. Flow (perm)			1511				973	3283			1094	3167
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	13	1	17	8	3	14	1	130	17	4	41	172
RTOR Reduction (vph)	0	0	3	0	0	0	0	2	0	0	0	2
Lane Group Flow (vph)	0	0	39	0	0	0	15	149	0	0	41	271
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Perm	NA
Protected Phases			8					4				4
Permitted Phases	8	8				4	4				4	
Actuated Green, G (s)			9.5				15.1	15.1			15.1	15.1
Effective Green, g (s)			9.5				15.1	15.1			15.1	15.1
Actuated g/C Ratio			0.15				0.24	0.24			0.24	0.24
Clearance Time (s)			4.6				4.6	4.6			4.6	4.6
Vehicle Extension (s)			3.0				3.0	3.0			3.0	3.0
Lane Grp Cap (vph)			230				236	796			265	768
v/s Ratio Prot								0.05				c0.09
v/s Ratio Perm			0.03				0.02				0.04	
v/c Ratio			0.17				0.06	0.19			0.15	0.35
Uniform Delay, d1			22.9				18.1	18.7			18.5	19.5
Progression Factor			1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2			0.4				0.1	0.1			0.3	0.3
Delay (s)			23.3				18.2	18.8			18.8	19.8
Level of Service			C				B	B			B	B
Approach Delay (s/veh)			23.3					18.7				19.7
Approach LOS			C					B				B

Intersection Summary

Movement	SWR	SWR2
Lane Configurations		
Traffic Volume (vph)	70	7
Future Volume (vph)	70	7
Ideal Flow (vphpl)	1800	1800
Total Lost time (s)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Peak-hour factor, PHF	0.76	0.76
Adj. Flow (vph)	92	9
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	0	0
Turn Type		
Protected Phases		
Permitted Phases		
Actuated Green, G (s)		
Effective Green, g (s)		
Actuated g/C Ratio		
Clearance Time (s)		
Vehicle Extension (s)		
Lane Grp Cap (vph)		
v/s Ratio Prot		
v/s Ratio Perm		
v/c Ratio		
Uniform Delay, d1		
Progression Factor		
Incremental Delay, d2		
Delay (s)		
Level of Service		
Approach Delay (s/veh)		
Approach LOS		
Intersection Summary		

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	0	124	2	0	1	135	273	1	2	345	16
Future Vol, veh/h	16	0	124	2	0	1	135	273	1	2	345	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	0	144	2	0	1	157	317	1	2	401	19

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	891	1053	213	839	1061	161	423	0	0	321	0	0
Stage 1	418	418	-	634	634	-	-	-	-	-	-	-
Stage 2	473	635	-	205	427	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	237	225	792	259	222	855	1133	-	-	1236	-	-
Stage 1	583	589	-	434	471	-	-	-	-	-	-	-
Stage 2	541	471	-	777	583	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	203	192	790	181	190	853	1130	-	-	1234	-	-
Mov Cap-2 Maneuver	385	351	-	317	322	-	-	-	-	-	-	-
Stage 1	580	586	-	373	405	-	-	-	-	-	-	-
Stage 2	465	405	-	634	581	-	-	-	-	-	-	-

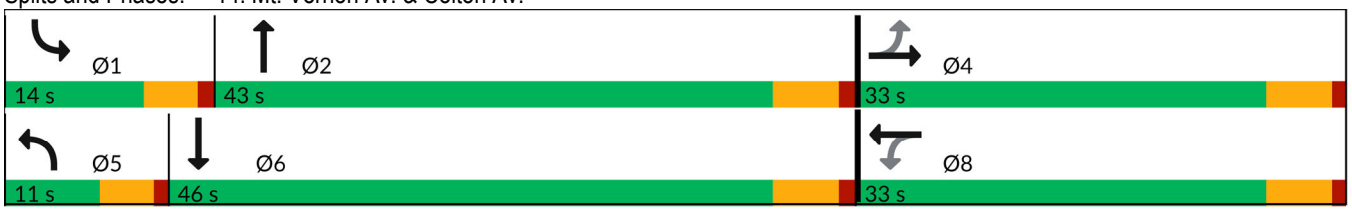
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.63	14.06	2.87	0.04
HCM LOS	B	B		

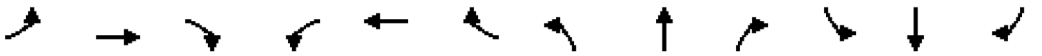
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1130	-	-	705	401	1234	-	-
HCM Lane V/C Ratio	0.139	-	-	0.231	0.009	0.002	-	-
HCM Control Delay (s/veh)	8.7	-	-	11.6	14.1	7.9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	0.9	0	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	33	121	107	176	12	393	49	494
Future Volume (vph)	33	121	107	176	12	393	49	494
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	24.4	24.4	28.4	28.4	9.6	37.4	9.6	37.4
Total Split (s)	33.0	33.0	33.0	33.0	11.0	43.0	14.0	46.0
Total Split (%)	36.7%	36.7%	36.7%	36.7%	12.2%	47.8%	15.6%	51.1%
Yellow Time (s)	4.4	4.4	4.4	4.4	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	4.6	5.4	4.6	5.4
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	14.3	14.3	14.3	14.3	5.9	16.1	6.9	20.9
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.12	0.33	0.14	0.43
v/c Ratio	0.13	0.28	0.37	0.51	0.07	0.47	0.24	0.44
Control Delay (s/veh)	18.7	18.2	21.4	20.2	28.9	14.9	27.9	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.7	18.2	21.4	20.2	28.9	14.9	27.9	10.8
LOS	B	B	C	C	C	B	C	B
Approach Delay (s/veh)		18.3		20.6		15.3		12.2
Approach LOS		B		C		B		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 48.7	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay (s/veh): 15.5	Intersection LOS: B
Intersection Capacity Utilization 61.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 14: Mt. Vernon Av. & Colton Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	121	7	107	176	58	12	393	67	49	494	66
Future Volume (veh/h)	33	121	7	107	176	58	12	393	67	49	494	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	37	134	7	119	196	42	13	437	67	54	549	72
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	342	434	23	420	367	79	27	808	123	91	946	124
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.28	0.28	0.06	0.32	0.32
Sat Flow, veh/h	1078	1669	87	1178	1410	302	1594	2928	446	1594	2991	391
Grp Volume(v), veh/h	37	0	141	119	0	238	13	250	254	54	308	313
Grp Sat Flow(s),veh/h/ln	1078	0	1756	1178	0	1712	1594	1683	1691	1594	1683	1699
Q Serve(g_s), s	1.2	0.0	2.4	3.4	0.0	4.5	0.3	4.8	4.8	1.3	5.8	5.8
Cycle Q Clear(g_c), s	5.7	0.0	2.4	5.9	0.0	4.5	0.3	4.8	4.8	1.3	5.8	5.8
Prop In Lane	1.00		0.05	1.00		0.18	1.00		0.26	1.00		0.23
Lane Grp Cap(c), veh/h	342	0	456	420	0	445	27	465	467	91	533	538
V/C Ratio(X)	0.11	0.00	0.31	0.28	0.00	0.53	0.48	0.54	0.54	0.59	0.58	0.58
Avail Cap(c_a), veh/h	848	0	1281	973	0	1249	270	1672	1680	396	1806	1823
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	11.3	13.6	0.0	12.0	18.4	11.7	11.7	17.4	10.8	10.8
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.4	0.0	1.0	4.9	1.0	1.0	2.3	1.0	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.7	0.7	0.0	1.3	0.1	1.4	1.4	0.4	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.6	0.0	11.7	14.0	0.0	13.0	23.4	12.6	12.7	19.7	11.8	11.8
LnGrp LOS	B		B	B		B	C	B	B	B	B	B
Approach Vol, veh/h		178			357			517			675	
Approach Delay, s/veh		12.3			13.4			12.9			12.5	
Approach LOS		B			B			B			B	

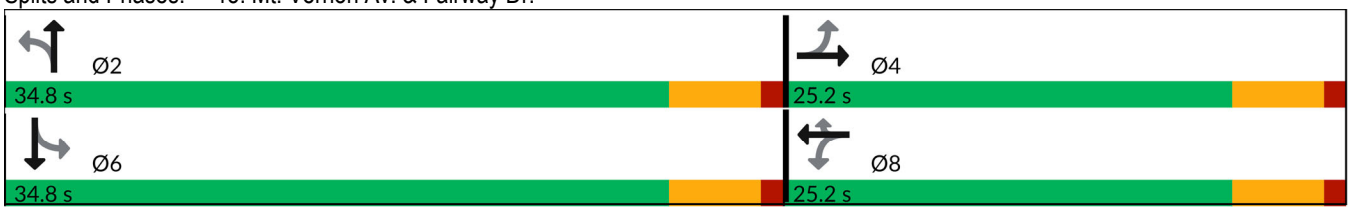
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	15.8		15.2	5.2	17.4		15.2				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	9.4	37.6		27.6	6.4	40.6		27.6				
Max Q Clear Time (g_c+I1), s	3.3	6.8		7.7	2.3	7.8		7.9				
Green Ext Time (p_c), s	0.0	3.0		0.8	0.0	3.8		1.6				

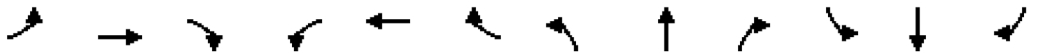
Intersection Summary			
HCM 7th Control Delay, s/veh		12.8	
HCM 7th LOS		B	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	20	58	90	42	209	5	292	230	494
Future Volume (vph)	20	58	90	42	209	5	292	230	494
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4		8			2		6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	23.1	23.1	25.1	25.1	25.1	24.1	24.1	26.1	26.1
Total Split (s)	25.2	25.2	25.2	25.2	25.2	34.8	34.8	34.8	34.8
Total Split (%)	42.0%	42.0%	42.0%	42.0%	42.0%	58.0%	58.0%	58.0%	58.0%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	16.1	16.1	16.1	16.1	16.1	21.2	21.2	21.2	21.2
Actuated g/C Ratio	0.43	0.43	0.43	0.43	0.43	0.57	0.57	0.57	0.57
v/c Ratio	0.04	0.10	0.19	0.03	0.29	0.01	0.21	0.50	0.29
Control Delay (s/veh)	13.0	11.2	14.2	12.3	3.8	6.8	5.9	13.2	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.0	11.2	14.2	12.3	3.8	6.8	5.9	13.2	7.2
LOS	B	B	B	B	A	A	A	B	A
Approach Delay (s/veh)		11.6		7.6			5.9		9.1
Approach LOS		B		A			A		A

Intersection Summary			
Cycle Length: 60			
Actuated Cycle Length: 37.3			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay (s/veh): 8.2		Intersection LOS: A	
Intersection Capacity Utilization 50.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 15: Mt. Vernon Av. & Fairway Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	58	13	90	42	209	5	292	66	230	494	12
Future Volume (veh/h)	20	58	13	90	42	209	5	292	66	230	494	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	22	62	10	97	45	97	5	314	61	247	531	11
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	490	379	61	480	856	382	494	1294	248	574	1549	32
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	1177	1488	240	1252	3367	1502	815	2817	541	952	3373	70
Grp Volume(v), veh/h	22	0	72	97	45	97	5	186	189	247	265	277
Grp Sat Flow(s),veh/h/ln	1177	0	1728	1252	1683	1502	815	1683	1675	952	1683	1759
Q Serve(g_s), s	0.5	0.0	1.2	2.3	0.4	1.8	0.1	2.4	2.4	7.6	3.6	3.6
Cycle Q Clear(g_c), s	0.9	0.0	1.2	3.5	0.4	1.8	3.7	2.4	2.4	10.1	3.6	3.6
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.32	1.00		0.04
Lane Grp Cap(c), veh/h	490	0	440	480	856	382	494	773	769	574	773	808
V/C Ratio(X)	0.04	0.00	0.16	0.20	0.05	0.25	0.01	0.24	0.25	0.43	0.34	0.34
Avail Cap(c_a), veh/h	855	0	975	868	1900	847	800	1404	1396	930	1404	1467
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.4	0.0	10.3	11.7	10.0	10.6	7.4	5.9	5.9	8.9	6.2	6.2
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.2	0.0	0.3	0.0	0.2	0.2	0.5	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.3	0.5	0.1	0.5	0.0	0.5	0.5	1.1	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.4	0.0	10.5	11.9	10.1	10.9	7.4	6.0	6.0	9.4	6.4	6.4
LnGrp LOS	B		B	B	B	B	A	A	A	A	A	A
Approach Vol, veh/h		94			239			380			789	
Approach Delay, s/veh		10.5			11.2			6.0			7.4	
Approach LOS		B			B			A			A	

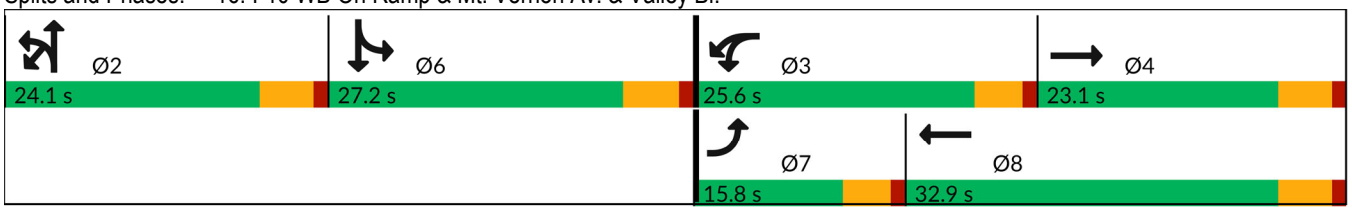
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.5		14.2		21.5		14.2				
Change Period (Y+Rc), s		5.1		5.1		5.1		5.1				
Max Green Setting (Gmax), s		29.7		20.1		29.7		20.1				
Max Q Clear Time (g_c+I1), s		5.7		3.2		12.1		5.5				
Green Ext Time (p_c), s		2.2		0.3		4.3		0.7				

Intersection Summary												
HCM 7th Control Delay, s/veh			7.8									
HCM 7th LOS			A									

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	74	61	34	108	231	4	268
Future Volume (vph)	74	61	34	108	231	4	268
Turn Type	Prot	NA	Prot	NA	NA	Split	NA
Protected Phases	7	4	3	8	2	6	6
Permitted Phases							
Detector Phase	7	4	3	8	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	23.1	9.6	25.1	23.1	23.1	23.1
Total Split (s)	15.8	23.1	25.6	32.9	24.1	27.2	27.2
Total Split (%)	15.8%	23.1%	25.6%	32.9%	24.1%	27.2%	27.2%
Yellow Time (s)	3.6	4.1	3.6	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	4.6	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	None	None	None	None	None	None
Act Effct Green (s)	8.5	13.3	17.5	20.7	16.9	20.1	20.1
Actuated g/C Ratio	0.10	0.15	0.20	0.23	0.19	0.23	0.23
v/c Ratio	0.52	0.55	0.81	0.33	0.76	0.01	0.81
Control Delay (s/veh)	53.4	45.6	55.6	28.9	43.4	30.0	43.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.4	45.6	55.6	28.9	43.4	30.0	43.0
LOS	D	D	E	C	D	C	D
Approach Delay (s/veh)		48.5		46.2	43.4		42.9
Approach LOS		D		D	D		D

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 88.2	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay (s/veh): 44.5	Intersection LOS: D
Intersection Capacity Utilization 69.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 16: I-10 WB On Ramp & Mt. Vernon Av. & Valley Bl.



Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	74	61	60	4	200	34	108	19	141	45	231	20
Future Volume (vph)	74	61	60	4	200	34	108	19	141	45	231	20
Ideal Flow (vphpl)	1700	1800	1800	1800	1700	1700	1800	1800	1700	1700	1800	1800
Total Lost time (s)	4.6	5.1				4.6	5.1				5.1	
Lane Util. Factor	1.00	1.00				1.00	1.00				0.95	
Frt	1.00	0.92				1.00	0.98				0.99	
Flt Protected	0.95	1.00				0.95	1.00				0.98	
Satd. Flow (prot)	1583	1629				1583	1724				3260	
Flt Permitted	0.95	1.00				0.95	1.00				0.98	
Satd. Flow (perm)	1583	1629				1583	1724				3260	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	80	66	65	4	217	37	117	21	153	49	251	22
RTOR Reduction (vph)	0	1	0	0	0	0	7	0	0	0	3	0
Lane Group Flow (vph)	80	134	0	0	0	254	131	0	0	0	472	0
Turn Type	Prot	NA			Prot	Prot	NA		Split	Split	NA	
Protected Phases	7	4			3	3	8		2	2	2	
Permitted Phases												
Actuated Green, G (s)	7.2	13.3				17.6	23.7				16.9	
Effective Green, g (s)	7.2	13.3				17.6	23.7				16.9	
Actuated g/C Ratio	0.08	0.15				0.20	0.27				0.19	
Clearance Time (s)	4.6	5.1				4.6	5.1				5.1	
Vehicle Extension (s)	2.0	3.0				2.0	3.0				3.0	
Lane Grp Cap (vph)	129	246				316	464				626	
v/s Ratio Prot	0.05	c0.08				c0.16	0.08				c0.14	
v/s Ratio Perm												
v/c Ratio	0.62	0.55				0.80	0.28				0.75	
Uniform Delay, d1	39.0	34.5				33.5	25.4				33.5	
Progression Factor	1.00	1.00				1.00	1.00				1.00	
Incremental Delay, d2	6.5	2.5				13.0	0.3				5.1	
Delay (s)	45.5	37.0				46.5	25.7				38.7	
Level of Service	D	D				D	C				D	
Approach Delay (s/veh)		40.2					39.2				38.7	
Approach LOS		D					D				D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	38.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	87.9	Sum of lost time (s)	19.9
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

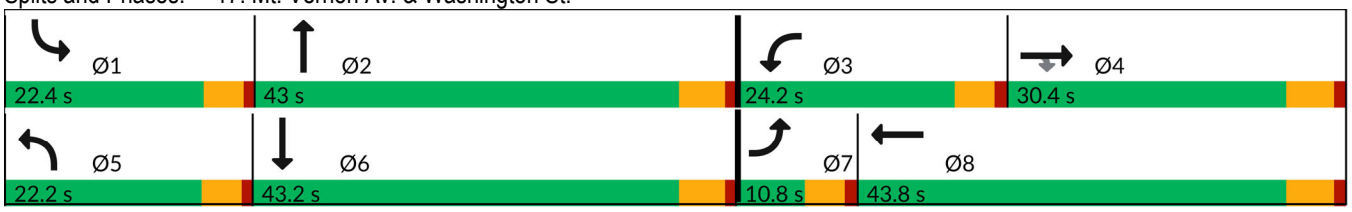
Movement	SBL	SBT	SBR	SBR2
Lane Configurations				
Traffic Volume (vph)	4	268	203	66
Future Volume (vph)	4	268	203	66
Ideal Flow (vphpl)	1700	1800	1800	1800
Total Lost time (s)	5.1	5.1		
Lane Util. Factor	1.00	0.95		
Frt	1.00	0.92		
Flt Protected	0.95	1.00		
Satd. Flow (prot)	1583	3101		
Flt Permitted	0.95	1.00		
Satd. Flow (perm)	1583	3101		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	291	221	72
RTOR Reduction (vph)	0	11	0	0
Lane Group Flow (vph)	4	573	0	0
Turn Type	Split	NA		
Protected Phases	6	6		
Permitted Phases				
Actuated Green, G (s)	20.2	20.2		
Effective Green, g (s)	20.2	20.2		
Actuated g/C Ratio	0.23	0.23		
Clearance Time (s)	5.1	5.1		
Vehicle Extension (s)	3.0	3.0		
Lane Grp Cap (vph)	363	712		
v/s Ratio Prot	0.00	c0.18		
v/s Ratio Perm				
v/c Ratio	0.01	0.81		
Uniform Delay, d1	26.1	32.0		
Progression Factor	1.00	1.00		
Incremental Delay, d2	0.0	6.6		
Delay (s)	26.1	38.6		
Level of Service	C	D		
Approach Delay (s/veh)		38.5		
Approach LOS		D		

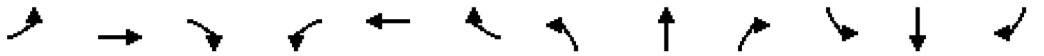
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	159	79	279	190	382	117	240	494	247	146	66
Future Volume (vph)	53	159	79	279	190	382	117	240	494	247	146	66
Turn Type	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	30.4	30.4	9.6	31.4		9.6	23.1		9.6	30.1	
Total Split (s)	10.8	30.4	30.4	24.2	43.8		22.2	43.0		22.4	43.2	
Total Split (%)	9.0%	25.3%	25.3%	20.2%	36.5%		18.5%	35.8%		18.7%	36.0%	
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4		3.6	4.1		3.6	4.1	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4		4.6	5.1		4.6	5.1	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	
Act Effct Green (s)	5.8	10.9	10.9	11.7	21.3	66.9	10.1	13.1	66.9	10.9	16.5	66.9
Actuated g/C Ratio	0.09	0.16	0.16	0.17	0.32	1.00	0.15	0.20	1.00	0.16	0.25	1.00
v/c Ratio	0.22	0.31	0.23	0.58	0.19	0.27	0.51	0.39	0.35	0.55	0.19	0.05
Control Delay (s/veh)	35.1	29.3	2.4	31.8	20.5	0.5	36.4	26.1	0.6	32.0	23.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.1	29.3	2.4	31.8	20.5	0.5	36.4	26.1	0.6	32.0	23.6	0.1
LOS	D	C	A	C	C	A	D	C	A	C	C	A
Approach Delay (s/veh)		23.0			15.2			12.7			24.8	
Approach LOS		C			B			B			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 66.9	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay (s/veh): 17.1	Intersection LOS: B
Intersection Capacity Utilization 51.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Mt. Vernon Av. & Washington St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	159	79	279	190	382	117	240	494	247	146	66
Future Volume (veh/h)	53	159	79	279	190	382	117	240	494	247	146	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1575	1772	1772	1575	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	56	167	34	294	200	0	123	253	0	260	154	0
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	154	600	264	409	895		154	618		370	722	
Arrive On Green	0.05	0.18	0.18	0.14	0.27	0.00	0.10	0.18	0.00	0.13	0.21	0.00
Sat Flow, veh/h	2910	3367	1482	2910	3367	1502	1594	3367	1502	2910	3367	1502
Grp Volume(v), veh/h	56	167	34	294	200	0	123	253	0	260	154	0
Grp Sat Flow(s),veh/h/ln	1455	1683	1482	1455	1683	1502	1594	1683	1502	1455	1683	1502
Q Serve(g_s), s	1.0	2.3	1.0	5.1	2.5	0.0	4.0	3.5	0.0	4.6	2.0	0.0
Cycle Q Clear(g_c), s	1.0	2.3	1.0	5.1	2.5	0.0	4.0	3.5	0.0	4.6	2.0	0.0
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	154	600	264	409	895		154	618		370	722	
V/C Ratio(X)	0.36	0.28	0.13	0.72	0.22		0.80	0.41		0.70	0.21	
Avail Cap(c_a), veh/h	339	1582	696	1072	2431		527	2399		974	2412	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.3	18.9	18.4	21.9	15.2	0.0	23.5	19.2	0.0	22.2	17.2	0.0
Incr Delay (d2), s/veh	0.5	0.2	0.2	0.9	0.1	0.0	3.6	0.4	0.0	0.9	0.1	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	0.3	0.8	0.3	1.6	0.8	0.0	1.5	1.3	0.0	1.4	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.9	19.1	18.6	22.8	15.4	0.0	27.1	19.6	0.0	23.2	17.3	0.0
LnGrp LOS	C	B	B	C	B		C	B		C	B	
Approach Vol, veh/h		257			494			376			414	
Approach Delay, s/veh		20.3			19.8			22.1			21.0	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	14.9	12.1	14.9	9.7	16.5	7.4	19.5
Change Period (Y+Rc), s	4.6	5.1	4.6	5.4	4.6	5.1	4.6	5.4
Max Green Setting (Gmax), s	17.8	37.9	19.6	25.0	17.6	38.1	6.2	38.4
Max Q Clear Time (g_c+I1), s	6.6	5.5	7.1	4.3	6.0	4.0	3.0	4.5
Green Ext Time (p_c), s	0.4	1.6	0.4	1.0	0.1	0.9	0.0	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	20.7
HCM 7th LOS	C

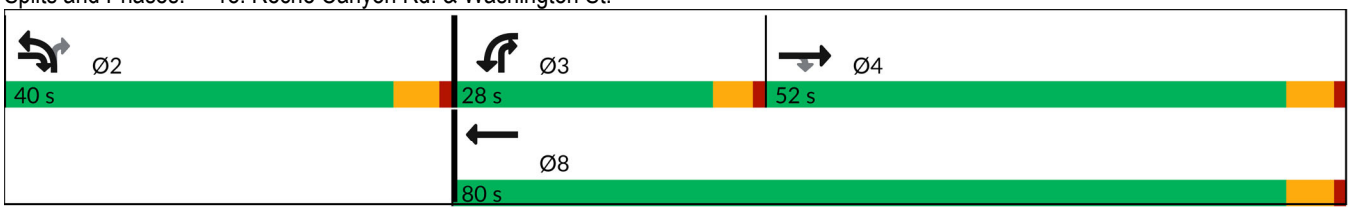
Notes

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1073	270	412	771	608	893
Future Volume (vph)	1073	270	412	771	608	893
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Detector Phase	4	2	3	8	2	3
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	42.4	30.1	9.6	23.4	30.1	9.6
Total Split (s)	52.0	40.0	28.0	80.0	40.0	28.0
Total Split (%)	43.3%	33.3%	23.3%	66.7%	33.3%	23.3%
Yellow Time (s)	4.4	4.1	3.6	4.4	4.1	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.1	4.6	5.4	5.1	4.6
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	42.4	72.2	20.5	67.6	29.5	55.3
Actuated g/C Ratio	0.39	0.67	0.19	0.63	0.27	0.51
v/c Ratio	0.88	0.29	0.81	0.39	0.83	0.70
Control Delay (s/veh)	40.1	5.3	55.5	11.0	47.6	22.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.1	5.3	55.5	11.0	47.6	22.8
LOS	D	A	E	B	D	C
Approach Delay (s/veh)	33.1			26.5	32.9	
Approach LOS	C			C	C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 107.9	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay (s/veh): 31.1	Intersection LOS: C
Intersection Capacity Utilization 78.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 18: Reche Canyon Rd. & Washington St.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1073	270	412	771	608	893
Future Volume (veh/h)	1073	270	412	771	608	893
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		0.98	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	1772	1772	1575	1772	1575	1772
Adj Flow Rate, veh/h	1154	143	443	829	654	852
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1312	1021	499	2032	871	1244
Arrive On Green	0.39	0.39	0.17	0.60	0.30	0.30
Sat Flow, veh/h	3455	1469	2910	3455	2910	2643
Grp Volume(v), veh/h	1154	143	443	829	654	852
Grp Sat Flow(s),veh/h/ln	1683	1469	1455	1683	1455	1321
Q Serve(g_s), s	34.4	3.6	16.1	14.0	22.0	27.2
Cycle Q Clear(g_c), s	34.4	3.6	16.1	14.0	22.0	27.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1312	1021	499	2032	871	1244
V/C Ratio(X)	0.88	0.14	0.89	0.41	0.75	0.68
Avail Cap(c_a), veh/h	1451	1082	630	2324	940	1307
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	30.6	5.8	43.7	11.3	34.2	22.3
Incr Delay (d2), s/veh	6.1	0.1	10.6	0.1	3.2	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.3	2.4	6.4	4.7	7.8	8.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	36.8	5.9	54.4	11.4	37.4	23.8
LnGrp LOS	D	A	D	B	D	C
Approach Vol, veh/h	1297			1272	1506	
Approach Delay, s/veh	33.4			26.4	29.7	
Approach LOS	C			C	C	

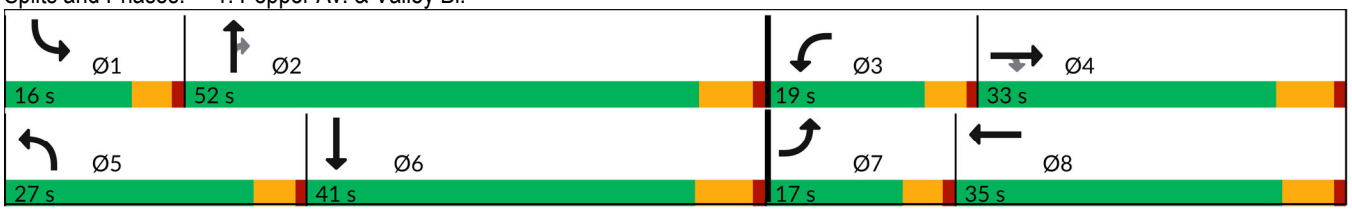
Timer - Assigned Phs	2	3	4	8
Phs Duration (G+Y+Rc), s	37.4	23.1	47.5	70.7
Change Period (Y+Rc), s	5.1	4.6	5.4	5.4
Max Green Setting (Gmax), s	34.9	23.4	46.6	74.6
Max Q Clear Time (g_c+I1), s	29.2	18.1	36.4	16.0
Green Ext Time (p_c), s	3.1	0.5	5.7	6.5

Intersection Summary	
HCM 7th Control Delay, s/veh	29.8
HCM 7th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	130	365	235	174	351	295	776	165	115	778
Future Volume (vph)	130	365	235	174	351	295	776	165	115	778
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8	5	2		1	6
Permitted Phases			4					2		
Detector Phase	7	4	4	3	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	30.2	30.2	9.6	29.8	9.6	35.8	35.8	9.6	36.2
Total Split (s)	17.0	33.0	33.0	19.0	35.0	27.0	52.0	52.0	16.0	41.0
Total Split (%)	14.2%	27.5%	27.5%	15.8%	29.2%	22.5%	43.3%	43.3%	13.3%	34.2%
Yellow Time (s)	3.6	5.2	5.2	3.6	4.8	3.6	4.8	4.8	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	5.8	4.6	5.8	5.8	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	8.9	16.6	16.6	10.3	18.4	14.4	30.7	30.7	8.3	24.2
Actuated g/C Ratio	0.10	0.19	0.19	0.12	0.21	0.16	0.35	0.35	0.09	0.27
v/c Ratio	0.47	0.60	0.51	0.54	0.64	0.65	0.48	0.29	0.44	0.68
Control Delay (s/veh)	46.9	38.8	9.1	46.4	36.4	43.6	23.9	10.1	47.4	31.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.9	38.8	9.1	46.4	36.4	43.6	23.9	10.1	47.4	31.9
LOS	D	D	A	D	D	D	C	B	D	C
Approach Delay (s/veh)		30.6			39.3		26.8			33.7
Approach LOS		C			D		C			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 88.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 31.6	Intersection LOS: C
Intersection Capacity Utilization 63.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Pepper Av. & Valley Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	365	235	174	351	77	295	776	165	115	778	78
Future Volume (veh/h)	130	365	235	174	351	77	295	776	165	115	778	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1575	1772	1772	1575	1772	1772	1575	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	135	380	142	181	366	64	307	808	83	120	810	67
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	584	257	262	553	96	403	1650	512	196	1230	101
Arrive On Green	0.07	0.17	0.17	0.09	0.19	0.19	0.14	0.34	0.34	0.07	0.27	0.27
Sat Flow, veh/h	2910	3367	1482	2910	2867	497	2910	4837	1500	2910	4553	375
Grp Volume(v), veh/h	135	380	142	181	213	217	307	808	83	120	573	304
Grp Sat Flow(s),veh/h/ln	1455	1683	1482	1455	1683	1681	1455	1612	1500	1455	1612	1703
Q Serve(g_s), s	3.0	6.9	5.8	4.0	7.7	7.9	6.7	8.7	2.5	2.6	10.4	10.5
Cycle Q Clear(g_c), s	3.0	6.9	5.8	4.0	7.7	7.9	6.7	8.7	2.5	2.6	10.4	10.5
Prop In Lane	1.00		1.00	1.00		0.30	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	206	584	257	262	325	324	403	1650	512	196	871	460
V/C Ratio(X)	0.66	0.65	0.55	0.69	0.66	0.67	0.76	0.49	0.16	0.61	0.66	0.66
Avail Cap(c_a), veh/h	548	1369	603	636	746	745	989	3392	1052	504	1703	900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	25.4	24.9	29.1	24.6	24.6	27.3	17.2	15.1	29.9	21.3	21.4
Incr Delay (d2), s/veh	1.3	1.2	1.8	1.2	2.3	2.4	1.1	0.2	0.1	1.1	0.9	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.6	1.9	1.3	2.9	2.9	2.2	2.8	0.7	0.9	3.4	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.2	26.6	26.7	30.3	26.8	27.0	28.5	17.4	15.3	31.0	22.2	23.0
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	C	C
Approach Vol, veh/h		657			611			1198			997	
Approach Delay, s/veh		27.6			27.9			20.1			23.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	28.7	10.5	17.6	13.7	24.0	9.3	18.9
Change Period (Y+Rc), s	4.6	* 6.2	4.6	6.2	4.6	6.2	4.6	* 6.2
Max Green Setting (Gmax), s	11.4	* 46	14.4	26.8	22.4	34.8	12.4	* 29
Max Q Clear Time (g_c+I1), s	4.6	10.7	6.0	8.9	8.7	12.5	5.0	9.9
Green Ext Time (p_c), s	0.1	6.1	0.2	2.5	0.5	5.2	0.1	2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	23.9
HCM 7th LOS	C

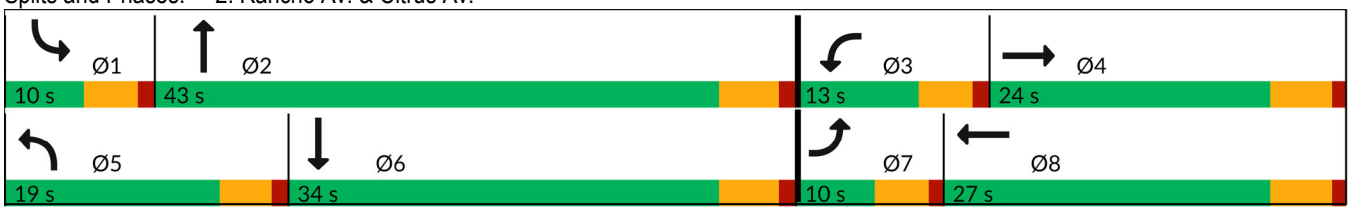
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	13	10	46	21	98	716	14	553
Future Volume (vph)	13	10	46	21	98	716	14	553
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	23.1	9.6	23.1	9.6	23.1	9.6	23.1
Total Split (s)	10.0	24.0	13.0	27.0	19.0	43.0	10.0	34.0
Total Split (%)	11.1%	26.7%	14.4%	30.0%	21.1%	47.8%	11.1%	37.8%
Yellow Time (s)	3.6	4.1	3.6	4.1	3.6	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	4.6	5.1	4.6	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	7.6	19.5	8.6	23.6	10.6	36.2	7.6	24.7
Actuated g/C Ratio	0.14	0.37	0.16	0.45	0.20	0.69	0.14	0.47
v/c Ratio	0.06	0.14	0.19	0.07	0.32	0.36	0.07	0.39
Control Delay (s/veh)	34.9	10.3	32.8	12.7	30.2	10.8	34.9	18.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.9	10.3	32.8	12.7	30.2	10.8	34.9	18.1
LOS	C	B	C	B	C	B	C	B
Approach Delay (s/veh)		13.7		22.3		12.9		18.5
Approach LOS		B		C		B		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 52.6	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay (s/veh): 15.5	Intersection LOS: B
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Rancho Av. & Citrus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	10	72	46	21	29	98	716	57	14	553	30
Future Volume (veh/h)	13	10	72	46	21	29	98	716	57	14	553	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	14	11	13	48	22	14	103	754	55	15	582	25
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	29	46	55	82	98	62	136	1215	89	31	1040	45
Arrive On Green	0.02	0.06	0.06	0.05	0.10	0.10	0.09	0.38	0.38	0.02	0.32	0.32
Sat Flow, veh/h	1594	738	872	1594	1011	643	1594	3177	232	1594	3288	141
Grp Volume(v), veh/h	14	0	24	48	0	36	103	399	410	15	298	309
Grp Sat Flow(s),veh/h/ln	1594	0	1611	1594	0	1654	1594	1683	1725	1594	1683	1746
Q Serve(g_s), s	0.3	0.0	0.6	1.2	0.0	0.8	2.5	7.7	7.7	0.4	5.9	5.9
Cycle Q Clear(g_c), s	0.3	0.0	0.6	1.2	0.0	0.8	2.5	7.7	7.7	0.4	5.9	5.9
Prop In Lane	1.00		0.54	1.00		0.39	1.00		0.13	1.00		0.08
Lane Grp Cap(c), veh/h	29	0	101	82	0	160	136	644	660	31	533	552
V/C Ratio(X)	0.49	0.00	0.24	0.58	0.00	0.23	0.76	0.62	0.62	0.49	0.56	0.56
Avail Cap(c_a), veh/h	215	0	759	334	0	904	572	1591	1631	215	1213	1259
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.5	0.0	17.9	18.6	0.0	16.7	17.9	10.0	10.0	19.5	11.4	11.4
Incr Delay (d2), s/veh	4.7	0.0	1.2	2.4	0.0	0.7	3.3	1.0	1.0	4.5	0.9	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	0.4	0.0	0.3	0.9	2.2	2.2	0.2	1.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.2	0.0	19.1	21.0	0.0	17.4	21.2	11.0	11.0	23.9	12.3	12.3
LnGrp LOS	C		B	C		B	C	B	B	C	B	B
Approach Vol, veh/h		38			84			912			622	
Approach Delay, s/veh		21.0			19.5			12.1			12.6	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.4	20.4	6.7	7.6	8.0	17.8	5.3	9.0
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1	4.6	5.1	4.6	5.1
Max Green Setting (Gmax), s	5.4	37.9	8.4	18.9	14.4	28.9	5.4	21.9
Max Q Clear Time (g_c+I1), s	2.4	9.7	3.2	2.6	4.5	7.9	2.3	2.8
Green Ext Time (p_c), s	0.0	5.4	0.0	0.0	0.1	3.5	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	12.9
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	54	905	10	107	997
Future Vol, veh/h	9	54	905	10	107	997
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	100	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	55	923	10	109	1017

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2165	468	0	0	935	0
Stage 1	930	-	-	-	-	-
Stage 2	1236	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	46	543	-	-	730	-
Stage 1	346	-	-	-	-	-
Stage 2	273	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	39	542	-	-	730	-
Mov Cap-2 Maneuver	184	-	-	-	-	-
Stage 1	345	-	-	-	-	-
Stage 2	232	-	-	-	-	-

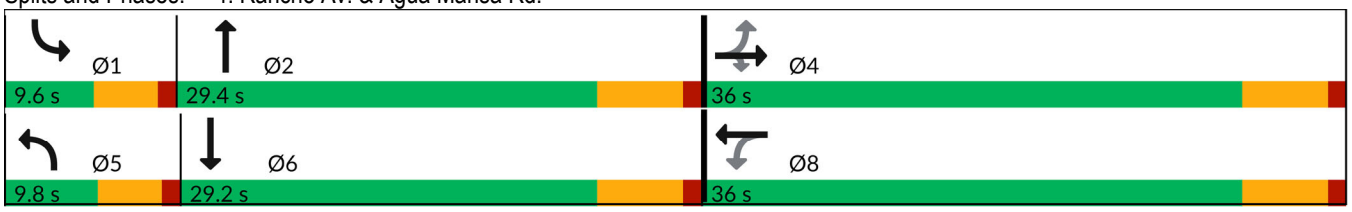
Approach	WB	NB	SB
HCM Control Delay, s/v	14.27	0	1.05
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	184	542	730	-
HCM Lane V/C Ratio	-	-	0.05	0.102	0.15	-
HCM Control Delay (s/veh)	-	-	25.5	12.4	10.8	-
HCM Lane LOS	-	-	D	B	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0.3	0.5	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	447	47	211	4	41	70	437	4	811
Future Volume (vph)	447	47	211	4	41	70	437	4	811
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4			8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	4	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.8	23.8	23.8	23.8	23.8	9.6	27.8	9.6	23.8
Total Split (s)	36.0	36.0	36.0	36.0	36.0	9.8	29.4	9.6	29.2
Total Split (%)	48.0%	48.0%	48.0%	48.0%	48.0%	13.1%	39.2%	12.8%	38.9%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.8	5.8		5.8	4.6	5.8	4.6	5.8
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		30.3	30.3		25.8	5.2	29.2	5.0	23.5
Actuated g/C Ratio		0.42	0.42		0.35	0.07	0.40	0.07	0.32
v/c Ratio		0.99	0.29		0.12	0.64	0.33	0.04	0.97
Control Delay (s/veh)		62.6	3.5		14.7	61.7	16.6	33.5	46.5
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		62.6	3.5		14.7	61.7	16.6	33.5	46.5
LOS		E	A		B	E	B	C	D
Approach Delay (s/veh)		44.9			14.7		22.8		46.5
Approach LOS		D			B		C		D

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 73	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay (s/veh): 39.8	Intersection LOS: D
Intersection Capacity Utilization 83.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: Rancho Av. & Agua Mansa Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	447	47	211	4	41	23	70	437	2	4	811	207
Future Volume (veh/h)	447	47	211	4	41	23	70	437	2	4	811	207
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	456	48	171	4	42	12	71	446	1	4	828	189
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	11	614	52	327	85	87	1262	3	9	863	197
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.05	0.37	0.37	0.01	0.32	0.32
Sat Flow, veh/h	267	28	1502	0	800	209	1594	3446	8	1594	2722	621
Grp Volume(v), veh/h	504	0	171	58	0	0	71	218	229	4	512	505
Grp Sat Flow(s),veh/h/ln	295	0	1502	1008	0	0	1594	1683	1771	1594	1683	1660
Q Serve(g_s), s	0.0	0.0	5.6	0.0	0.0	0.0	3.3	7.0	7.0	0.2	22.0	22.0
Cycle Q Clear(g_c), s	30.2	0.0	5.6	30.2	0.0	0.0	3.3	7.0	7.0	0.2	22.0	22.0
Prop In Lane	0.90		1.00	0.07		0.21	1.00		0.00	1.00		0.37
Lane Grp Cap(c), veh/h	213	0	614	464	0	0	87	616	648	9	534	526
V/C Ratio(X)	2.36	0.00	0.28	0.12	0.00	0.00	0.82	0.35	0.35	0.47	0.96	0.96
Avail Cap(c_a), veh/h	213	0	614	464	0	0	112	616	648	108	534	526
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	0.0	14.5	14.4	0.0	0.0	34.5	17.0	17.0	36.6	24.8	24.8
Incr Delay (d2), s/veh	626.7	0.0	0.2	0.1	0.0	0.0	23.2	0.3	0.3	14.2	29.0	29.2
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	40.8	0.0	1.7	0.5	0.0	0.0	1.7	2.4	2.5	0.1	12.0	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	655.1	0.0	14.8	14.5	0.0	0.0	57.8	17.4	17.4	50.9	53.7	54.0
LnGrp LOS	F		B	B			E	B	B	D	D	D
Approach Vol, veh/h		675			58			518			1021	
Approach Delay, s/veh		492.9			14.5			22.9			53.8	
Approach LOS		F			B			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.0	32.8		36.0	8.6	29.2		36.0				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		5.8				
Max Green Setting (Gmax), s	5.0	23.6		30.2	5.2	23.4		30.2				
Max Q Clear Time (g_c+I1), s	2.2	9.0		32.2	5.3	24.0		32.2				
Green Ext Time (p_c), s	0.0	2.0		0.0	0.0	0.0		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh	176.2	
HCM 7th LOS	F	

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	7	18	0	0	0
Future Vol, veh/h	1	7	18	0	0	0
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	12	31	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	63	3	2	0	-	0
Stage 1	2	-	-	-	-	-
Stage 2	61	-	-	-	-	-
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	943	1081	1621	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	962	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	926	1080	1621	-	-	-
Mov Cap-2 Maneuver	926	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	962	-	-	-	-	-

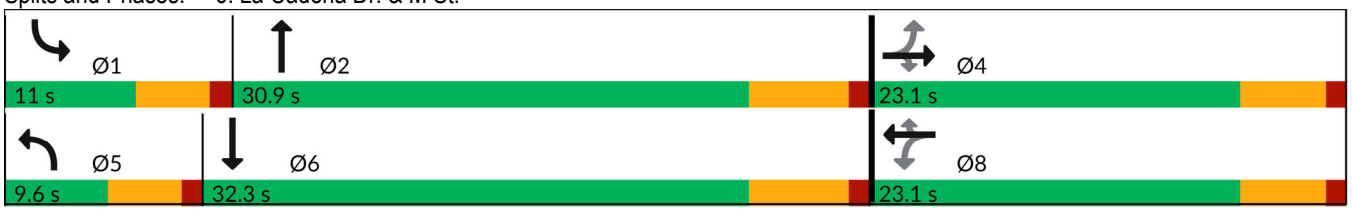
Approach	EB	NB	SB
HCM Control Delay, s/v	8.45	7.26	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1621	-	1058	-	-
HCM Lane V/C Ratio	0.019	-	0.013	-	-
HCM Control Delay (s/veh)	7.3	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	18	9	3	96	9	136	6	690	86	714
Future Volume (vph)	18	9	3	96	9	136	6	690	86	714
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.1	23.1	23.1	23.1	23.1	23.1	9.6	30.8	9.6	27.8
Total Split (s)	23.1	23.1	23.1	23.1	23.1	23.1	9.6	30.9	11.0	32.3
Total Split (%)	35.5%	35.5%	35.5%	35.5%	35.5%	35.5%	14.8%	47.5%	16.9%	49.7%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1	5.1		5.1	5.1	4.6	5.8	4.6	5.8
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.3	14.3		14.3	14.3	6.4	22.8	7.4	29.0
Actuated g/C Ratio		0.31	0.31		0.31	0.31	0.14	0.49	0.16	0.63
v/c Ratio		0.07	0.01		0.28	0.25	0.03	0.49	0.35	0.36
Control Delay (s/veh)		17.8	0.0		20.5	5.6	25.8	14.0	30.0	8.6
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		17.8	0.0		20.5	5.6	25.8	14.0	30.0	8.6
LOS		B	A		C	A	C	B	C	A
Approach Delay (s/veh)		16.1			12.1			14.1		10.8
Approach LOS		B			B			B		B

Intersection Summary			
Cycle Length: 65			
Actuated Cycle Length: 46.4			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 12.4		Intersection LOS: B	
Intersection Capacity Utilization 55.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: La Cadena Dr. & M St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	9	3	96	9	136	6	690	76	86	714	16
Future Volume (veh/h)	18	9	3	96	9	136	6	690	76	86	714	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		0.97
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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	19	9	1	99	9	81	6	711	63	89	736	14
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	112	31	496	128	6	496	13	980	87	108	1265	24
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.01	0.31	0.31	0.07	0.37	0.37
Sat Flow, veh/h	1	94	1496	1	18	1495	1594	3117	276	1594	3377	64
Grp Volume(v), veh/h	28	0	1	108	0	81	6	384	390	89	367	383
Grp Sat Flow(s),veh/h/ln	94	0	1496	19	0	1495	1594	1683	1710	1594	1683	1758
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	2.1	0.2	11.0	11.0	3.0	9.5	9.5
Cycle Q Clear(g_c), s	18.0	0.0	0.0	18.0	0.0	2.1	0.2	11.0	11.0	3.0	9.5	9.5
Prop In Lane	0.68		1.00	0.92		1.00	1.00		0.16	1.00		0.04
Lane Grp Cap(c), veh/h	143	0	496	133	0	496	13	529	537	108	630	658
V/C Ratio(X)	0.20	0.00	0.00	0.81	0.00	0.16	0.47	0.73	0.73	0.82	0.58	0.58
Avail Cap(c_a), veh/h	143	0	497	134	0	496	147	779	791	188	822	859
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.0	0.0	12.1	26.1	0.0	12.8	26.8	16.5	16.5	24.9	13.6	13.6
Incr Delay (d2), s/veh	0.7	0.0	0.0	29.7	0.0	0.2	9.8	1.9	1.9	5.7	0.9	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	2.4	0.0	0.6	0.1	3.6	3.7	1.2	2.9	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.6	0.0	12.1	55.9	0.0	13.0	36.6	18.4	18.4	30.6	14.4	14.4
LnGrp LOS	B		B	E		B	D	B	B	C	B	B
Approach Vol, veh/h		29			189			780			839	
Approach Delay, s/veh		15.5			37.5			18.6			16.1	
Approach LOS		B			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	22.9		23.1	5.0	26.1		23.1				
Change Period (Y+Rc), s	4.6	5.8		5.1	4.6	5.8		5.1				
Max Green Setting (Gmax), s	6.4	25.1		18.0	5.0	26.5		18.0				
Max Q Clear Time (g_c+I1), s	5.0	13.0		20.0	2.2	11.5		20.0				
Green Ext Time (p_c), s	0.0	3.5		0.0	0.0	3.7		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh		19.3
HCM 7th LOS		B

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	0	1	4	3	33	5	735	14	81	745	11
Future Vol, veh/h	4	0	1	4	3	33	5	735	14	81	745	11
Conflicting Peds, #/hr	0	0	6	0	0	0	0	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	80	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	1	5	3	38	6	835	16	92	847	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1470	1901	438	1468	1900	426	861	0	0	851	0	0
Stage 1	1039	1039	-	855	855	-	-	-	-	-	-	-
Stage 2	431	863	-	613	1045	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	89	68	567	89	68	577	776	-	-	783	-	-
Stage 1	247	306	-	319	373	-	-	-	-	-	-	-
Stage 2	573	370	-	446	304	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	71	60	563	77	60	577	775	-	-	783	-	-
Mov Cap-2 Maneuver	160	152	-	194	166	-	-	-	-	-	-	-
Stage 1	217	269	-	317	370	-	-	-	-	-	-	-
Stage 2	527	367	-	391	268	-	-	-	-	-	-	-

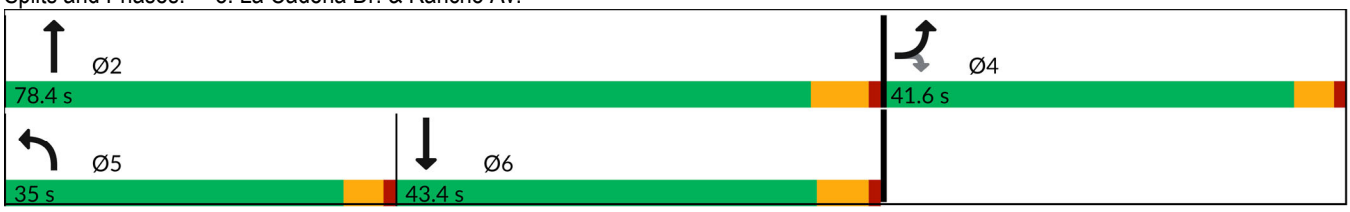
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	24.87	14.68	0.06	0.99
HCM LOS	C	B		

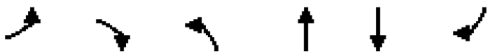
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	775	-	-	187	417	783	-	-
HCM Lane V/C Ratio	0.007	-	-	0.03	0.109	0.118	-	-
HCM Control Delay (s/veh)	9.7	-	-	24.9	14.7	10.2	-	-
HCM Lane LOS	A	-	-	C	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.4	0.4	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	61	879	393	567	736
Future Volume (vph)	61	879	393	567	736
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	41.6	41.6	9.6	24.2	42.8
Total Split (s)	41.6	41.6	35.0	78.4	43.4
Total Split (%)	34.7%	34.7%	29.2%	65.3%	36.2%
Yellow Time (s)	3.6	3.6	3.6	5.2	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	6.2	5.8
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	25.0	25.0	31.4	65.9	30.2
Actuated g/C Ratio	0.24	0.24	0.31	0.65	0.30
v/c Ratio	0.90	0.69	0.88	0.28	0.83
Control Delay (s/veh)	34.9	8.4	57.9	9.5	42.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.9	8.4	57.9	9.5	42.3
LOS	C	A	E	A	D
Approach Delay (s/veh)	21.8			29.3	42.3
Approach LOS	C			C	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 102.1	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay (s/veh): 30.3	Intersection LOS: C
Intersection Capacity Utilization 82.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 8: La Cadena Dr. & Rancho Av.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	61	879	393	567	736	18
Future Volume (veh/h)	61	879	393	567	736	18
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1673	1772	1673	1772	1772	1772
Adj Flow Rate, veh/h	0	717	427	616	800	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	438	824	454	2067	960	11
Arrive On Green	0.00	0.27	0.28	0.61	0.28	0.28
Sat Flow, veh/h	1594	3003	1594	3455	3499	38
Grp Volume(v), veh/h	0	717	427	616	395	414
Grp Sat Flow(s),veh/h/ln	1594	1502	1594	1683	1683	1765
Q Serve(g_s), s	0.0	22.0	25.3	8.4	21.3	21.3
Cycle Q Clear(g_c), s	0.0	22.0	25.3	8.4	21.3	21.3
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	438	824	454	2067	474	497
V/C Ratio(X)	0.00	0.87	0.94	0.30	0.83	0.83
Avail Cap(c_a), veh/h	609	1148	501	2511	654	686
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	33.5	33.8	8.8	32.6	32.6
Incr Delay (d2), s/veh	0.0	5.5	24.1	0.1	6.6	6.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	17.2	12.1	2.5	9.0	9.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	38.9	57.9	8.9	39.3	39.0
LnGrp LOS		D	E	A	D	D
Approach Vol, veh/h	717			1043	809	
Approach Delay, s/veh	38.9			29.0	39.1	
Approach LOS	D			C	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		65.6		31.2	32.2	33.4
Change Period (Y+Rc), s		6.2		4.6	4.6	* 6.2
Max Green Setting (Gmax), s		72.2		37.0	30.4	* 38
Max Q Clear Time (g_c+I1), s		10.4		24.0	27.3	23.3
Green Ext Time (p_c), s		4.1		2.6	0.2	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	34.9
HCM 7th LOS	C

Notes

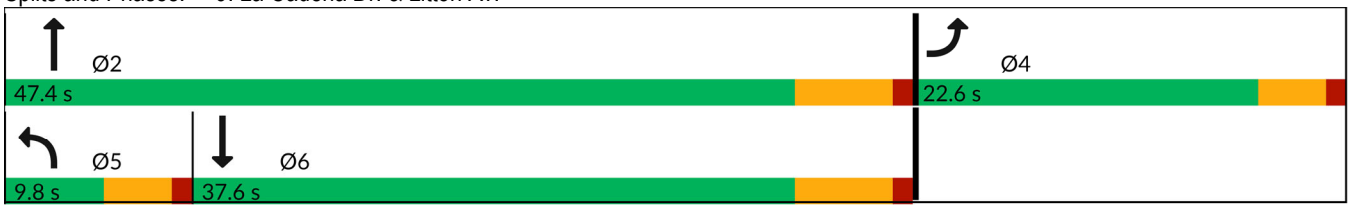
User approved volume balancing among the lanes for turning movement.

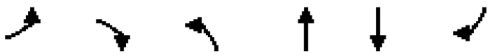
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	43	48	909	1600
Future Volume (vph)	43	48	909	1600
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	10.0	10.0
Minimum Split (s)	22.6	9.6	24.2	24.2
Total Split (s)	22.6	9.8	47.4	37.6
Total Split (%)	32.3%	14.0%	67.7%	53.7%
Yellow Time (s)	3.6	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	6.2	6.2
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	6.7	5.4	41.5	36.5
Actuated g/C Ratio	0.13	0.11	0.81	0.72
v/c Ratio	0.35	0.33	0.38	0.78
Control Delay (s/veh)	20.7	31.3	3.7	16.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.7	31.3	3.7	16.8
LOS	C	C	A	B
Approach Delay (s/veh)	20.7		5.0	16.8
Approach LOS	C		A	B

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 51	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 12.7	Intersection LOS: B
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: La Cadena Dr. & Litton Av.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	43	27	48	909	1600	43
Future Volume (veh/h)	43	27	48	909	1600	43
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1673	1772	1673	1772	1772	1772
Adj Flow Rate, veh/h	49	20	55	1033	1818	47
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	66	27	84	2463	1980	51
Arrive On Green	0.06	0.06	0.05	0.73	0.59	0.59
Sat Flow, veh/h	1078	440	1594	3455	3442	86
Grp Volume(v), veh/h	70	0	55	1033	909	956
Grp Sat Flow(s),veh/h/ln	1540	0	1594	1683	1683	1756
Q Serve(g_s), s	2.3	0.0	1.8	6.2	25.1	25.5
Cycle Q Clear(g_c), s	2.3	0.0	1.8	6.2	25.1	25.5
Prop In Lane	0.70	0.29	1.00			0.05
Lane Grp Cap(c), veh/h	94	0	84	2463	994	1037
V/C Ratio(X)	0.74	0.00	0.66	0.42	0.91	0.92
Avail Cap(c_a), veh/h	532	0	159	2663	1015	1059
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	0.0	24.2	2.7	9.5	9.6
Incr Delay (d2), s/veh	4.3	0.0	3.2	0.1	12.3	12.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.6	0.1	7.7	8.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	28.3	0.0	27.4	2.8	21.8	22.3
LnGrp LOS	C		C	A	C	C
Approach Vol, veh/h	70			1088	1865	
Approach Delay, s/veh	28.3			4.1	22.0	
Approach LOS	C			A	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		44.3		7.8	7.3	37.0
Change Period (Y+Rc), s		6.2		4.6	4.6	6.2
Max Green Setting (Gmax), s		41.2		18.0	5.2	31.4
Max Q Clear Time (g_c+I1), s		8.2		4.3	3.8	27.5
Green Ext Time (p_c), s		7.6		0.1	0.0	3.3

Intersection Summary		
HCM 7th Control Delay, s/veh		15.7
HCM 7th LOS		B

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	15	1	11	16	21	1	18	24	29	7	7
Future Vol, veh/h	7	15	1	11	16	21	1	18	24	29	7	7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	16	1	12	17	22	1	19	26	31	7	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	7.3	7.2	7	7.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	30%	23%	67%
Vol Thru, %	42%	65%	33%	16%
Vol Right, %	56%	4%	44%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	43	23	48	43
LT Vol	1	7	11	29
Through Vol	18	15	16	7
RT Vol	24	1	21	7
Lane Flow Rate	46	24	51	46
Geometry Grp	1	1	1	1
Degree of Util (X)	0.048	0.028	0.055	0.053
Departure Headway (Hd)	3.769	4.168	3.896	4.137
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	946	855	915	863
Service Time	1.811	2.213	1.938	2.175
HCM Lane V/C Ratio	0.049	0.028	0.056	0.053
HCM Control Delay, s/veh	7	7.3	7.2	7.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0.2	0.2

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	241	4	41	258	6	41
Future Vol, veh/h	241	4	41	258	6	41
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	248	4	42	266	6	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	255	0	603	253
Stage 1	-	-	-	-	253	-
Stage 2	-	-	-	-	351	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1310	-	462	786
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	713	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1308	-	444	785
Mov Cap-2 Maneuver	-	-	-	-	535	-
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	686	-

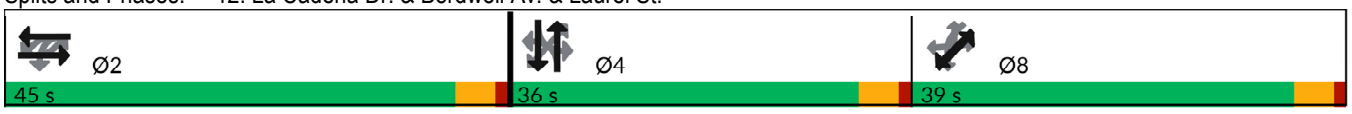
Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.08	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	535	785	-	-	247	-
HCM Lane V/C Ratio	0.012	0.054	-	-	0.032	-
HCM Control Delay (s/veh)	11.8	9.8	-	-	7.8	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	0	0.2	-	-	0.1	-

Lane Group	EBL	EBT	WBL2	WBL	WBT	NBL2	NBL	NBT	SBL2	SBL	SBT	NEL2
Lane Configurations												
Traffic Volume (vph)	53	79	1	15	82	1	30	8	7	5	4	8
Future Volume (vph)	53	79	1	15	82	1	30	8	7	5	4	8
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		2			2			4			4	
Permitted Phases	2		2	2		4	4		4	4		8
Detector Phase	2	2	2	2	2	4	4	4	4	4	4	8
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	22.6	22.6	22.6	22.6	22.6	31.6	31.6	31.6	31.6	31.6	31.6	27.6
Total Split (s)	45.0	45.0	45.0	45.0	45.0	36.0	36.0	36.0	36.0	36.0	36.0	39.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	32.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.6			4.6			4.6			4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.2			14.2			13.6			13.6	
Actuated g/C Ratio		0.29			0.29			0.28			0.28	
v/c Ratio		0.44			0.23			0.16			0.06	
Control Delay (s/veh)		21.8			19.7			19.4			18.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		21.8			19.7			19.4			18.9	
LOS		C			B			B			B	
Approach Delay (s/veh)		21.8			19.7			19.4			18.9	
Approach LOS		C			B			B			B	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 49.1			
Natural Cycle: 85			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 18.9		Intersection LOS: B	
Intersection Capacity Utilization 56.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 12: La Cadena Dr. & Bordwell Av. & Laurel St.



Lane Group	NEL	NET	SWL2	SWL	SWT
Lane Configurations					
Traffic Volume (vph)	4	206	4	17	250
Future Volume (vph)	4	206	4	17	250
Turn Type	Perm	NA	Perm	Perm	NA
Protected Phases		8			8
Permitted Phases	8		8	8	
Detector Phase	8	8	8	8	8
Switch Phase					
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.6	27.6	27.6	27.6	27.6
Total Split (s)	39.0	39.0	39.0	39.0	39.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.6	4.6		4.6	4.6
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	None	None	None
Act Effct Green (s)	14.8	14.8		14.8	14.8
Actuated g/C Ratio	0.30	0.30		0.30	0.30
v/c Ratio	0.05	0.24		0.07	0.37
Control Delay (s/veh)	19.5	17.3		19.7	17.9
Queue Delay	0.0	0.0		0.0	0.0
Total Delay (s/veh)	19.5	17.3		19.7	17.9
LOS	B	B		B	B
Approach Delay (s/veh)		17.4			18.0
Approach LOS		B			B

Intersection Summary

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT
Lane Configurations												
Traffic Volume (vph)	53	79	18	27	1	15	82	2	1	1	30	8
Future Volume (vph)	53	79	18	27	1	15	82	2	1	1	30	8
Ideal Flow (vphpl)	1700	1800	1800	1800	1700	1700	1800	1800	1800	1700	1700	1800
Total Lost time (s)		4.6					4.6					4.6
Lane Util. Factor		1.00					1.00					1.00
Frt		0.97					1.00					0.96
Flt Protected		0.99					0.99					0.97
Satd. Flow (prot)		1679					1745					1645
Flt Permitted		0.88					0.94					0.82
Satd. Flow (perm)		1500					1653					1383
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	58	86	20	29	1	16	89	2	1	1	33	9
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	0	0	0	1
Lane Group Flow (vph)	0	187	0	0	0	0	109	0	0	0	0	62
Turn Type	Perm	NA			Perm	Perm	NA			Perm	Perm	NA
Protected Phases		2					2					4
Permitted Phases	2				2	2				4	4	
Actuated Green, G (s)		14.2					14.2					7.0
Effective Green, g (s)		14.2					14.2					7.0
Actuated g/C Ratio		0.29					0.29					0.14
Clearance Time (s)		4.6					4.6					4.6
Vehicle Extension (s)		3.0					3.0					3.0
Lane Grp Cap (vph)		427					471					194
v/s Ratio Prot												
v/s Ratio Perm		c0.12					0.07					c0.04
v/c Ratio		0.44					0.23					0.32
Uniform Delay, d1		14.5					13.6					19.3
Progression Factor		1.00					1.00					1.00
Incremental Delay, d2		0.7					0.3					1.0
Delay (s)		15.3					13.9					20.2
Level of Service		B					B					C
Approach Delay (s/veh)		15.3					13.9					20.2
Approach LOS		B					B					C

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	49.8	Sum of lost time (s)	13.8
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	NEL2	NEL	NET	NER	NER2
Lane Configurations												
Traffic Volume (vph)	17	2	7	5	4	5	1	8	4	206	17	2
Future Volume (vph)	17	2	7	5	4	5	1	8	4	206	17	2
Ideal Flow (vphpl)	1800	1800	1700	1700	1800	1800	1800	1700	1700	1800	1800	1800
Total Lost time (s)					4.6				4.6	4.6		
Lane Util. Factor					1.00				1.00	0.95		
Frt					0.96				1.00	0.99		
Flt Protected					0.97				0.95	1.00		
Satd. Flow (prot)					1656				1583	3312		
Flt Permitted					0.81				0.54	1.00		
Satd. Flow (perm)					1377				894	3312		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	2	8	5	4	5	1	9	4	224	18	2
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	0	1	0	0
Lane Group Flow (vph)	0	0	0	0	22	0	0	0	13	243	0	0
Turn Type			Perm	Perm	NA			Perm	Perm	NA		
Protected Phases					4					8		
Permitted Phases			4	4				8	8			
Actuated Green, G (s)					7.0				14.8	14.8		
Effective Green, g (s)					7.0				14.8	14.8		
Actuated g/C Ratio					0.14				0.30	0.30		
Clearance Time (s)					4.6				4.6	4.6		
Vehicle Extension (s)					3.0				3.0	3.0		
Lane Grp Cap (vph)					193				265	984		
v/s Ratio Prot										0.07		
v/s Ratio Perm					0.02				0.01			
v/c Ratio					0.11				0.05	0.25		
Uniform Delay, d1					18.7				12.5	13.3		
Progression Factor					1.00				1.00	1.00		
Incremental Delay, d2					0.3				0.1	0.1		
Delay (s)					19.0				12.6	13.4		
Level of Service					B				B	B		
Approach Delay (s/veh)					19.0					13.4		
Approach LOS					B					B		

Intersection Summary

Movement	SWL2	SWL	SWT	SWR	SWR2
Lane Configurations					
Traffic Volume (vph)	4	17	250	68	14
Future Volume (vph)	4	17	250	68	14
Ideal Flow (vphpl)	1700	1700	1800	1800	1800
Total Lost time (s)		4.6	4.6		
Lane Util. Factor		1.00	0.95		
Frt		1.00	0.96		
Flt Protected		0.95	1.00		
Satd. Flow (prot)		1583	3229		
Flt Permitted		0.60	1.00		
Satd. Flow (perm)		1000	3229		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	18	272	74	15
RTOR Reduction (vph)	0	0	3	0	0
Lane Group Flow (vph)	0	22	358	0	0
Turn Type	Perm	Perm	NA		
Protected Phases			8		
Permitted Phases	8	8			
Actuated Green, G (s)		14.8	14.8		
Effective Green, g (s)		14.8	14.8		
Actuated g/C Ratio		0.30	0.30		
Clearance Time (s)		4.6	4.6		
Vehicle Extension (s)		3.0	3.0		
Lane Grp Cap (vph)		297	959		
v/s Ratio Prot			c0.11		
v/s Ratio Perm		0.02			
v/c Ratio		0.07	0.37		
Uniform Delay, d1		12.6	13.8		
Progression Factor		1.00	1.00		
Incremental Delay, d2		0.1	0.2		
Delay (s)		12.7	14.1		
Level of Service		B	B		
Approach Delay (s/veh)			14.0		
Approach LOS			B		

Intersection Summary

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	95	1	0	0	86	532	1	1	475	21
Future Vol, veh/h	11	0	95	1	0	0	86	532	1	1	475	21
Conflicting Peds, #/hr	0	0	2	0	0	1	0	0	3	0	0	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	0	99	1	0	0	90	554	1	1	495	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	980	1260	275	988	1271	282	532	0	0	558	0	0
Stage 1	523	523	-	737	737	-	-	-	-	-	-	-
Stage 2	457	737	-	251	534	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	204	169	722	201	167	715	1032	-	-	1009	-	-
Stage 1	505	529	-	376	423	-	-	-	-	-	-	-
Stage 2	553	423	-	731	523	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	183	151	710	157	149	713	1017	-	-	1006	-	-
Mov Cap-2 Maneuver	374	321	-	301	302	-	-	-	-	-	-	-
Stage 1	498	521	-	342	384	-	-	-	-	-	-	-
Stage 2	504	384	-	627	515	-	-	-	-	-	-	-

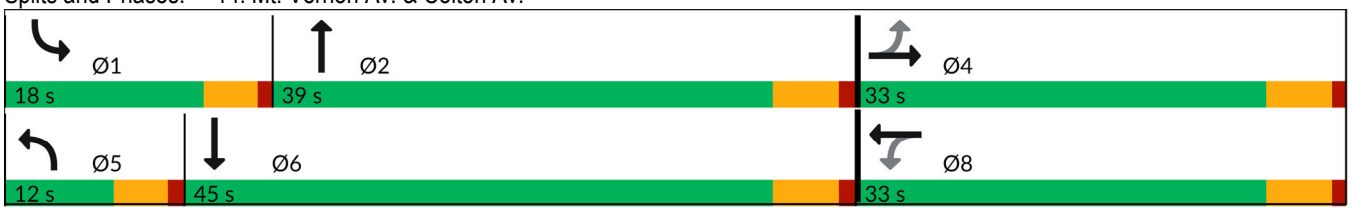
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.67	17.02	1.23	0.02
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1017	-	-	650	301	1006	-	-
HCM Lane V/C Ratio	0.088	-	-	0.17	0.003	0.001	-	-
HCM Control Delay (s/veh)	8.9	-	-	11.7	17	8.6	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.6	0	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	69	225	97	222	41	588	92	507
Future Volume (vph)	69	225	97	222	41	588	92	507
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	24.4	24.4	28.4	28.4	9.6	37.4	9.6	37.4
Total Split (s)	33.0	33.0	33.0	33.0	12.0	39.0	18.0	45.0
Total Split (%)	36.7%	36.7%	36.7%	36.7%	13.3%	43.3%	20.0%	50.0%
Yellow Time (s)	4.4	4.4	4.4	4.4	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	4.6	5.4	4.6	5.4
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	18.2	18.2	18.2	18.2	6.7	22.4	9.0	27.0
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.11	0.35	0.14	0.43
v/c Ratio	0.38	0.53	0.43	0.66	0.27	0.68	0.44	0.44
Control Delay (s/veh)	28.5	25.8	28.7	28.3	37.9	21.4	37.0	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.5	25.8	28.7	28.3	37.9	21.4	37.0	14.8
LOS	C	C	C	C	D	C	D	B
Approach Delay (s/veh)		26.4		28.4		22.2		17.9
Approach LOS		C		C		C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 63.3	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 22.7	Intersection LOS: C
Intersection Capacity Utilization 74.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 14: Mt. Vernon Av. & Colton Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	225	22	97	222	81	41	588	136	92	507	61
Future Volume (veh/h)	69	225	22	97	222	81	41	588	136	92	507	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.99	1.00		0.95	1.00		0.97
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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	75	245	20	105	241	52	45	639	136	100	551	56
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	272	470	38	295	410	89	71	1002	213	124	1230	125
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.37	0.37	0.08	0.40	0.40
Sat Flow, veh/h	1021	1613	132	1046	1410	304	1594	2736	581	1594	3078	312
Grp Volume(v), veh/h	75	0	265	105	0	293	45	393	382	100	301	306
Grp Sat Flow(s),veh/h/ln	1021	0	1744	1046	0	1714	1594	1683	1634	1594	1683	1706
Q Serve(g_s), s	3.9	0.0	7.4	5.4	0.0	8.5	1.6	11.2	11.3	3.6	7.6	7.6
Cycle Q Clear(g_c), s	12.4	0.0	7.4	12.8	0.0	8.5	1.6	11.2	11.3	3.6	7.6	7.6
Prop In Lane	1.00		0.08	1.00		0.18	1.00		0.36	1.00		0.18
Lane Grp Cap(c), veh/h	272	0	508	295	0	499	71	617	599	124	673	682
V/C Ratio(X)	0.28	0.00	0.52	0.36	0.00	0.59	0.64	0.64	0.64	0.81	0.45	0.45
Avail Cap(c_a), veh/h	459	0	827	487	0	813	203	972	944	367	1146	1161
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	0.0	17.2	22.6	0.0	17.6	27.3	15.2	15.2	26.4	12.8	12.8
Incr Delay (d2), s/veh	0.5	0.0	0.8	0.7	0.0	1.1	3.5	1.1	1.1	4.6	0.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.7	1.2	0.0	3.0	0.6	3.7	3.6	1.4	2.4	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.5	0.0	18.1	23.3	0.0	18.7	30.8	16.3	16.4	31.0	13.2	13.2
LnGrp LOS	C		B	C		B	C	B	B	C	B	B
Approach Vol, veh/h		340			398			820			707	
Approach Delay, s/veh		19.3			19.9			17.2			15.7	
Approach LOS		B			B			B			B	

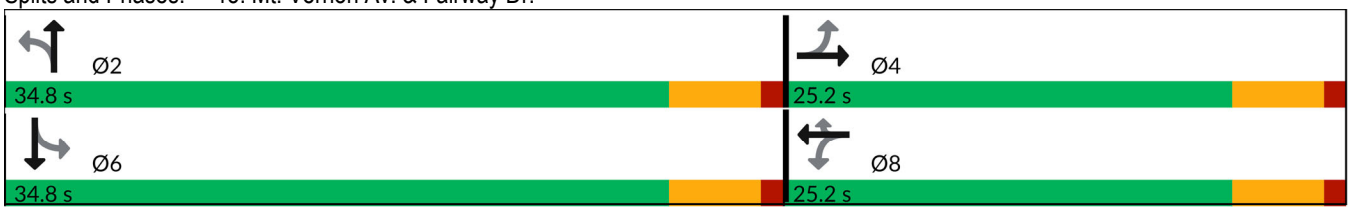
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	26.7		22.3	7.2	28.7		22.3				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	13.4	33.6		27.6	7.4	39.6		27.6				
Max Q Clear Time (g_c+I1), s	5.6	13.3		14.4	3.6	9.6		14.8				
Green Ext Time (p_c), s	0.1	4.6		1.4	0.0	3.7		1.7				

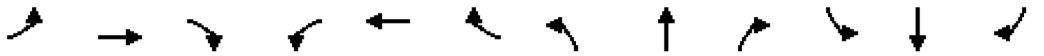
Intersection Summary		
HCM 7th Control Delay, s/veh		17.5
HCM 7th LOS		B

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	17	95	170	144	360	16	508	205	480
Future Volume (vph)	17	95	170	144	360	16	508	205	480
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4		8			2		6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	23.1	23.1	25.1	25.1	25.1	24.1	24.1	26.1	26.1
Total Split (s)	25.2	25.2	25.2	25.2	25.2	34.8	34.8	34.8	34.8
Total Split (%)	42.0%	42.0%	42.0%	42.0%	42.0%	58.0%	58.0%	58.0%	58.0%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	14.5	14.5	14.5	14.5	14.5	19.9	19.9	19.9	19.9
Actuated g/C Ratio	0.32	0.32	0.32	0.32	0.32	0.44	0.44	0.44	0.44
v/c Ratio	0.05	0.21	0.48	0.14	0.57	0.05	0.40	0.67	0.35
Control Delay (s/veh)	13.7	12.7	19.7	13.2	9.0	8.1	9.0	22.6	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.7	12.7	19.7	13.2	9.0	8.1	9.0	22.6	8.9
LOS	B	B	B	B	A	A	A	C	A
Approach Delay (s/veh)		12.9		12.6			9.0		12.9
Approach LOS		B		B			A		B

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 45.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay (s/veh): 11.7	Intersection LOS: B
Intersection Capacity Utilization 62.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 15: Mt. Vernon Av. & Fairway Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	95	17	170	144	360	16	508	60	205	480	21
Future Volume (veh/h)	17	95	17	170	144	360	16	508	60	205	480	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	18	98	15	175	148	247	16	524	49	211	495	15
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	404	426	65	452	957	422	491	1474	137	461	1580	48
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	928	1499	229	1202	3367	1484	839	3110	290	790	3334	101
Grp Volume(v), veh/h	18	0	113	175	148	247	16	283	290	211	250	260
Grp Sat Flow(s),veh/h/ln	928	0	1729	1202	1683	1484	839	1683	1716	790	1683	1752
Q Serve(g_s), s	0.6	0.0	2.1	5.5	1.4	6.0	0.5	4.5	4.5	9.7	3.9	3.9
Cycle Q Clear(g_c), s	2.0	0.0	2.1	7.6	1.4	6.0	4.4	4.5	4.5	14.2	3.9	3.9
Prop In Lane	1.00		0.13	1.00		1.00	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	404	0	491	452	957	422	491	798	813	461	798	830
V/C Ratio(X)	0.04	0.00	0.23	0.39	0.15	0.59	0.03	0.35	0.36	0.46	0.31	0.31
Avail Cap(c_a), veh/h	583	0	824	684	1605	708	685	1186	1209	643	1186	1234
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	0.0	11.6	14.5	11.3	13.0	8.2	7.0	7.0	11.5	6.9	6.9
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.5	0.1	1.3	0.0	0.3	0.3	0.7	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.7	1.3	0.4	1.7	0.1	1.1	1.1	1.3	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.1	0.0	11.8	15.0	11.4	14.3	8.2	7.3	7.3	12.2	7.1	7.1
LnGrp LOS	B		B	B	B	B	A	A	A	B	A	A
Approach Vol, veh/h		131			570			589			721	
Approach Delay, s/veh		11.8			13.7			7.3			8.6	
Approach LOS		B			B			A			A	

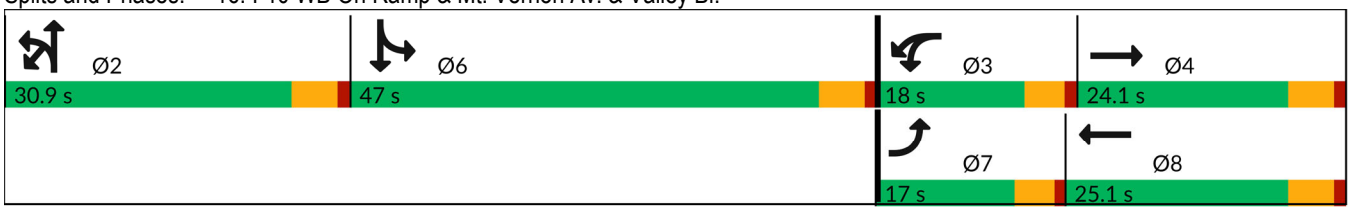
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.1		17.1		25.1		17.1				
Change Period (Y+Rc), s		5.1		5.1		5.1		5.1				
Max Green Setting (Gmax), s		29.7		20.1		29.7		20.1				
Max Q Clear Time (g_c+I1), s		6.5		4.1		16.2		9.6				
Green Ext Time (p_c), s		3.5		0.5		3.7		1.8				

Intersection Summary												
HCM 7th Control Delay, s/veh			9.9									
HCM 7th LOS			A									

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	169	131	42	169	371	10	334
Future Volume (vph)	169	131	42	169	371	10	334
Turn Type	Prot	NA	Prot	NA	NA	Split	NA
Protected Phases	7	4	3	8	2	6	6
Permitted Phases							
Detector Phase	7	4	3	8	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	23.1	9.6	25.1	23.1	23.1	23.1
Total Split (s)	17.0	24.1	18.0	25.1	30.9	47.0	47.0
Total Split (%)	14.2%	20.1%	15.0%	20.9%	25.8%	39.2%	39.2%
Yellow Time (s)	3.6	4.1	3.6	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	4.6	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	None	None	None	None	None	None
Act Effct Green (s)	12.4	18.2	13.4	19.2	25.8	41.9	41.9
Actuated g/C Ratio	0.10	0.15	0.11	0.16	0.22	0.35	0.35
v/c Ratio	1.10	0.88	1.18	0.69	1.04	0.02	1.18
Control Delay (s/veh)	148.4	82.9	168.4	60.1	90.8	25.9	134.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	148.4	82.9	168.4	60.1	90.8	25.9	134.0
LOS	F	F	F	E	F	C	F
Approach Delay (s/veh)		112.1		115.8	90.8		132.3
Approach LOS		F		F	F		F

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.2	
Natural Cycle: 125	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay (s/veh): 112.0	Intersection LOS: F
Intersection Capacity Utilization 100.7%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 16: I-10 WB On Ramp & Mt. Vernon Av. & Valley Bl.



Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	169	131	74	6	153	42	169	15	209	76	371	39
Future Volume (vph)	169	131	74	6	153	42	169	15	209	76	371	39
Ideal Flow (vphpl)	1700	1800	1800	1800	1700	1700	1800	1800	1700	1700	1800	1800
Total Lost time (s)	4.6	5.1				4.6	5.1				5.1	
Lane Util. Factor	1.00	1.00				1.00	1.00				0.95	
Frt	1.00	0.94				1.00	0.99				0.99	
Flt Protected	0.95	1.00				0.95	1.00				0.98	
Satd. Flow (prot)	1583	1664				1583	1743				3258	
Flt Permitted	0.95	1.00				0.95	1.00				0.98	
Satd. Flow (perm)	1583	1664				1583	1743				3258	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	180	139	79	6	163	45	180	16	222	81	395	41
RTOR Reduction (vph)	0	0	0	0	0	0	3	0	0	0	4	0
Lane Group Flow (vph)	180	224	0	0	0	208	193	0	0	0	735	0
Turn Type	Prot	NA			Prot	Prot	NA		Split	Split	NA	
Protected Phases	7	4			3	3	8		2	2	2	
Permitted Phases												
Actuated Green, G (s)	12.4	18.2				13.4	19.2				25.8	
Effective Green, g (s)	12.4	18.2				13.4	19.2				25.8	
Actuated g/C Ratio	0.10	0.15				0.11	0.16				0.22	
Clearance Time (s)	4.6	5.1				4.6	5.1				5.1	
Vehicle Extension (s)	2.0	3.0				2.0	3.0				3.0	
Lane Grp Cap (vph)	164	254				177	280				705	
v/s Ratio Prot	0.11	c0.13				c0.13	0.11				c0.23	
v/s Ratio Perm												
v/c Ratio	1.10	0.88				1.18	0.69				1.04	
Uniform Delay, d1	53.4	49.4				52.9	47.2				46.7	
Progression Factor	1.00	1.00				1.00	1.00				1.00	
Incremental Delay, d2	98.8	28.0				122.7	7.2				45.5	
Delay (s)	152.2	77.4				175.6	54.4				92.2	
Level of Service	F	E				F	D				F	
Approach Delay (s/veh)		110.7					116.8				92.2	
Approach LOS		F					F				F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	113.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	119.2	Sum of lost time (s)	19.9
Intersection Capacity Utilization	100.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

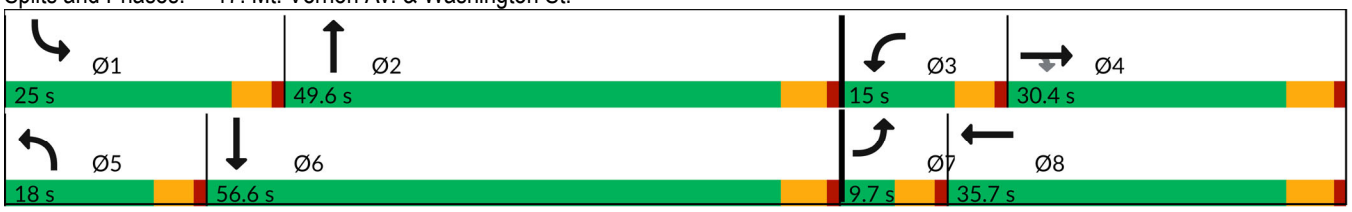
Movement	SBL	SBT	SBR	SBR2
Lane Configurations				
Traffic Volume (vph)	10	334	188	125
Future Volume (vph)	10	334	188	125
Ideal Flow (vphpl)	1700	1800	1800	1800
Total Lost time (s)	5.1	5.1		
Lane Util. Factor	1.00	1.00		
Frt	1.00	0.93		
Flt Protected	0.95	1.00		
Satd. Flow (prot)	1583	1637		
Flt Permitted	0.95	1.00		
Satd. Flow (perm)	1583	1637		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94
Adj. Flow (vph)	11	355	200	133
RTOR Reduction (vph)	0	7	0	0
Lane Group Flow (vph)	11	681	0	0
Turn Type	Split	NA		
Protected Phases	6	6		
Permitted Phases				
Actuated Green, G (s)	41.9	41.9		
Effective Green, g (s)	41.9	41.9		
Actuated g/C Ratio	0.35	0.35		
Clearance Time (s)	5.1	5.1		
Vehicle Extension (s)	3.0	3.0		
Lane Grp Cap (vph)	556	575		
v/s Ratio Prot	0.01	c0.42		
v/s Ratio Perm				
v/c Ratio	0.02	1.18		
Uniform Delay, d1	25.2	38.7		
Progression Factor	1.00	1.00		
Incremental Delay, d2	0.0	99.6		
Delay (s)	25.3	138.2		
Level of Service	C	F		
Approach Delay (s/veh)		136.5		
Approach LOS		F		

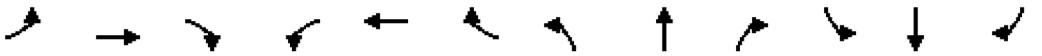
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	218	101	232	186	407	80	156	751	474	361	83
Future Volume (vph)	69	218	101	232	186	407	80	156	751	474	361	83
Turn Type	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	30.4	30.4	9.6	31.4		9.6	23.1		9.6	30.1	
Total Split (s)	9.7	30.4	30.4	15.0	35.7		18.0	49.6		25.0	56.6	
Total Split (%)	8.1%	25.3%	25.3%	12.5%	29.8%		15.0%	41.3%		20.8%	47.2%	
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4		3.6	4.1		3.6	4.1	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4		4.6	5.1		4.6	5.1	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	
Act Effct Green (s)	5.1	11.9	11.9	10.4	19.2	72.3	8.2	11.2	72.3	18.9	24.1	72.3
Actuated g/C Ratio	0.07	0.16	0.16	0.14	0.27	1.00	0.11	0.15	1.00	0.26	0.33	1.00
v/c Ratio	0.34	0.40	0.26	0.57	0.21	0.28	0.46	0.31	0.51	0.64	0.33	0.06
Control Delay (s/veh)	39.2	29.7	1.6	36.7	22.9	0.5	39.7	29.5	1.2	29.1	21.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.2	29.7	1.6	36.7	22.9	0.5	39.7	29.5	1.2	29.1	21.0	0.1
LOS	D	C	A	D	C	A	D	C	A	C	C	A
Approach Delay (s/veh)		24.0			15.7			8.8			23.3	
Approach LOS		C			B			A			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 72.3	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay (s/veh): 16.8	Intersection LOS: B
Intersection Capacity Utilization 57.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 17: Mt. Vernon Av. & Washington St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	218	101	232	186	407	80	156	751	474	361	83
Future Volume (veh/h)	69	218	101	232	186	407	80	156	751	474	361	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1575	1772	1772	1575	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	70	222	48	237	190	0	82	159	0	484	368	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	583	255	331	768		102	543		600	1022	
Arrive On Green	0.06	0.17	0.17	0.11	0.23	0.00	0.06	0.16	0.00	0.21	0.30	0.00
Sat Flow, veh/h	2910	3367	1474	2910	3367	1502	1594	3367	1502	2910	3367	1502
Grp Volume(v), veh/h	70	222	48	237	190	0	82	159	0	484	368	0
Grp Sat Flow(s),veh/h/ln	1455	1683	1474	1455	1683	1502	1594	1683	1502	1455	1683	1502
Q Serve(g_s), s	1.3	3.3	1.6	4.5	2.6	0.0	2.9	2.4	0.0	9.0	4.9	0.0
Cycle Q Clear(g_c), s	1.3	3.3	1.6	4.5	2.6	0.0	2.9	2.4	0.0	9.0	4.9	0.0
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	171	583	255	331	768		102	543		600	1022	
V/C Ratio(X)	0.41	0.38	0.19	0.72	0.25		0.81	0.29		0.81	0.36	
Avail Cap(c_a), veh/h	260	1477	647	531	1790		375	2629		1042	3043	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.9	20.9	20.1	24.4	18.0	0.0	26.3	21.0	0.0	21.5	15.5	0.0
Incr Delay (d2), s/veh	0.6	0.4	0.4	1.1	0.2	0.0	5.6	0.3	0.0	1.0	0.2	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	0.4	1.2	0.5	1.4	0.9	0.0	1.2	0.9	0.0	2.8	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.4	21.3	20.5	25.4	18.2	0.0	31.9	21.3	0.0	22.5	15.7	0.0
LnGrp LOS	C	C	C	C	B		C	C		C	B	
Approach Vol, veh/h		340			427			241			852	
Approach Delay, s/veh		22.2			22.2			24.9			19.6	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	14.3	11.1	15.3	8.2	22.4	7.9	18.4
Change Period (Y+Rc), s	4.6	5.1	4.6	5.4	4.6	5.1	4.6	5.4
Max Green Setting (Gmax), s	20.4	44.5	10.4	25.0	13.4	51.5	5.1	30.3
Max Q Clear Time (g_c+I1), s	11.0	4.4	6.5	5.3	4.9	6.9	3.3	4.6
Green Ext Time (p_c), s	0.7	1.0	0.2	1.3	0.0	2.6	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	21.4
HCM 7th LOS	C

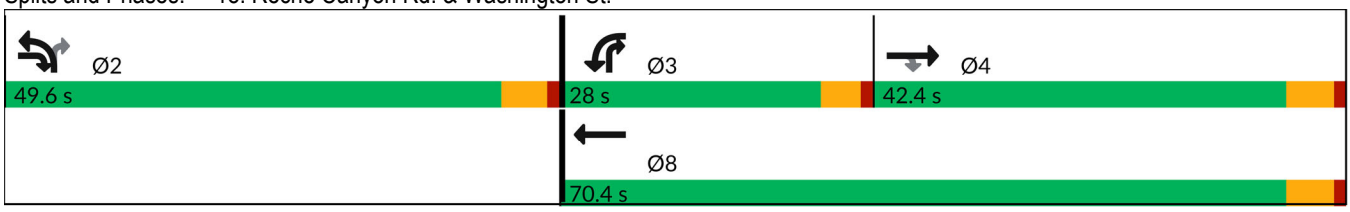
Notes

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	560	837	461	279	540	457
Future Volume (vph)	560	837	461	279	540	457
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Detector Phase	4	2	3	8	2	3
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	42.4	23.4	9.6	23.4	23.4	9.6
Total Split (s)	42.4	49.6	28.0	70.4	49.6	28.0
Total Split (%)	35.3%	41.3%	23.3%	58.7%	41.3%	23.3%
Yellow Time (s)	4.4	4.1	3.6	4.4	4.1	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.1	4.6	5.4	5.1	4.6
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	22.8	59.3	19.1	46.8	36.2	60.8
Actuated g/C Ratio	0.24	0.63	0.20	0.50	0.38	0.65
v/c Ratio	0.73	0.92	0.83	0.18	0.51	0.27
Control Delay (s/veh)	39.7	29.2	51.4	14.1	25.1	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.7	29.2	51.4	14.1	25.1	5.7
LOS	D	C	D	B	C	A
Approach Delay (s/veh)	33.4			37.4	16.2	
Approach LOS	C			D	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 94.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay (s/veh): 28.9	Intersection LOS: C
Intersection Capacity Utilization 78.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 18: Reche Canyon Rd. & Washington St.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	560	837	461	279	540	457
Future Volume (veh/h)	560	837	461	279	540	457
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		0.98	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	1772	1772	1575	1772	1575	1772
Adj Flow Rate, veh/h	589	503	485	294	568	412
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1096	872	578	1984	764	1219
Arrive On Green	0.33	0.33	0.20	0.59	0.26	0.26
Sat Flow, veh/h	3455	1468	2910	3455	2910	2643
Grp Volume(v), veh/h	589	503	485	294	568	412
Grp Sat Flow(s),veh/h/ln	1683	1468	1455	1683	1455	1321
Q Serve(g_s), s	10.1	15.2	11.4	2.8	12.7	7.0
Cycle Q Clear(g_c), s	10.1	15.2	11.4	2.8	12.7	7.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1096	872	578	1984	764	1219
V/C Ratio(X)	0.54	0.58	0.84	0.15	0.74	0.34
Avail Cap(c_a), veh/h	1758	1161	961	3088	1828	2185
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	19.5	9.1	27.3	6.5	23.9	12.2
Incr Delay (d2), s/veh	0.4	0.6	1.4	0.0	1.5	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	7.7	3.7	0.8	4.0	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	19.9	9.7	28.7	6.6	25.4	12.3
LnGrp LOS	B	A	C	A	C	B
Approach Vol, veh/h	1092			779	980	
Approach Delay, s/veh	15.2			20.4	19.9	
Approach LOS	B			C	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		23.7	18.7	28.5		47.2
Change Period (Y+Rc), s		5.1	4.6	5.4		5.4
Max Green Setting (Gmax), s		44.5	23.4	37.0		65.0
Max Q Clear Time (g_c+I1), s		14.7	13.4	17.2		4.8
Green Ext Time (p_c), s		3.9	0.7	5.7		1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	18.2
HCM 7th LOS	B

APPENDIX 3.3:

EXISTING (2024) SIGNAL WARRANTS

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

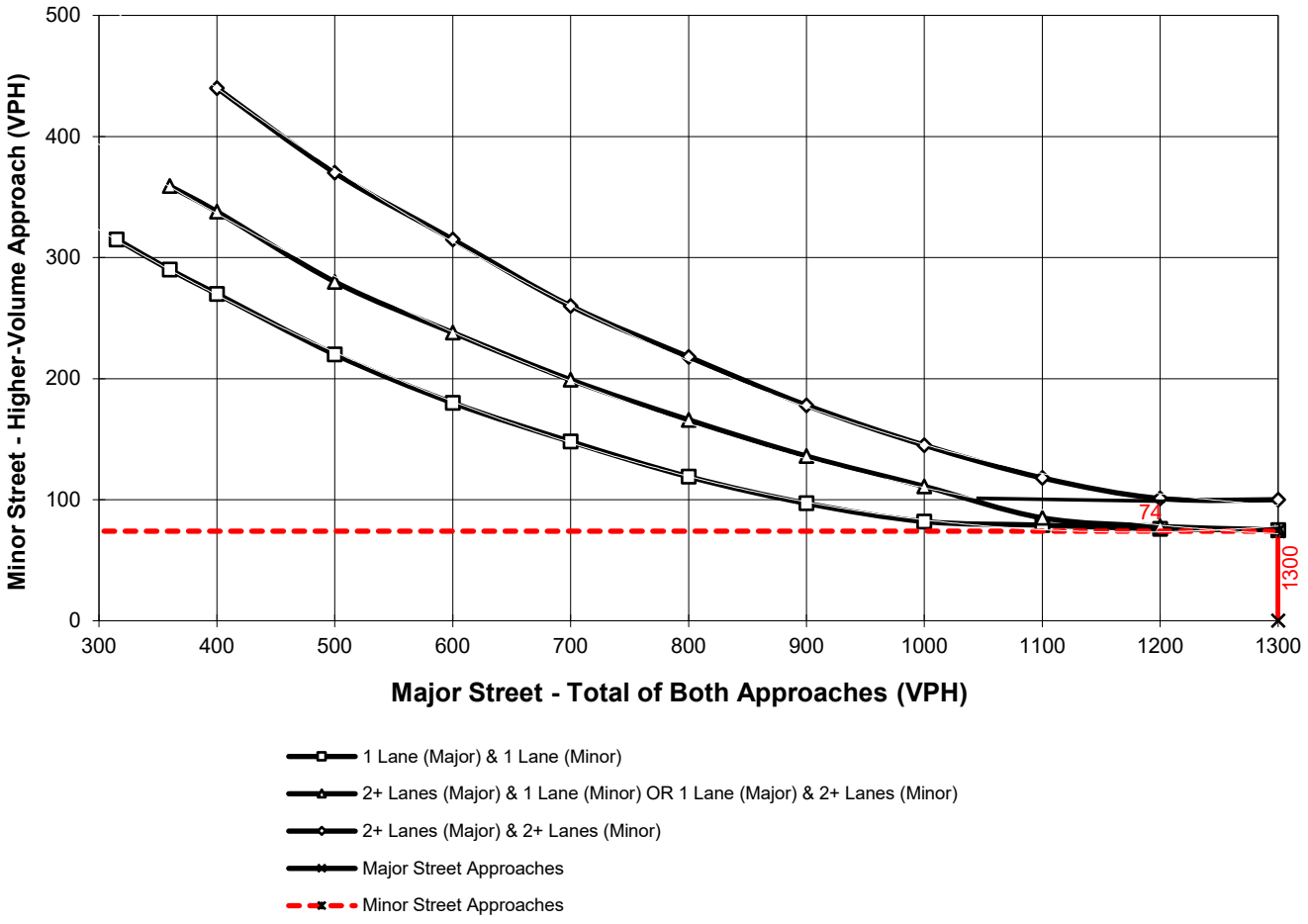
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2024) Conditions - Weekday AM Peak Hour**

Major Street Name = **Rancho Av.**
Total of Both Approaches (VPH) = **1700**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **N St.**
High Volume Approach (VPH) = **74**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

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

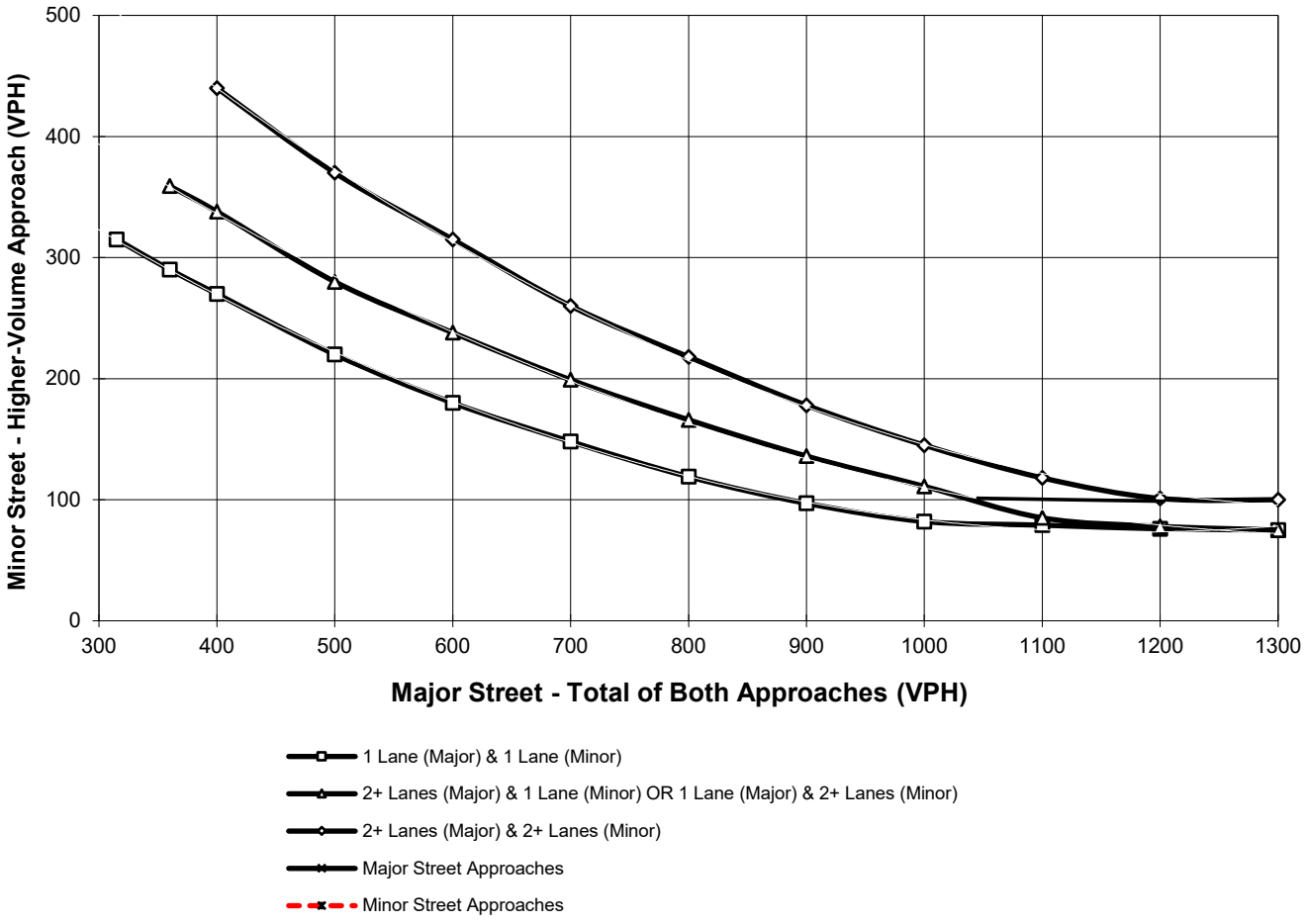
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **5th St.**
Total of Both Approaches (VPH) = **18**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **K St.**
High Volume Approach (VPH) = **8**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

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

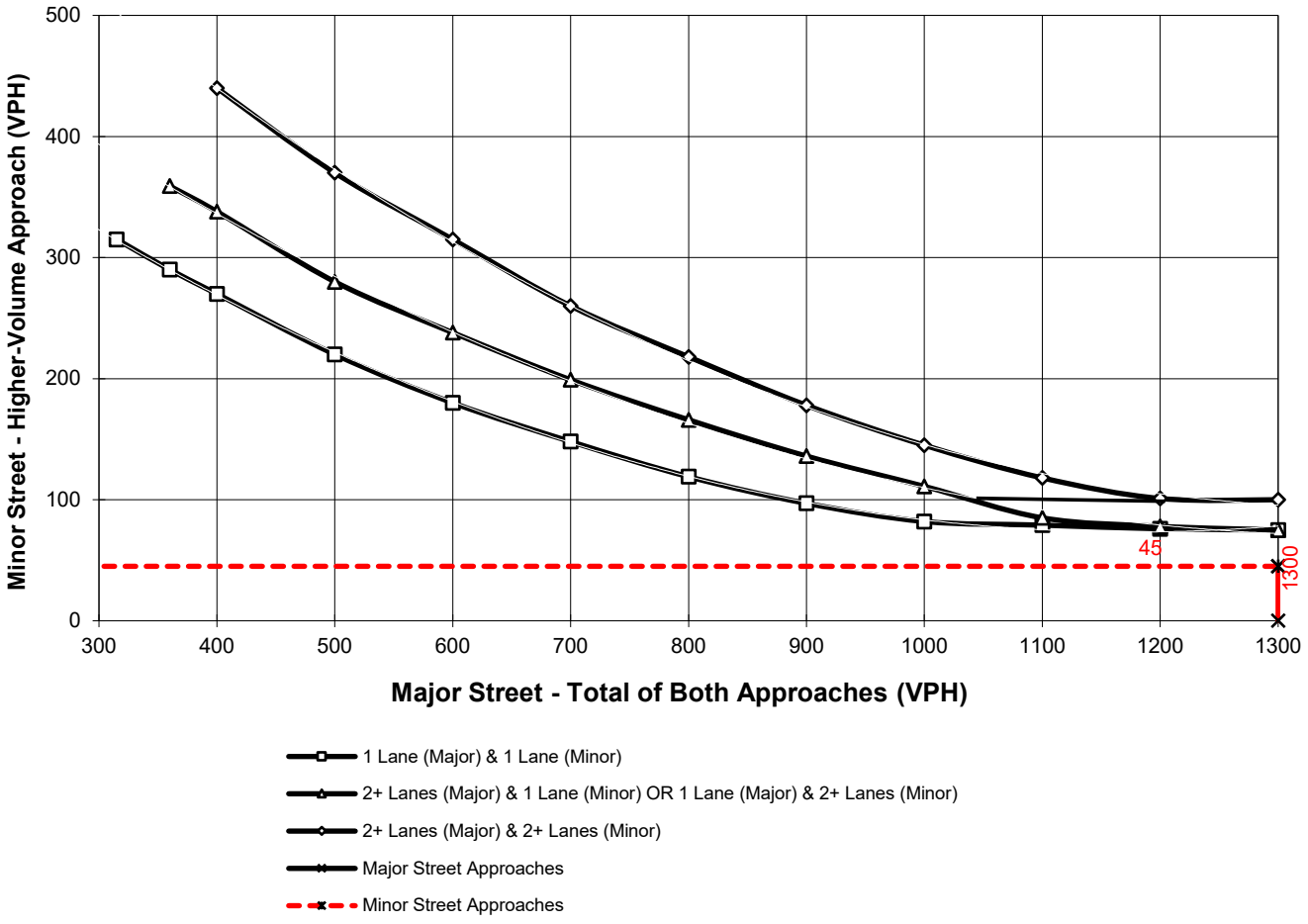
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **La Cadena Dr.**
Total of Both Approaches (VPH) = **1591**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **O St.**
High Volume Approach (VPH) = **45**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

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

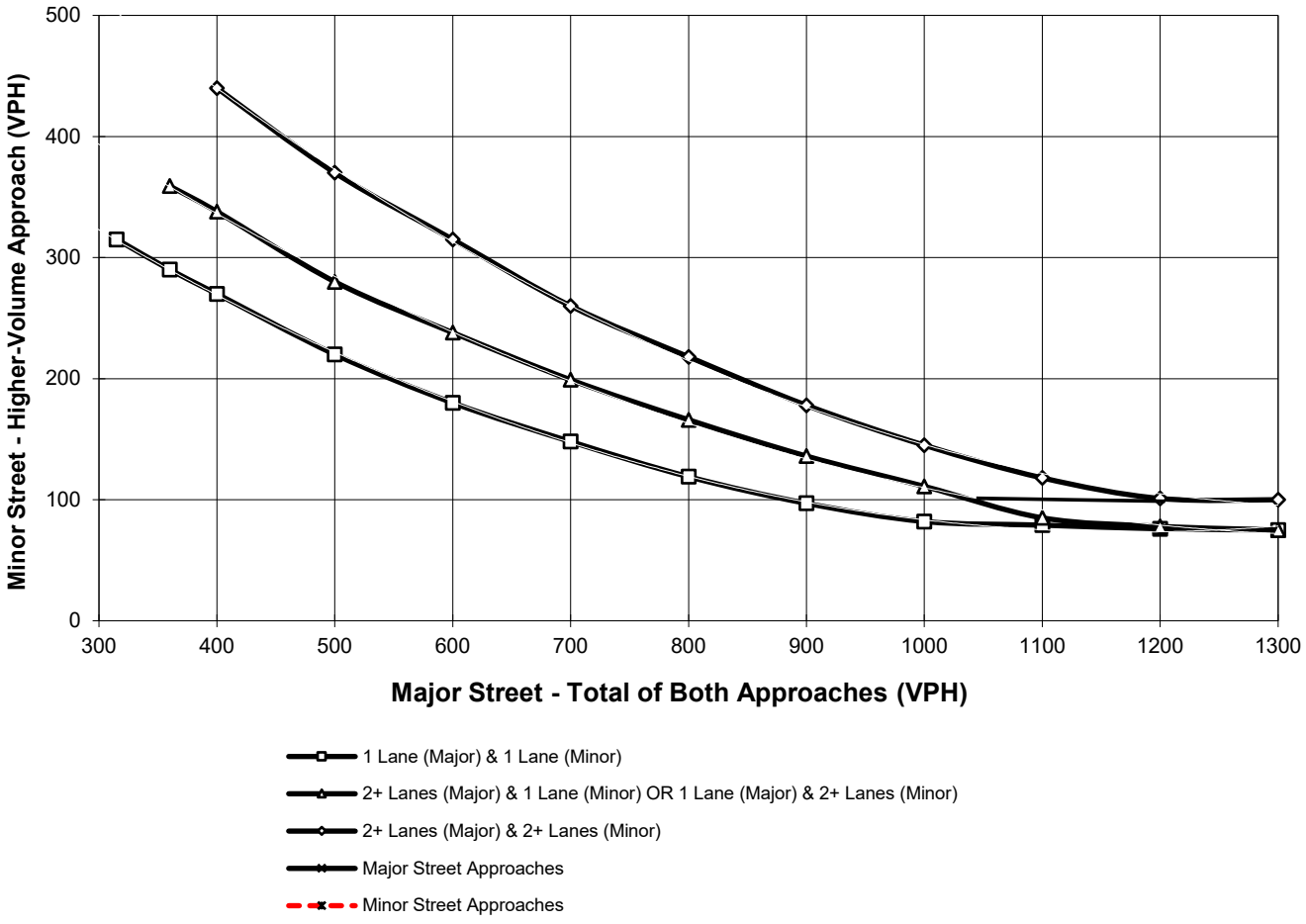
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2024) Conditions - Weekday AM Peak Hour**

Major Street Name = **8th St.**
Total of Both Approaches (VPH) = **143**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Congress St.**
High Volume Approach (VPH) = **113**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

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

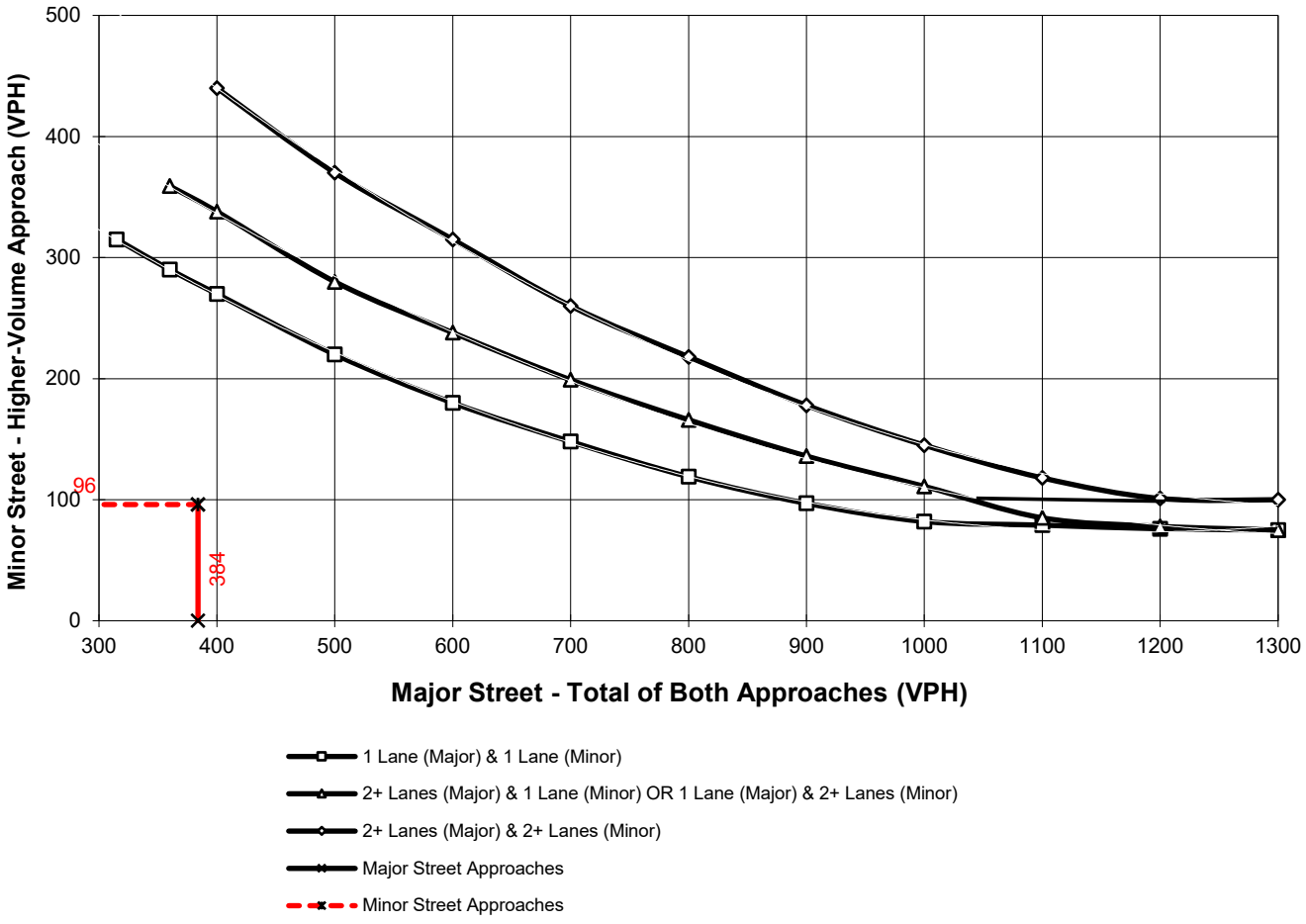
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2024) Conditions - Weekday AM Peak Hour**

Major Street Name = **M St.**
Total of Both Approaches (VPH) = **384**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Fogg St.**
High Volume Approach (VPH) = **96**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

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

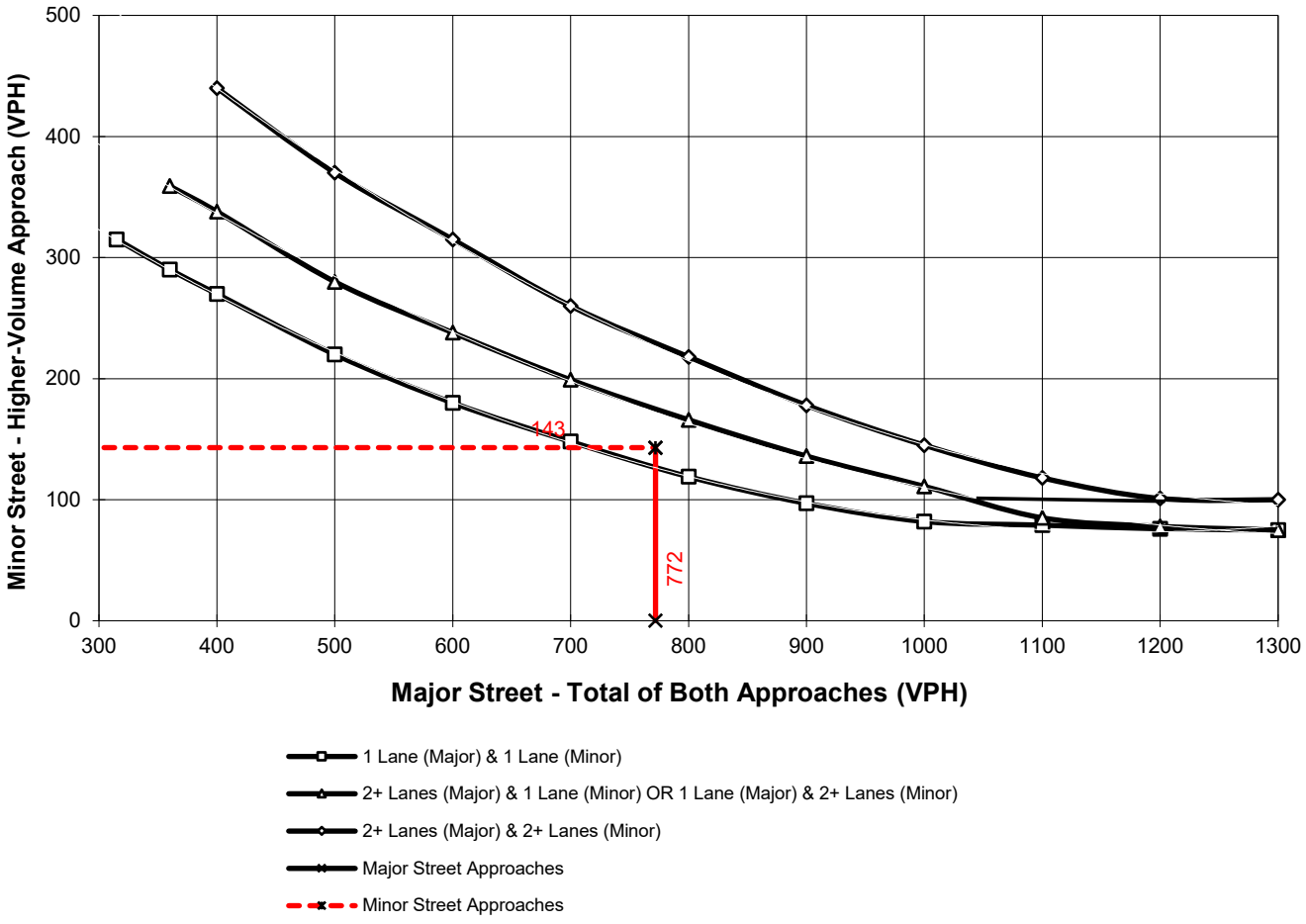
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2024) Conditions - Weekday AM Peak Hour**

Major Street Name = **Mt. Vernon Av.** Total of Both Approaches (VPH) = **772**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Laurel St.** High Volume Approach (VPH) = **143**
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

APPENDIX 3.4:

EXISTING (2024) INTERSECTION ANALYSIS WITH IMPROVEMENTS

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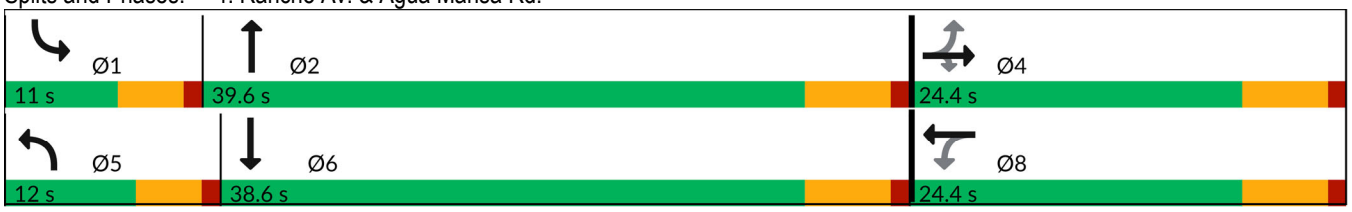
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	220	22	71	10	46	97	308	32	759
Future Volume (vph)	220	22	71	10	46	97	308	32	759
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4			8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	4	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.8	23.8	23.8	23.8	23.8	9.6	27.8	9.6	23.8
Total Split (s)	24.4	24.4	24.4	24.4	24.4	12.0	39.6	11.0	38.6
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	16.0%	52.8%	14.7%	51.5%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.8	4.6	5.8
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	16.9	16.9	16.9		16.6	7.2	33.0	6.0	30.2
Actuated g/C Ratio	0.25	0.25	0.25		0.24	0.11	0.48	0.09	0.44
v/c Ratio	0.78	0.06	0.19		0.26	0.66	0.23	0.27	0.86
Control Delay (s/veh)	44.5	22.1	4.2		24.8	54.4	11.5	37.4	24.0
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.5	22.1	4.2		24.8	54.4	11.5	37.4	24.0
LOS	D	C	A		C	D	B	D	C
Approach Delay (s/veh)		33.8			24.8		21.4		24.4
Approach LOS		C			C		C		C

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 68.1	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 25.3	Intersection LOS: C
Intersection Capacity Utilization 74.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: Rancho Av. & Agua Mansa Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	22	71	10	46	33	97	308	15	32	759	331
Future Volume (veh/h)	220	22	71	10	46	33	97	308	15	32	759	331
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.97	0.98		0.99	1.00		1.00	1.00		0.96
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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	253	25	82	11	53	38	111	354	17	37	872	380
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	404	405	334	75	217	138	137	1616	77	59	1004	434
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.09	0.49	0.49	0.04	0.45	0.45
Sat Flow, veh/h	1220	1772	1462	69	951	606	1594	3270	157	1594	2256	975
Grp Volume(v), veh/h	253	25	82	102	0	0	111	182	189	37	649	603
Grp Sat Flow(s),veh/h/ln	1220	1772	1462	1625	0	0	1594	1683	1743	1594	1683	1548
Q Serve(g_s), s	8.9	0.7	3.1	0.0	0.0	0.0	4.6	4.1	4.2	1.5	23.5	23.9
Cycle Q Clear(g_c), s	12.3	0.7	3.1	3.4	0.0	0.0	4.6	4.1	4.2	1.5	23.5	23.9
Prop In Lane	1.00		1.00	0.11		0.37	1.00		0.09	1.00		0.63
Lane Grp Cap(c), veh/h	404	405	334	430	0	0	137	832	861	59	749	689
V/C Ratio(X)	0.63	0.06	0.25	0.24	0.00	0.00	0.81	0.22	0.22	0.63	0.87	0.88
Avail Cap(c_a), veh/h	462	489	404	506	0	0	175	844	874	151	819	753
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	20.3	21.3	21.4	0.0	0.0	30.3	9.7	9.7	32.0	16.9	17.0
Incr Delay (d2), s/veh	2.2	0.1	0.4	0.3	0.0	0.0	15.5	0.1	0.1	4.0	9.1	10.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.3	1.0	1.2	0.0	0.0	2.2	1.2	1.3	0.6	9.1	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.6	20.4	21.6	21.7	0.0	0.0	45.8	9.8	9.8	36.0	26.0	27.6
LnGrp LOS	C	C	C	C			D	A	A	D	C	C
Approach Vol, veh/h		360			102			482			1289	
Approach Delay, s/veh		25.1			21.7			18.1			27.0	
Approach LOS		C			C			B			C	

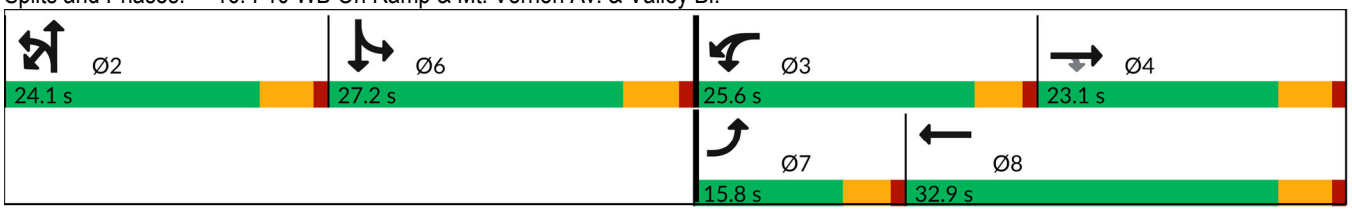
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	39.1		21.2	10.4	35.8		21.2				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		5.8				
Max Green Setting (Gmax), s	6.4	33.8		18.6	7.4	32.8		18.6				
Max Q Clear Time (g_c+I1), s	3.5	6.2		14.3	6.6	25.9		5.4				
Green Ext Time (p_c), s	0.0	1.9		0.5	0.0	4.1		0.3				

Intersection Summary		
HCM 7th Control Delay, s/veh	24.5	
HCM 7th LOS	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	74	61	60	34	108	231	4	268
Future Volume (vph)	74	61	60	34	108	231	4	268
Turn Type	Prot	NA	Perm	Prot	NA	NA	Split	NA
Protected Phases	7	4		3	8	2	6	6
Permitted Phases			4					
Detector Phase	7	4	4	3	8	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	23.1	23.1	9.6	25.1	23.1	23.1	23.1
Total Split (s)	15.8	23.1	23.1	25.6	32.9	24.1	27.2	27.2
Total Split (%)	15.8%	23.1%	23.1%	25.6%	32.9%	24.1%	27.2%	27.2%
Yellow Time (s)	3.6	4.1	4.1	3.6	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	4.6	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	8.5	11.1	11.1	17.3	18.2	16.6	19.9	19.9
Actuated g/C Ratio	0.11	0.14	0.14	0.21	0.22	0.21	0.25	0.25
v/c Ratio	0.48	0.27	0.19	0.75	0.35	0.71	0.01	0.76
Control Delay (s/veh)	48.3	40.2	1.2	47.8	30.5	38.3	27.3	37.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.3	40.2	1.2	47.8	30.5	38.3	27.3	37.0
LOS	D	D	A	D	C	D	C	D
Approach Delay (s/veh)		30.7			41.7	38.3		37.0
Approach LOS		C			D	D		D

Intersection Summary		
Cycle Length: 100		
Actuated Cycle Length: 80.9		
Natural Cycle: 85		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.76		
Intersection Signal Delay (s/veh): 37.6	Intersection LOS: D	
Intersection Capacity Utilization 69.5%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 16: I-10 WB On Ramp & Mt. Vernon Av. & Valley Bl.



Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	74	61	60	4	200	34	108	19	141	45	231	20
Future Volume (vph)	74	61	60	4	200	34	108	19	141	45	231	20
Ideal Flow (vphpl)	1700	1800	1800	1800	1700	1700	1800	1800	1700	1700	1800	1800
Total Lost time (s)	4.6	5.1	5.1			4.6	5.1				5.1	
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00				0.95	
Frt	1.00	1.00	0.85			1.00	0.98				0.99	
Flt Protected	0.95	1.00	1.00			0.95	1.00				0.98	
Satd. Flow (prot)	1583	1765	1500			1583	1724				3260	
Flt Permitted	0.95	1.00	1.00			0.95	1.00				0.98	
Satd. Flow (perm)	1583	1765	1500			1583	1724				3260	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	80	66	65	4	217	37	117	21	153	49	251	22
RTOR Reduction (vph)	0	0	62	0	0	0	7	0	0	0	3	0
Lane Group Flow (vph)	80	66	7	0	0	254	131	0	0	0	472	0
Turn Type	Prot	NA	Perm		Prot	Prot	NA		Split	Split	NA	
Protected Phases	7	4			3	3	8		2	2	2	
Permitted Phases			4									
Actuated Green, G (s)	6.8	7.7	7.7			17.3	18.2				16.6	
Effective Green, g (s)	6.8	7.7	7.7			17.3	18.2				16.6	
Actuated g/C Ratio	0.08	0.09	0.09			0.21	0.22				0.20	
Clearance Time (s)	4.6	5.1	5.1			4.6	5.1				5.1	
Vehicle Extension (s)	2.0	3.0	3.0			2.0	3.0				3.0	
Lane Grp Cap (vph)	132	166	141			336	385				664	
v/s Ratio Prot	0.05	0.04				c0.16	c0.08				c0.14	
v/s Ratio Perm			0.00									
v/c Ratio	0.61	0.40	0.05			0.76	0.34				0.71	
Uniform Delay, d1	36.0	34.7	33.5			30.1	26.6				30.2	
Progression Factor	1.00	1.00	1.00			1.00	1.00				1.00	
Incremental Delay, d2	5.3	1.6	0.1			8.3	0.5				3.6	
Delay (s)	41.3	36.2	33.6			38.4	27.1				33.8	
Level of Service	D	D	C			D	C				C	
Approach Delay (s/veh)		37.3					34.4				33.8	
Approach LOS		D					C				C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	81.4	Sum of lost time (s)	19.9
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

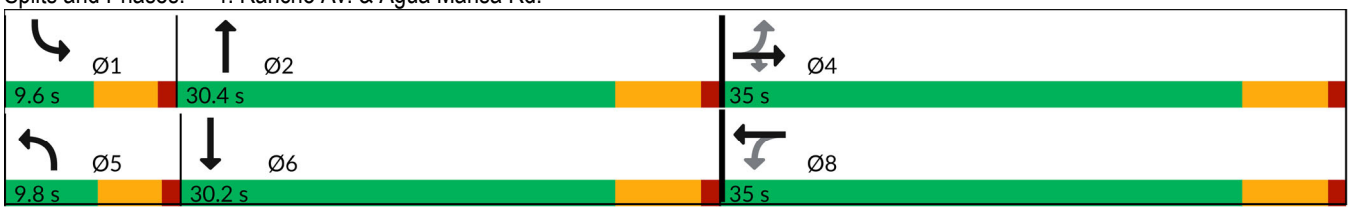
Movement	SBL	SBT	SBR	SBR2
Lane Configurations				
Traffic Volume (vph)	4	268	203	66
Future Volume (vph)	4	268	203	66
Ideal Flow (vphpl)	1700	1800	1800	1800
Total Lost time (s)	5.1	5.1		
Lane Util. Factor	1.00	0.95		
Frt	1.00	0.92		
Flt Protected	0.95	1.00		
Satd. Flow (prot)	1583	3101		
Flt Permitted	0.95	1.00		
Satd. Flow (perm)	1583	3101		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	291	221	72
RTOR Reduction (vph)	0	11	0	0
Lane Group Flow (vph)	4	573	0	0
Turn Type	Split	NA		
Protected Phases	6	6		
Permitted Phases				
Actuated Green, G (s)	19.9	19.9		
Effective Green, g (s)	19.9	19.9		
Actuated g/C Ratio	0.24	0.24		
Clearance Time (s)	5.1	5.1		
Vehicle Extension (s)	3.0	3.0		
Lane Grp Cap (vph)	386	758		
v/s Ratio Prot	0.00	c0.18		
v/s Ratio Perm				
v/c Ratio	0.01	0.76		
Uniform Delay, d1	23.3	28.5		
Progression Factor	1.00	1.00		
Incremental Delay, d2	0.0	4.3		
Delay (s)	23.3	32.8		
Level of Service	C	C		
Approach Delay (s/veh)		32.8		
Approach LOS		C		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	447	47	211	4	41	70	437	4	811
Future Volume (vph)	447	47	211	4	41	70	437	4	811
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4			8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	4	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.8	23.8	23.8	23.8	23.8	9.6	27.8	9.6	23.8
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.8	30.4	9.6	30.2
Total Split (%)	46.7%	46.7%	46.7%	46.7%	46.7%	13.1%	40.5%	12.8%	40.3%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.8	4.6	5.8
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	29.3	29.3	29.3		25.0	5.2	30.1	5.0	24.3
Actuated g/C Ratio	0.40	0.40	0.40		0.34	0.07	0.41	0.07	0.33
v/c Ratio	0.96	0.07	0.29		0.12	0.63	0.32	0.04	0.93
Control Delay (s/veh)	56.9	14.8	3.6		15.3	61.6	15.8	33.5	39.6
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.9	14.8	3.6		15.3	61.6	15.8	33.5	39.6
LOS	E	B	A		B	E	B	C	D
Approach Delay (s/veh)		38.2			15.3		22.1		39.5
Approach LOS		D			B		C		D

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 72.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay (s/veh): 34.6	Intersection LOS: C
Intersection Capacity Utilization 82.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: Rancho Av. & Agua Mansa Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	447	47	211	4	41	23	70	437	2	4	811	207
Future Volume (veh/h)	447	47	211	4	41	23	70	437	2	4	811	207
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	456	48	171	4	42	12	71	446	1	4	828	189
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	593	672	569	71	491	132	87	1326	3	9	914	209
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.05	0.38	0.38	0.01	0.34	0.34
Sat Flow, veh/h	1275	1772	1502	43	1295	349	1594	3446	8	1594	2722	621
Grp Volume(v), veh/h	456	48	171	58	0	0	71	218	229	4	512	505
Grp Sat Flow(s),veh/h/ln	1275	1772	1502	1687	0	0	1594	1683	1771	1594	1683	1660
Q Serve(g_s), s	22.1	1.2	5.6	0.0	0.0	0.0	3.1	6.4	6.4	0.2	20.4	20.4
Cycle Q Clear(g_c), s	23.7	1.2	5.6	1.5	0.0	0.0	3.1	6.4	6.4	0.2	20.4	20.4
Prop In Lane	1.00		1.00	0.07		0.21	1.00		0.00	1.00		0.37
Lane Grp Cap(c), veh/h	593	672	569	694	0	0	87	648	681	9	565	557
V/C Ratio(X)	0.77	0.07	0.30	0.08	0.00	0.00	0.82	0.34	0.34	0.47	0.91	0.91
Avail Cap(c_a), veh/h	640	737	625	755	0	0	118	648	681	114	585	577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	13.9	15.3	14.0	0.0	0.0	32.8	15.3	15.3	34.8	22.3	22.3
Incr Delay (d2), s/veh	5.3	0.0	0.3	0.1	0.0	0.0	20.1	0.3	0.3	14.2	17.5	17.7
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	6.9	0.4	1.7	0.5	0.0	0.0	1.6	2.2	2.3	0.1	9.7	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.0	14.0	15.6	14.1	0.0	0.0	52.9	15.6	15.6	49.0	39.8	40.0
LnGrp LOS	C	B	B	B			D	B	B	D	D	D
Approach Vol, veh/h		675			58			518			1021	
Approach Delay, s/veh		22.5			14.1			20.7			39.9	
Approach LOS		C			B			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.0	32.8		32.4	8.4	29.4		32.4				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		5.8				
Max Green Setting (Gmax), s	5.0	24.6		29.2	5.2	24.4		29.2				
Max Q Clear Time (g_c+I1), s	2.2	8.4		25.7	5.1	22.4		3.5				
Green Ext Time (p_c), s	0.0	2.1		0.9	0.0	1.2		0.2				

Intersection Summary		
HCM 7th Control Delay, s/veh	29.7	
HCM 7th LOS	C	

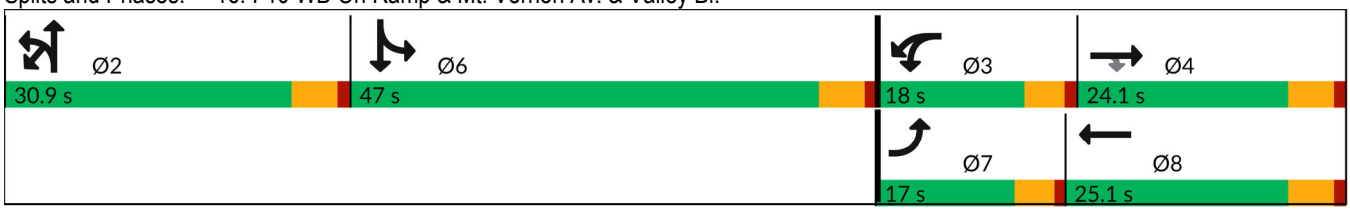
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	169	131	74	42	169	371	10	334
Future Volume (vph)	169	131	74	42	169	371	10	334
Turn Type	Prot	NA	Perm	Prot	NA	NA	Split	NA
Protected Phases	7	4		3	8	2	6	6
Permitted Phases			4					
Detector Phase	7	4	4	3	8	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	23.1	23.1	9.6	25.1	23.1	23.1	23.1
Total Split (s)	17.0	24.1	24.1	18.0	25.1	30.9	47.0	47.0
Total Split (%)	14.2%	20.1%	20.1%	15.0%	20.9%	25.8%	39.2%	39.2%
Yellow Time (s)	3.6	4.1	4.1	3.6	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	4.6	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	12.5	15.1	15.1	13.5	16.1	26.1	28.3	28.3
Actuated g/C Ratio	0.12	0.15	0.15	0.13	0.16	0.25	0.27	0.27
v/c Ratio	0.94	0.54	0.39	1.00	0.72	0.89	0.03	0.79
Control Delay (s/veh)	98.6	50.3	46.9	111.0	57.0	53.0	27.2	40.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	98.6	50.3	46.9	111.0	57.0	53.0	27.2	40.4
LOS	F	D	D	F	E	D	C	D
Approach Delay (s/veh)		71.1			84.8	53.0		40.2
Approach LOS		E			F	D		D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.1	
Natural Cycle: 95	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay (s/veh): 58.0	Intersection LOS: E
Intersection Capacity Utilization 78.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 16: I-10 WB On Ramp & Mt. Vernon Av. & Valley Bl.



Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	169	131	74	6	153	42	169	15	209	76	371	39
Future Volume (vph)	169	131	74	6	153	42	169	15	209	76	371	39
Ideal Flow (vphpl)	1700	1800	1800	1800	1700	1700	1800	1800	1700	1700	1800	1800
Total Lost time (s)	4.6	5.1	5.1			4.6	5.1				5.1	
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00				0.95	
Frt	1.00	1.00	0.85			1.00	0.99				0.99	
Flt Protected	0.95	1.00	1.00			0.95	1.00				0.98	
Satd. Flow (prot)	1583	1765	1500			1583	1743				3258	
Flt Permitted	0.95	1.00	1.00			0.95	1.00				0.98	
Satd. Flow (perm)	1583	1765	1500			1583	1743				3258	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	180	139	79	6	163	45	180	16	222	81	395	41
RTOR Reduction (vph)	0	0	0	0	0	0	3	0	0	0	4	0
Lane Group Flow (vph)	180	139	85	0	0	208	193	0	0	0	735	0
Turn Type	Prot	NA	Perm		Prot	Prot	NA		Split	Split	NA	
Protected Phases	7	4			3	3	8		2	2	2	
Permitted Phases			4									
Actuated Green, G (s)	12.5	15.1	15.1			13.5	16.1				26.1	
Effective Green, g (s)	12.5	15.1	15.1			13.5	16.1				26.1	
Actuated g/C Ratio	0.12	0.15	0.15			0.13	0.16				0.25	
Clearance Time (s)	4.6	5.1	5.1			4.6	5.1				5.1	
Vehicle Extension (s)	2.0	3.0	3.0			2.0	3.0				3.0	
Lane Grp Cap (vph)	192	259	220			207	272				826	
v/s Ratio Prot	0.11	0.08				c0.13	c0.11				c0.23	
v/s Ratio Perm			0.06									
v/c Ratio	0.94	0.54	0.39			1.00	0.71				0.89	
Uniform Delay, d1	44.8	40.7	39.7			44.7	41.2				37.0	
Progression Factor	1.00	1.00	1.00			1.00	1.00				1.00	
Incremental Delay, d2	46.4	2.1	1.1			63.8	8.5				11.8	
Delay (s)	91.2	42.8	40.8			108.5	49.7				48.8	
Level of Service	F	D	D			F	D				D	
Approach Delay (s/veh)		64.0					80.0				48.8	
Approach LOS		E					E				D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	54.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	102.9	Sum of lost time (s)	19.9
Intersection Capacity Utilization	78.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2
Lane Configurations				
Traffic Volume (vph)	10	334	188	125
Future Volume (vph)	10	334	188	125
Ideal Flow (vphpl)	1700	1800	1800	1800
Total Lost time (s)	5.1	5.1		
Lane Util. Factor	1.00	0.95		
Frt	1.00	0.93		
Flt Protected	0.95	1.00		
Satd. Flow (prot)	1583	3110		
Flt Permitted	0.95	1.00		
Satd. Flow (perm)	1583	3110		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94
Adj. Flow (vph)	11	355	200	133
RTOR Reduction (vph)	0	20	0	0
Lane Group Flow (vph)	11	668	0	0
Turn Type	Split	NA		
Protected Phases	6	6		
Permitted Phases				
Actuated Green, G (s)	28.3	28.3		
Effective Green, g (s)	28.3	28.3		
Actuated g/C Ratio	0.28	0.28		
Clearance Time (s)	5.1	5.1		
Vehicle Extension (s)	3.0	3.0		
Lane Grp Cap (vph)	435	855		
v/s Ratio Prot	0.01	c0.21		
v/s Ratio Perm				
v/c Ratio	0.03	0.78		
Uniform Delay, d1	27.2	34.4		
Progression Factor	1.00	1.00		
Incremental Delay, d2	0.0	4.7		
Delay (s)	27.3	39.1		
Level of Service	C	D		
Approach Delay (s/veh)		39.0		
Approach LOS		D		

Intersection Summary

APPENDIX 4.1:

WITHOUT PROJECT POST PROCESSING WORKSHEETS

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) Without Project	Analyst:	IA
		Date:	4/9/25

LOCATION: Pepper Av. & Valley Bl.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	271	402	131	48%	295	581	286	97%
	Through	765	634	-131	-17%	776	743	-33	-4%
	Right	81	85	4	5%	165	220	55	33%
	NB Total	1,117	1,121	4	0%	1,236	1,544	308	25%
SOUTH BOUND	Left	94	148	54	57%	115	138	23	20%
	Through	1,151	1,075	-76	-7%	778	691	-87	-11%
	Right	61	135	74	121%	78	138	60	77%
	SB Total	1,306	1,358	52	4%	971	967	-4	0%
EAST BOUND	Left	87	190	103	118%	130	167	37	28%
	Through	181	504	323	178%	365	652	287	79%
	Right	294	485	191	65%	235	312	77	33%
	EB Total	562	1,179	617	110%	730	1,131	401	55%
WEST BOUND	Left	309	314	5	2%	174	187	13	7%
	Through	261	630	369	141%	351	751	400	114%
	Right	42	57	15	36%	77	80	3	4%
	WB Total	612	1,001	389	64%	602	1,018	416	69%
TOTAL ENTERING VOLUME		3,597	4,659	1062	30%	3,539	4,660	1121	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,358	967			
North Leg	Outbound	881	990			
North Leg	**TOTAL**	**2,239**	**1,957**	**13%**	**11%**	**17,533**
South Leg	Inbound	1,121	1,544			
South Leg	Outbound	1,874	1,190			
South Leg	**TOTAL**	**2,995**	**2,734**	**13%**	**12%**	**23,279**
East Leg	Inbound	1,001	1,018			
East Leg	Outbound	737	1,010			
East Leg	**TOTAL**	**1,738**	**2,028**	**8%**	**9%**	**22,117**
West Leg	Inbound	1,179	1,131			
West Leg	Outbound	1,167	1,470			
West Leg	**TOTAL**	**2,346**	**2,601**	**7%**	**8%**	**33,702**
OVERALL TOTAL		***9,318***	***9,320***	**10%**	***10%***	***96,630***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) Without Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Rancho Av. & Citrus St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	36	66	30	83%	98	154	56	57%
	Through	346	324	-22	-6%	716	676	-40	-6%
	Right	65	74	9	14%	57	54	-3	-5%
	NB Total	447	464	17	4%	871	884	13	1%
SOUTH BOUND	Left	31	39	8	26%	14	10	-4	-29%
	Through	595	581	-14	-2%	553	540	-13	-2%
	Right	12	24	12	100%	30	35	5	17%
	SB Total	638	644	6	1%	597	585	-12	-2%
EAST BOUND	Left	23	34	11	48%	13	21	8	62%
	Through	26	47	21	81%	10	16	6	60%
	Right	119	170	51	43%	72	164	92	128%
	EB Total	168	251	83	49%	95	201	106	112%
WEST BOUND	Left	72	70	-2	-3%	46	96	50	109%
	Through	15	30	15	100%	21	52	31	148%
	Right	21	21	0	0%	29	43	14	48%
	WB Total	108	121	13	12%	96	191	95	99%
TOTAL ENTERING VOLUME		1,361	1,480	119	9%	1,659	1,861	202	12%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	644	585			
North Leg	Outbound	379	740			
North Leg	**TOTAL**	**1,023**	**1,325**	**8%**	**11%**	**12,179**
South Leg	Inbound	464	884			
South Leg	Outbound	821	800			
South Leg	**TOTAL**	**1,285**	**1,684**	**8%**	**11%**	**15,930**
East Leg	Inbound	121	191			
East Leg	Outbound	160	80			
East Leg	**TOTAL**	**281**	**271**	**14%**	**14%**	**1,995**
West Leg	Inbound	251	201			
West Leg	Outbound	120	241			
West Leg	**TOTAL**	**371**	**442**	**10%**	**12%**	**3,748**
OVERALL TOTAL		***2,960***	***3,722***	**9%**	***11%***	***33,853***

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Project: Colton Housing Element
Scenario: Horizon Year (2050) Without Project

Job #: 16031
Analyst: IA
Date: 4/9/25

LOCATION: Rancho Av. & N St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	545	659	114	21%	905	1,028	123	14%
	Right	1	12	11	1100%	10	46	36	360%
	NB Total	546	671	125	23%	915	1,074	159	17%
SOUTH BOUND	Left	43	68	25	58%	107	144	37	35%
	Through	1,111	1,304	193	17%	997	1,164	167	17%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	1,154	1,372	218	19%	1,104	1,308	204	18%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	16	126	110	688%	9	36	27	300%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	58	61	3	5%	54	62	8	15%
	WB Total	74	187	113	153%	63	98	35	56%
TOTAL ENTERING VOLUME		1,774	2,230	456	26%	2,082	2,480	398	19%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,372	1,308			
North Leg	Outbound	720	1,090			
North Leg	**TOTAL**	**2,092**	**2,398**	**9%**	**10%**	**23,459**
South Leg	Inbound	671	1,074			
South Leg	Outbound	1,430	1,200			
South Leg	**TOTAL**	**2,101**	**2,274**	**9%**	**9%**	**23,945**
East Leg	Inbound	187	98			
East Leg	Outbound	80	190			
East Leg	**TOTAL**	**267**	**288**	**10%**	**10%**	**2,785**
West Leg	Inbound	0	0			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
OVERALL TOTAL		***4,460***	***4,960***	**#DIV/0!**	***#DIV/0!***	***#DIV/0!***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) Without Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Rancho Av. & Agua Mansa Rd.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	97	155	58	60%	70	107	37	53%
	Through	308	379	71	23%	437	543	106	24%
	Right	15	15	0	0%	2	2	0	0%
	NB Total	420	549	129	31%	509	652	143	28%
SOUTH BOUND	Left	32	28	-4	-13%	4	3	-1	-25%
	Through	759	947	188	25%	811	955	144	18%
	Right	331	456	125	38%	207	258	51	25%
	SB Total	1,122	1,431	309	28%	1,022	1,216	194	19%
EAST BOUND	Left	220	335	115	52%	447	586	139	31%
	Through	22	27	5	23%	47	45	-2	-4%
	Right	71	127	56	79%	211	321	110	52%
	EB Total	313	489	176	56%	705	952	247	35%
WEST BOUND	Left	10	10	0	0%	4	4	0	0%
	Through	46	51	5	11%	41	45	4	10%
	Right	33	28	-5	-15%	23	21	-2	-9%
	WB Total	89	89	0	0%	68	70	2	3%
TOTAL ENTERING VOLUME		1,944	2,558	614	32%	2,304	2,890	586	25%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,431	1,216			
North Leg	Outbound	742	1,150			
North Leg	**TOTAL**	**2,173**	**2,366**	**9%**	**10%**	**24,249**
South Leg	Inbound	549	652			
South Leg	Outbound	1,084	1,280			
South Leg	**TOTAL**	**1,633**	**1,932**	**8%**	**10%**	**19,271**
East Leg	Inbound	89	70			
East Leg	Outbound	70	50			
East Leg	**TOTAL**	**159**	**120**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	489	952			
West Leg	Outbound	662	410			
West Leg	**TOTAL**	**1,151**	**1,362**	**8%**	**9%**	**15,323**
OVERALL TOTAL		***5,116***	***5,780***	**9%**	***10%***	***58,843***

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Project: Colton Housing Element
Scenario: Horizon Year (2050) Without Project

Job #: 16031
Analyst: IA
Date: 3/17/25

LOCATION: 5th St. & K St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH	Left	6	10	4	67%	18	20	2	11%
BOUND	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	6	10	4	67%	18	20	2	11%
SOUTH	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
BOUND	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	1	0	-1	-100%	0	0	0	#DIV/0!
	SB Total	1	0	-1	-100%	0	0	0	#DIV/0!
EAST	Left	0	0	0	#DIV/0!	1	0	-1	-100%
BOUND	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	11	10	-1	-9%	7	10	3	43%
	EB Total	11	10	-1	-9%	8	10	2	25%
WEST	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
BOUND	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		18	20	2	11%	26	30	4	15%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	0	0			
North Leg	Outbound	0	0			
North Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
South Leg	Inbound	10	20			
South Leg	Outbound	10	10			
South Leg	**TOTAL**	**20**	**30**	**10%**	**15%**	**205**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	10	10			
West Leg	Outbound	10	20			
West Leg	**TOTAL**	**20**	**30**	**9%**	**14%**	**213**
OVERALL TOTAL		***40***	***60***	**10%**	***14%***	***418***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) Without Project	Analyst:	IA
		Date:	3/17/25

LOCATION: La Cadena Dr. & M St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	6	9	3	50%	6	8	2	33%
	Through	543	722	179	33%	690	929	239	35%
	Right	53	40	-13	-25%	76	56	-20	-26%
	NB Total	602	771	169	28%	772	993	221	29%
SOUTH BOUND	Left	54	27	-27	-50%	86	48	-38	-44%
	Through	666	1,000	334	50%	714	926	212	30%
	Right	8	8	0	0%	16	16	0	0%
	SB Total	728	1,035	307	42%	816	990	174	21%
EAST BOUND	Left	11	9	-2	-18%	18	21	3	17%
	Through	6	3	-3	-50%	9	6	-3	-33%
	Right	6	9	3	50%	3	4	1	33%
	EB Total	23	21	-2	-9%	30	31	1	3%
WEST BOUND	Left	63	62	-1	-2%	96	80	-16	-17%
	Through	4	3	-1	-25%	9	6	-3	-33%
	Right	50	29	-21	-42%	136	90	-46	-34%
	WB Total	117	94	-23	-20%	241	176	-65	-27%
TOTAL ENTERING VOLUME		1,470	1,921	451	31%	1,859	2,190	331	18%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,035	990			
North Leg	Outbound	760	1,040			
North Leg	**TOTAL**	**1,795**	**2,030**	**9%**	**10%**	**19,360**
South Leg	Inbound	771	993			
South Leg	Outbound	1,071	1,010			
South Leg	**TOTAL**	**1,842**	**2,003**	**10%**	**10%**	**19,312**
East Leg	Inbound	94	176			
East Leg	Outbound	70	110			
East Leg	**TOTAL**	**164**	**286**	**7%**	**13%**	**2,250**
West Leg	Inbound	21	31			
West Leg	Outbound	20	30			
West Leg	**TOTAL**	**41**	**61**	**#DIV/0!**	**#DIV/0!**	**-**
OVERALL TOTAL		***3,842***	***4,380***	**9%**	***11%***	***40,922***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) Without Project	Analyst:	IA
		Date:	3/17/25

LOCATION: La Cadena Dr. & O St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH	Left	2	3	1	50%	5	7	2	40%
BOUND	Through	462	517	55	12%	735	812	77	10%
	Right	26	37	11	42%	14	29	15	107%
	NB Total	490	557	67	14%	754	848	94	12%
SOUTH	Left	102	93	-9	-9%	81	81	0	0%
BOUND	Through	668	833	165	25%	745	925	180	24%
	Right	8	7	-1	-13%	11	8	-3	-27%
	SB Total	778	933	155	20%	837	1,014	177	21%
EAST	Left	1	0	-1	-100%	4	6	2	50%
BOUND	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	2	0	-2	-100%	1	4	3	300%
	EB Total	3	0	-3	-100%	5	10	5	100%
WEST	Left	13	27	14	108%	4	12	8	200%
BOUND	Through	0	0	0	#DIV/0!	3	5	2	67%
	Right	27	33	6	22%	33	42	9	27%
	WB Total	40	60	20	50%	40	59	19	48%
TOTAL ENTERING VOLUME		1,311	1,550	239	18%	1,636	1,931	295	18%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	933	1,014			
North Leg	Outbound	550	860			
North Leg	**TOTAL**	**1,483**	**1,874**	**8%**	**10%**	**17,979**
South Leg	Inbound	557	848			
South Leg	Outbound	860	941			
South Leg	**TOTAL**	**1,417**	**1,789**	**8%**	**10%**	**17,916**
East Leg	Inbound	60	59			
East Leg	Outbound	130	110			
East Leg	**TOTAL**	**190**	**169**	**14%**	**13%**	**1,351**
West Leg	Inbound	0	10			
West Leg	Outbound	10	20			
West Leg	**TOTAL**	**10**	**30**	**#DIV/0!**	**#DIV/0!**	**-**
OVERALL TOTAL		***3,100***	***3,862***	***8%***	***10%***	***37,246***

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Project: Colton Housing Element
Scenario: Horizon Year (2050) Without Project

Job #: 16031
Analyst: IA
Date: 3/17/25

LOCATION: La Cadena Dr. & Rancho Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH	Left	328	439	111	34%	393	481	88	22%
BOUND	Through	447	545	98	22%	567	678	111	20%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	775	984	209	27%	960	1,159	199	21%
SOUTH	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
BOUND	Through	622	756	134	22%	736	929	193	26%
	Right	37	74	37	100%	18	32	14	78%
	SB Total	659	830	171	26%	754	961	207	27%
EAST	Left	21	40	19	90%	61	106	45	74%
BOUND	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	762	957	195	26%	879	1,114	235	27%
	EB Total	783	997	214	27%	940	1,220	280	30%
WEST	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
BOUND	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		2,217	2,811	594	27%	2,654	3,340	686	26%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	830	961			
North Leg	Outbound	585	784			
North Leg	**TOTAL**	**1,415**	**1,745**	**8%**	**10%**	**17,448**
South Leg	Inbound	984	1,159			
South Leg	Outbound	1,713	2,043			
South Leg	**TOTAL**	**2,697**	**3,202**	**9%**	**10%**	**31,375**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
West Leg	Inbound	997	1,220			
West Leg	Outbound	513	513			
West Leg	**TOTAL**	**1,510**	**1,733**	**9%**	**10%**	**17,191**
OVERALL TOTAL		***5,622***	***6,680***	**#DIV/0!**	***#DIV/0!***	***#DIV/0!***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) Without Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Bordwell Av. & La Cadena Dr./Laurel St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	12	14	2	17%	12	18	6	50%
	Through	99	175	76	77%	206	315	109	53%
	Right	16	22	6	38%	19	18	-1	-5%
	NB Total	127	211	84	66%	237	351	114	48%
SOUTH BOUND	Left	31	45	14	45%	21	24	3	14%
	Through	131	266	135	103%	250	417	167	67%
	Right	77	98	21	27%	82	148	66	80%
	SB Total	239	409	170	71%	353	589	236	67%
EAST BOUND	Left	80	96	16	20%	53	98	45	85%
	Through	125	115	-10	-8%	79	90	11	14%
	Right	85	109	24	28%	45	73	28	62%
	EB Total	290	320	30	10%	177	261	84	47%
WEST BOUND	Left	5	8	3	60%	16	18	2	13%
	Through	162	160	-2	-1%	82	98	16	20%
	Right	1	1	0	0%	3	4	1	33%
	WB Total	168	169	1	1%	101	120	19	19%
TOTAL ENTERING VOLUME		824	1,109	285	35%	868	1,321	453	52%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	409	589			
North Leg	Outbound	272	417			
North Leg	**TOTAL**	**681**	**1,006**	**7%**	**11%**	**9,317**
South Leg	Inbound	211	351			
South Leg	Outbound	383	508			
South Leg	**TOTAL**	**594**	**859**	**7%**	**10%**	**8,509**
East Leg	Inbound	169	120			
East Leg	Outbound	182	132			
East Leg	**TOTAL**	**351**	**252**	**14%**	**10%**	**2,473**
West Leg	Inbound	320	261			
West Leg	Outbound	272	264			
West Leg	**TOTAL**	**592**	**525**	**15%**	**13%**	**3,935**
OVERALL TOTAL		***2,218***	***2,642***	**9%**	***11%***	***24,233***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) Without Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Mt. Vernon Av. & Laurel St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH	Left	135	130	-5	-4%	86	102	16	19%
BOUND	Through	273	275	2	1%	532	638	106	20%
	Right	1	0	-1	-100%	1	0	-1	-100%
	NB Total	409	405	-4	-1%	619	740	121	20%
SOUTH	Left	2	0	-2	-100%	1	0	-1	-100%
BOUND	Through	345	524	179	52%	475	632	157	33%
	Right	16	20	4	25%	21	28	7	33%
	SB Total	363	544	181	50%	497	660	163	33%
EAST	Left	16	15	-1	-6%	11	12	1	9%
BOUND	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	124	136	12	10%	95	108	13	14%
	EB Total	140	151	11	8%	106	120	14	13%
WEST	Left	2	0	-2	-100%	1	0	-1	-100%
BOUND	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	1	0	-1	-100%	0	0	0	#DIV/0!
	WB Total	3	0	-3	-100%	1	0	-1	-100%
TOTAL ENTERING VOLUME		915	1,100	185	20%	1,223	1,520	297	24%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	544	660			
North Leg	Outbound	290	650			
North Leg	**TOTAL**	**834**	**1,310**	**7%**	**11%**	**12,250**
South Leg	Inbound	405	740			
South Leg	Outbound	660	740			
South Leg	**TOTAL**	**1,065**	**1,480**	**8%**	**11%**	**13,905**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	151	120			
West Leg	Outbound	150	130			
West Leg	**TOTAL**	**301**	**250**	**13%**	**11%**	**2,231**
OVERALL TOTAL		***2,200***	***3,040***	***8%***	***11%***	***28,386***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) Without Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Mt. Vernon Av. & Colton Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	12	12	0	0%	41	51	10	24%
	Through	393	385	-8	-2%	588	668	80	14%
	Right	67	74	7	10%	136	141	5	4%
	NB Total	472	471	-1	0%	765	860	95	12%
SOUTH BOUND	Left	49	74	25	51%	92	110	18	20%
	Through	494	626	132	27%	507	641	134	26%
	Right	66	89	23	35%	61	89	28	46%
	SB Total	609	789	180	30%	660	840	180	27%
EAST BOUND	Left	33	32	-1	-3%	69	82	13	19%
	Through	121	132	11	9%	225	243	18	8%
	Right	7	6	-1	-14%	22	25	3	14%
	EB Total	161	170	9	6%	316	350	34	11%
WEST BOUND	Left	107	108	1	1%	97	100	3	3%
	Through	176	189	13	7%	222	263	41	18%
	Right	58	63	5	9%	81	87	6	7%
	WB Total	341	360	19	6%	400	450	50	13%
TOTAL ENTERING VOLUME		1,583	1,790	207	13%	2,141	2,500	359	17%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	789	840			
North Leg	Outbound	480	837			
North Leg	**TOTAL**	**1,269**	**1,677**	**8%**	**10%**	**16,107**
South Leg	Inbound	471	860			
South Leg	Outbound	740	766			
South Leg	**TOTAL**	**1,211**	**1,626**	**8%**	**11%**	**15,280**
East Leg	Inbound	360	450			
East Leg	Outbound	280	494			
East Leg	**TOTAL**	**640**	**944**	**7%**	**10%**	**8,996**
West Leg	Inbound	170	350			
West Leg	Outbound	290	403			
West Leg	**TOTAL**	**460**	**753**	**8%**	**12%**	**6,132**
OVERALL TOTAL		***3,580***	***5,000***	***8%***	***11%***	***46,515***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) Without Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Mt. Vernon Av. & Fairway Dr.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	5	5	0	0%	16	21	5	31%
	Through	292	355	63	22%	508	586	78	15%
	Right	66	45	-21	-32%	60	41	-19	-32%
	NB Total	363	405	42	12%	584	648	64	11%
SOUTH BOUND	Left	230	288	58	25%	205	185	-20	-10%
	Through	494	542	48	10%	480	592	112	23%
	Right	12	22	10	83%	21	37	16	76%
	SB Total	736	852	116	16%	706	814	108	15%
EAST BOUND	Left	20	44	24	120%	17	26	9	53%
	Through	58	72	14	24%	95	84	-11	-12%
	Right	13	14	1	8%	17	21	4	24%
	EB Total	91	130	39	43%	129	131	2	2%
WEST BOUND	Left	90	42	-48	-53%	170	148	-22	-13%
	Through	42	33	-9	-21%	144	181	37	26%
	Right	209	198	-11	-5%	360	389	29	8%
	WB Total	341	273	-68	-20%	674	718	44	7%
TOTAL ENTERING VOLUME		1,531	1,660	129	8%	2,093	2,311	218	10%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	852	814			
North Leg	Outbound	597	1,001			
North Leg	**TOTAL**	**1,449**	**1,815**	**9%**	**11%**	**16,728**
South Leg	Inbound	405	648			
South Leg	Outbound	598	761			
South Leg	**TOTAL**	**1,003**	**1,409**	**9%**	**12%**	**11,491**
East Leg	Inbound	273	718			
East Leg	Outbound	405	310			
East Leg	**TOTAL**	**678**	**1,028**	**9%**	**14%**	**7,493**
West Leg	Inbound	130	131			
West Leg	Outbound	60	239			
West Leg	**TOTAL**	**190**	**370**	**6%**	**12%**	**3,215**
OVERALL TOTAL		***3,320***	***4,622***	**9%**	***12%***	***38,928***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) Without Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Mt.Vernon Av. & Valley Bl.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	186	304	118	63%	285	367	82	29%
	Through	231	239	8	3%	371	331	-40	-11%
	Right	20	17	-3	-15%	39	21	-18	-46%
	NB Total	437	560	123	28%	695	719	24	3%
SOUTH BOUND	Left	4	2	-2	-50%	10	5	-5	-50%
	Through	268	234	-34	-13%	334	363	29	9%
	Right	269	313	44	16%	313	342	29	9%
	SB Total	541	549	8	1%	657	710	53	8%
EAST BOUND	Left	74	141	67	91%	169	329	160	95%
	Through	61	95	34	56%	131	157	26	20%
	Right	64	144	80	125%	80	223	143	179%
	EB Total	199	380	181	91%	380	709	329	87%
WEST BOUND	Left	234	214	-20	-9%	195	239	44	23%
	Through	108	131	23	21%	169	208	39	23%
	Right	19	15	-4	-21%	15	13	-2	-13%
	WB Total	361	360	-1	0%	379	460	81	21%
TOTAL ENTERING VOLUME		1,538	1,849	311	20%	2,111	2,598	487	23%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	549	710			
North Leg	Outbound	395	673			
North Leg	**TOTAL**	**944**	**1,383**	**9%**	**13%**	**10,864**
South Leg	Inbound	560	719			
South Leg	Outbound	592	825			
South Leg	**TOTAL**	**1,152**	**1,544**	**9%**	**12%**	**12,453**
East Leg	Inbound	360	460			
East Leg	Outbound	114	183			
East Leg	**TOTAL**	**474**	**643**	**7%**	**9%**	**6,793**
West Leg	Inbound	380	709			
West Leg	Outbound	748	917			
West Leg	**TOTAL**	**1,128**	**1,626**	**5%**	**7%**	**23,877**
OVERALL TOTAL		***3,698***	***5,196***	***7%***	***10%***	***53,986***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) Without Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Mt. Vernon Av. & Washington St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	117	113	-4	-3%	80	80	0	0%
	Through	240	270	30	13%	156	162	6	4%
	Right	494	593	99	20%	751	879	128	17%
	NB Total	851	976	125	15%	987	1,121	134	14%
SOUTH BOUND	Left	247	316	69	28%	474	579	105	22%
	Through	146	141	-5	-3%	361	345	-16	-4%
	Right	66	68	2	3%	83	86	3	4%
	SB Total	459	525	66	14%	918	1,010	92	10%
EAST BOUND	Left	53	56	3	6%	69	67	-2	-3%
	Through	159	180	21	13%	218	237	19	9%
	Right	79	68	-11	-14%	101	86	-15	-15%
	EB Total	291	304	13	4%	388	390	2	1%
WEST BOUND	Left	279	261	-18	-6%	232	215	-17	-7%
	Through	190	189	-1	-1%	186	187	1	1%
	Right	382	443	61	16%	407	427	20	5%
	WB Total	851	893	42	5%	825	829	4	0%
TOTAL ENTERING VOLUME		2,452	2,698	246	10%	3,118	3,350	232	7%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	525	1,010			
North Leg	Outbound	769	656			
North Leg	**TOTAL**	**1,294**	**1,666**	**8%**	**11%**	**15,762**
South Leg	Inbound	976	1,121			
South Leg	Outbound	470	646			
South Leg	**TOTAL**	**1,446**	**1,767**	**10%**	**12%**	**14,240**
East Leg	Inbound	893	829			
East Leg	Outbound	1,089	1,695			
East Leg	**TOTAL**	**1,982**	**2,524**	**9%**	**11%**	**22,527**
West Leg	Inbound	304	390			
West Leg	Outbound	370	353			
West Leg	**TOTAL**	**674**	**743**	**10%**	**11%**	**6,646**
OVERALL TOTAL		***5,396***	***6,700***	**9%**	***11%***	***59,175***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) Without Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Reche Canyon Rd. & Washington St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	608	717	109	18%	540	650	110	20%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	893	1,054	161	18%	457	619	162	35%
	NB Total	1,501	1,771	270	18%	997	1,269	272	27%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,073	1,236	163	15%	560	668	108	19%
	Right	270	414	144	53%	837	1,082	245	29%
	EB Total	1,343	1,650	307	23%	1,397	1,750	353	25%
WEST BOUND	Left	412	606	194	47%	461	521	60	13%
	Through	771	853	82	11%	279	259	-20	-7%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	1,183	1,459	276	23%	740	780	40	5%
TOTAL ENTERING VOLUME		4,027	4,880	853	21%	3,134	3,799	665	21%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	0	0			
North Leg	Outbound	0	0			
North Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
South Leg	Inbound	1,771	1,269			
South Leg	Outbound	1,020	1,603			
South Leg	**TOTAL**	**2,791**	**2,872**	**9%**	**10%**	**29,590**
East Leg	Inbound	1,459	780			
East Leg	Outbound	2,290	1,287			
East Leg	**TOTAL**	**3,749**	**2,067**	**20%**	**11%**	**18,843**
West Leg	Inbound	1,650	1,750			
West Leg	Outbound	1,570	909			
West Leg	**TOTAL**	**3,220**	**2,659**	**14%**	**11%**	**23,786**
OVERALL TOTAL		***9,760***	***7,598***	**#DIV/0!**	***#DIV/0!***	***#DIV/0!***

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APPENDIX 4.2:

WITH PROJECT POST PROCESSING WORKSHEETS

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Pepper Av. & Valley Bl.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	271	401	130	48%	295	583	288	98%
	Through	765	636	-129	-17%	776	746	-30	-4%
	Right	81	85	4	5%	165	225	60	36%
	NB Total	1,117	1,122	5	0%	1,236	1,554	318	26%
SOUTH BOUND	Left	94	147	53	56%	115	139	24	21%
	Through	1,151	1,077	-74	-6%	778	691	-87	-11%
	Right	61	135	74	121%	78	137	59	76%
	SB Total	1,306	1,359	53	4%	971	967	-4	0%
EAST BOUND	Left	87	189	102	117%	130	164	34	26%
	Through	181	497	316	175%	365	656	291	80%
	Right	294	483	189	64%	235	310	75	32%
	EB Total	562	1,169	607	108%	730	1,130	400	55%
WEST BOUND	Left	309	319	10	3%	174	189	15	9%
	Through	261	635	374	143%	351	750	399	114%
	Right	42	57	15	36%	77	80	3	4%
	WB Total	612	1,011	399	65%	602	1,019	417	69%
TOTAL ENTERING VOLUME		3,597	4,661	1064	30%	3,539	4,670	1131	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,359	967			
North Leg	Outbound	882	990			
North Leg	**TOTAL**	**2,241**	**1,957**	**13%**	**11%**	**17,576**
South Leg	Inbound	1,122	1,554			
South Leg	Outbound	1,879	1,190			
South Leg	**TOTAL**	**3,001**	**2,744**	**13%**	**12%**	**23,388**
East Leg	Inbound	1,011	1,019			
East Leg	Outbound	729	1,020			
East Leg	**TOTAL**	**1,740**	**2,039**	**8%**	**9%**	**22,346**
West Leg	Inbound	1,169	1,130			
West Leg	Outbound	1,171	1,470			
West Leg	**TOTAL**	**2,340**	**2,600**	**7%**	**8%**	**33,937**
OVERALL TOTAL		***9,322***	***9,340***	**10%**	***10%***	***97,247***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Rancho Av. & Citrus St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	36	67	31	86%	98	151	53	54%
	Through	346	325	-21	-6%	716	682	-34	-5%
	Right	65	75	10	15%	57	53	-4	-7%
	NB Total	447	467	20	4%	871	886	15	2%
SOUTH BOUND	Left	31	38	7	23%	14	10	-4	-29%
	Through	595	577	-18	-3%	553	546	-7	-1%
	Right	12	23	11	92%	30	37	7	23%
	SB Total	638	638	0	0%	597	593	-4	-1%
EAST BOUND	Left	23	34	11	48%	13	23	10	77%
	Through	26	47	21	81%	10	17	7	70%
	Right	119	172	53	45%	72	161	89	124%
	EB Total	168	253	85	51%	95	201	106	112%
WEST BOUND	Left	72	71	-1	-1%	46	93	47	102%
	Through	15	30	15	100%	21	53	32	152%
	Right	21	21	0	0%	29	45	16	55%
	WB Total	108	122	14	13%	96	191	95	99%
TOTAL ENTERING VOLUME		1,361	1,480	119	9%	1,659	1,871	212	13%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	638	593			
North Leg	Outbound	380	750			
North Leg	**TOTAL**	**1,018**	**1,343**	**8%**	**11%**	**12,209**
South Leg	Inbound	467	886			
South Leg	Outbound	820	800			
South Leg	**TOTAL**	**1,287**	**1,686**	**8%**	**10%**	**16,062**
East Leg	Inbound	122	191			
East Leg	Outbound	160	80			
East Leg	**TOTAL**	**282**	**271**	**14%**	**14%**	**2,000**
West Leg	Inbound	253	201			
West Leg	Outbound	120	241			
West Leg	**TOTAL**	**373**	**442**	**10%**	**12%**	**3,768**
OVERALL TOTAL		***2,960***	***3,742***	**9%**	***11%***	***34,039***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Rancho Av. & N St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	545	655	110	20%	905	1,042	137	15%
	Right	1	11	10	1000%	10	43	33	330%
	NB Total	546	666	120	22%	915	1,085	170	19%
SOUTH BOUND	Left	43	69	26	60%	107	147	40	37%
	Through	1,111	1,309	198	18%	997	1,160	163	16%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	1,154	1,378	224	19%	1,104	1,307	203	18%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	16	121	105	656%	9	30	21	233%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	58	65	7	12%	54	58	4	7%
	WB Total	74	186	112	151%	63	88	25	40%
TOTAL ENTERING VOLUME		1,774	2,230	456	26%	2,082	2,480	398	19%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,378	1,307			
North Leg	Outbound	720	1,100			
North Leg	**TOTAL**	**2,098**	**2,407**	**9%**	**10%**	**23,561**
South Leg	Inbound	666	1,085			
South Leg	Outbound	1,430	1,190			
South Leg	**TOTAL**	**2,096**	**2,275**	**9%**	**10%**	**23,919**
East Leg	Inbound	186	88			
East Leg	Outbound	80	190			
East Leg	**TOTAL**	**266**	**278**	**9%**	**10%**	**2,801**
West Leg	Inbound	0	0			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
OVERALL TOTAL		***4,460***	***4,960***	**#DIV/0!**	***#DIV/0!***	***#DIV/0!***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Rancho Av. & Agua Mansa Rd.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	97	148	51	53%	70	105	35	50%
	Through	308	376	68	22%	437	545	108	25%
	Right	15	15	0	0%	2	2	0	0%
	NB Total	420	539	119	28%	509	652	143	28%
SOUTH BOUND	Left	32	29	-3	-9%	4	3	-1	-25%
	Through	759	947	188	25%	811	952	141	17%
	Right	331	466	135	41%	207	260	53	26%
	SB Total	1,122	1,442	320	29%	1,022	1,215	193	19%
EAST BOUND	Left	220	340	120	55%	447	594	147	33%
	Through	22	27	5	23%	47	45	-2	-4%
	Right	71	122	51	72%	211	314	103	49%
	EB Total	313	489	176	56%	705	953	248	35%
WEST BOUND	Left	10	10	0	0%	4	4	0	0%
	Through	46	51	5	11%	41	45	4	10%
	Right	33	29	-4	-12%	23	21	-2	-9%
	WB Total	89	90	1	1%	68	70	2	3%
TOTAL ENTERING VOLUME		1,944	2,560	616	32%	2,304	2,890	586	25%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,442	1,215			
North Leg	Outbound	745	1,160			
North Leg	**TOTAL**	**2,187**	**2,375**	**9%**	**10%**	**24,229**
South Leg	Inbound	539	652			
South Leg	Outbound	1,079	1,270			
South Leg	**TOTAL**	**1,618**	**1,922**	**8%**	**10%**	**19,092**
East Leg	Inbound	90	70			
East Leg	Outbound	71	50			
East Leg	**TOTAL**	**161**	**120**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	489	953			
West Leg	Outbound	665	410			
West Leg	**TOTAL**	**1,154**	**1,363**	**8%**	**9%**	**15,360**
OVERALL TOTAL		***5,120***	***5,780***	**9%**	***10%***	***58,681***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: 5th St. & K St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	6	10	4	67%	18	20	2	11%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	6	10	4	67%	18	20	2	11%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	1	0	-1	-100%	0	0	0	#DIV/0!
	SB Total	1	0	-1	-100%	0	0	0	#DIV/0!
EAST BOUND	Left	0	0	0	#DIV/0!	1	0	-1	-100%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	11	10	-1	-9%	7	10	3	43%
	EB Total	11	10	-1	-9%	8	10	2	25%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		18	20	2	11%	26	30	4	15%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	0	0			
North Leg	Outbound	0	0			
North Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
South Leg	Inbound	10	20			
South Leg	Outbound	10	10			
South Leg	**TOTAL**	**20**	**30**	**9%**	**14%**	**212**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	10	10			
West Leg	Outbound	10	20			
West Leg	**TOTAL**	**20**	**30**	**9%**	**14%**	**221**
OVERALL TOTAL		***40***	***60***	**9%**	***14%***	***433***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: La Cadena Dr. & M St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	6	9	3	50%	6	8	2	33%
	Through	543	741	198	36%	690	939	249	36%
	Right	53	45	-8	-15%	76	61	-15	-20%
	NB Total	602	795	193	32%	772	1,008	236	31%
SOUTH BOUND	Left	54	32	-22	-41%	86	53	-33	-38%
	Through	666	1,001	335	50%	714	936	222	31%
	Right	8	8	0	0%	16	16	0	0%
	SB Total	728	1,041	313	43%	816	1,005	189	23%
EAST BOUND	Left	11	9	-2	-18%	18	21	3	17%
	Through	6	3	-3	-50%	9	6	-3	-33%
	Right	6	8	2	33%	3	4	1	33%
	EB Total	23	20	-3	-13%	30	31	1	3%
WEST BOUND	Left	63	60	-3	-5%	96	80	-16	-17%
	Through	4	3	-1	-25%	9	6	-3	-33%
	Right	50	30	-20	-40%	136	90	-46	-34%
	WB Total	117	93	-24	-21%	241	176	-65	-27%
TOTAL ENTERING VOLUME		1,470	1,949	479	33%	1,859	2,220	361	19%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,041	1,005			
North Leg	Outbound	780	1,050			
North Leg	**TOTAL**	**1,821**	**2,055**	**9%**	**10%**	**19,816**
South Leg	Inbound	795	1,008			
South Leg	Outbound	1,069	1,020			
South Leg	**TOTAL**	**1,864**	**2,028**	**9%**	**10%**	**19,755**
East Leg	Inbound	93	176			
East Leg	Outbound	80	120			
East Leg	**TOTAL**	**173**	**296**	**7%**	**13%**	**2,345**
West Leg	Inbound	20	31			
West Leg	Outbound	20	30			
West Leg	**TOTAL**	**40**	**61**	**#DIV/0!**	**#DIV/0!**	**-**
OVERALL TOTAL		***3,898***	***4,440***	**9%**	***11%***	***41,916***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: La Cadena Dr. & O St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH	Left	2	3	1	50%	5	7	2	40%
BOUND	Through	462	538	76	16%	735	816	81	11%
	Right	26	39	13	50%	14	31	17	121%
	NB Total	490	580	90	18%	754	854	100	13%
SOUTH	Left	102	91	-11	-11%	81	79	-2	-2%
BOUND	Through	668	842	174	26%	745	941	196	26%
	Right	8	7	-1	-13%	11	7	-4	-36%
	SB Total	778	940	162	21%	837	1,027	190	23%
EAST	Left	1	0	-1	-100%	4	6	2	50%
BOUND	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	2	0	-2	-100%	1	4	3	300%
	EB Total	3	0	-3	-100%	5	10	5	100%
WEST	Left	13	28	15	115%	4	15	11	275%
BOUND	Through	0	0	0	#DIV/0!	3	6	3	100%
	Right	27	32	5	19%	33	48	15	45%
	WB Total	40	60	20	50%	40	69	29	73%
TOTAL ENTERING VOLUME		1,311	1,580	269	21%	1,636	1,960	324	20%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	940	1,027			
North Leg	Outbound	570	870			
North Leg	**TOTAL**	**1,510**	**1,897**	**8%**	**10%**	**18,517**
South Leg	Inbound	580	854			
South Leg	Outbound	870	960			
South Leg	**TOTAL**	**1,450**	**1,814**	**8%**	**10%**	**18,476**
East Leg	Inbound	60	69			
East Leg	Outbound	130	110			
East Leg	**TOTAL**	**190**	**179**	**14%**	**13%**	**1,369**
West Leg	Inbound	0	10			
West Leg	Outbound	10	20			
West Leg	**TOTAL**	**10**	**30**	**#DIV/0!**	**#DIV/0!**	**-**
OVERALL TOTAL		***3,160***	***3,920***	***8%***	***10%***	***38,361***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: La Cadena Dr. & Rancho Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	328	428	100	30%	393	479	86	22%
	Through	447	552	105	23%	567	683	116	20%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	775	980	205	26%	960	1,162	202	21%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	622	773	151	24%	736	935	199	27%
	Right	37	69	32	86%	18	34	16	89%
	SB Total	659	842	183	28%	754	969	215	29%
EAST BOUND	Left	21	37	16	76%	61	111	50	82%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	762	942	180	24%	879	1,097	218	25%
	EB Total	783	979	196	25%	940	1,208	268	29%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		2,217	2,801	584	26%	2,654	3,339	685	26%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	842	969			
North Leg	Outbound	589	794			
North Leg	**TOTAL**	**1,431**	**1,763**	**8%**	**10%**	**17,754**
South Leg	Inbound	980	1,162			
South Leg	Outbound	1,715	2,032			
South Leg	**TOTAL**	**2,695**	**3,194**	**9%**	**10%**	**31,511**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
West Leg	Inbound	979	1,208			
West Leg	Outbound	497	513			
West Leg	**TOTAL**	**1,476**	**1,721**	**9%**	**10%**	**17,036**
OVERALL TOTAL		***5,602***	***6,678***	**#DIV/0!**	***#DIV/0!***	***#DIV/0!***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Bordwell Av. & La Cadena Dr./Laurel St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	12	13	1	8%	12	17	5	42%
	Through	99	177	78	79%	206	315	109	53%
	Right	16	21	5	31%	19	18	-1	-5%
	NB Total	127	211	84	66%	237	350	113	48%
SOUTH BOUND	Left	31	46	15	48%	21	25	4	19%
	Through	131	266	135	103%	250	426	176	70%
	Right	77	97	20	26%	82	149	67	82%
	SB Total	239	409	170	71%	353	600	247	70%
EAST BOUND	Left	80	101	21	26%	53	97	44	83%
	Through	125	114	-11	-9%	79	89	10	13%
	Right	85	106	21	25%	45	74	29	64%
	EB Total	290	321	31	11%	177	260	83	47%
WEST BOUND	Left	5	8	3	60%	16	18	2	13%
	Through	162	160	-2	-1%	82	98	16	20%
	Right	1	2	1	100%	3	4	1	33%
	WB Total	168	170	2	1%	101	120	19	19%
TOTAL ENTERING VOLUME		824	1,111	287	35%	868	1,330	462	53%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	409	600			
North Leg	Outbound	280	416			
North Leg	**TOTAL**	**689**	**1,016**	**7%**	**11%**	**9,348**
South Leg	Inbound	211	350			
South Leg	Outbound	380	518			
South Leg	**TOTAL**	**591**	**868**	**7%**	**10%**	**8,555**
East Leg	Inbound	170	120			
East Leg	Outbound	181	132			
East Leg	**TOTAL**	**351**	**252**	**14%**	**10%**	**2,490**
West Leg	Inbound	321	260			
West Leg	Outbound	270	264			
West Leg	**TOTAL**	**591**	**524**	**15%**	**13%**	**3,919**
OVERALL TOTAL		***2,222***	***2,660***	***9%***	***11%***	***24,312***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Mt. Vernon Av. & Laurel St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	135	130	-5	-4%	86	101	15	17%
	Through	273	284	11	4%	532	618	86	16%
	Right	1	0	-1	-100%	1	0	-1	-100%
	NB Total	409	414	5	1%	619	719	100	16%
SOUTH BOUND	Left	2	0	-2	-100%	1	0	-1	-100%
	Through	345	512	167	48%	475	662	187	39%
	Right	16	20	4	25%	21	29	8	38%
	SB Total	363	532	169	47%	497	691	194	39%
EAST BOUND	Left	16	16	0	0%	11	12	1	9%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	124	138	14	11%	95	108	13	14%
	EB Total	140	154	14	10%	106	120	14	13%
WEST BOUND	Left	2	0	-2	-100%	1	0	-1	-100%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	1	0	-1	-100%	0	0	0	#DIV/0!
	WB Total	3	0	-3	-100%	1	0	-1	-100%
TOTAL ENTERING VOLUME		915	1,100	185	20%	1,223	1,530	307	25%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	532	691			
North Leg	Outbound	300	630			
North Leg	**TOTAL**	**832**	**1,321**	**7%**	**11%**	**12,494**
South Leg	Inbound	414	719			
South Leg	Outbound	650	770			
South Leg	**TOTAL**	**1,064**	**1,489**	**8%**	**11%**	**14,173**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	154	120			
West Leg	Outbound	150	130			
West Leg	**TOTAL**	**304**	**250**	**14%**	**11%**	**2,247**
OVERALL TOTAL		***2,200***	***3,060***	***8%***	***11%***	***28,914***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Mt. Vernon Av. & Colton Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	12	12	0	0%	41	52	11	27%
	Through	393	409	16	4%	588	656	68	12%
	Right	67	79	12	18%	136	141	5	4%
	NB Total	472	500	28	6%	765	849	84	11%
SOUTH BOUND	Left	49	72	23	47%	92	107	15	16%
	Through	494	625	131	27%	507	668	161	32%
	Right	66	82	16	24%	61	87	26	43%
	SB Total	609	779	170	28%	660	862	202	31%
EAST BOUND	Left	33	32	-1	-3%	69	80	11	16%
	Through	121	132	11	9%	225	243	18	8%
	Right	7	7	0	0%	22	27	5	23%
	EB Total	161	171	10	6%	316	350	34	11%
WEST BOUND	Left	107	117	10	9%	97	106	9	9%
	Through	176	189	13	7%	222	261	39	18%
	Right	58	65	7	12%	81	84	3	4%
	WB Total	341	371	30	9%	400	451	51	13%
TOTAL ENTERING VOLUME		1,583	1,821	238	15%	2,141	2,512	371	17%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	779	862			
North Leg	Outbound	506	820			
North Leg	**TOTAL**	**1,285**	**1,682**	**8%**	**10%**	**16,416**
South Leg	Inbound	500	849			
South Leg	Outbound	749	801			
South Leg	**TOTAL**	**1,249**	**1,650**	**8%**	**10%**	**15,788**
East Leg	Inbound	371	451			
East Leg	Outbound	283	491			
East Leg	**TOTAL**	**654**	**942**	**7%**	**10%**	**9,042**
West Leg	Inbound	171	350			
West Leg	Outbound	283	400			
West Leg	**TOTAL**	**454**	**750**	**7%**	**12%**	**6,145**
OVERALL TOTAL		***3,642***	***5,024***	**8%**	***11%***	***47,391***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Mt. Vernon Av. & Fairway Dr.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	5	6	1	20%	16	24	8	50%
	Through	292	351	59	20%	508	588	80	16%
	Right	66	55	-11	-17%	60	54	-6	-10%
	NB Total	363	412	49	13%	584	666	82	14%
SOUTH BOUND	Left	230	267	37	16%	205	215	10	5%
	Through	494	560	66	13%	480	603	123	26%
	Right	12	19	7	58%	21	37	16	76%
	SB Total	736	846	110	15%	706	855	149	21%
EAST BOUND	Left	20	40	20	100%	17	21	4	24%
	Through	58	82	24	41%	95	91	-4	-4%
	Right	13	18	5	38%	17	19	2	12%
	EB Total	91	140	49	54%	129	131	2	2%
WEST BOUND	Left	90	69	-21	-23%	170	167	-3	-2%
	Through	42	46	4	10%	144	199	55	38%
	Right	209	236	27	13%	360	381	21	6%
	WB Total	341	351	10	3%	674	747	73	11%
TOTAL ENTERING VOLUME		1,531	1,749	218	14%	2,093	2,399	306	15%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	846	855			
North Leg	Outbound	627	990			
North Leg	**TOTAL**	**1,473**	**1,845**	**8%**	**11%**	**17,347**
South Leg	Inbound	412	666			
South Leg	Outbound	647	789			
South Leg	**TOTAL**	**1,059**	**1,455**	**8%**	**12%**	**12,501**
East Leg	Inbound	351	747			
East Leg	Outbound	404	360			
East Leg	**TOTAL**	**755**	**1,107**	**8%**	**11%**	**9,960**
West Leg	Inbound	140	131			
West Leg	Outbound	71	260			
West Leg	**TOTAL**	**211**	**391**	**5%**	**10%**	**3,857**
OVERALL TOTAL		***3,498***	***4,798***	***8%***	***11%***	***43,664***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Mt.Vernon Av. & Valley Bl.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	186	313	127	68%	285	381	96	34%
	Through	231	246	15	6%	371	377	6	2%
	Right	20	20	0	0%	39	32	-7	-18%
	NB Total	437	579	142	32%	695	790	95	14%
SOUTH BOUND	Left	4	3	-1	-25%	10	7	-3	-30%
	Through	268	270	2	1%	334	402	68	20%
	Right	269	318	49	18%	313	341	28	9%
	SB Total	541	591	50	9%	657	750	93	14%
EAST BOUND	Left	74	129	55	74%	169	325	156	92%
	Through	61	100	39	64%	131	201	70	53%
	Right	64	150	86	134%	80	224	144	180%
	EB Total	199	379	180	90%	380	750	370	97%
WEST BOUND	Left	234	237	3	1%	195	256	61	31%
	Through	108	129	21	19%	169	201	32	19%
	Right	19	14	-5	-26%	15	14	-1	-7%
	WB Total	361	380	19	5%	379	471	92	24%
TOTAL ENTERING VOLUME		1,538	1,929	391	25%	2,111	2,761	650	31%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	591	750			
North Leg	Outbound	389	716			
North Leg	**TOTAL**	**980**	**1,466**	**8%**	**13%**	**11,678**
South Leg	Inbound	579	790			
South Leg	Outbound	657	882			
South Leg	**TOTAL**	**1,236**	**1,672**	**9%**	**12%**	**13,791**
East Leg	Inbound	380	471			
East Leg	Outbound	123	240			
East Leg	**TOTAL**	**503**	**711**	**6%**	**9%**	**8,164**
West Leg	Inbound	379	750			
West Leg	Outbound	760	923			
West Leg	**TOTAL**	**1,139**	**1,673**	**5%**	**7%**	**25,286**
OVERALL TOTAL		***3,858***	***5,522***	***7%***	***9%***	***58,919***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Mt. Vernon Av. & Washington St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	117	109	-8	-7%	80	80	0	0%
	Through	240	262	22	9%	156	166	10	6%
	Right	494	601	107	22%	751	875	124	17%
	NB Total	851	972	121	14%	987	1,121	134	14%
SOUTH BOUND	Left	247	334	87	35%	474	584	110	23%
	Through	146	120	-26	-18%	361	348	-13	-4%
	Right	66	68	2	3%	83	88	5	6%
	SB Total	459	522	63	14%	918	1,020	102	11%
EAST BOUND	Left	53	55	2	4%	69	68	-1	-1%
	Through	159	185	26	16%	218	236	18	8%
	Right	79	56	-23	-29%	101	86	-15	-15%
	EB Total	291	296	5	2%	388	390	2	1%
WEST BOUND	Left	279	224	-55	-20%	232	212	-20	-9%
	Through	190	193	3	2%	186	186	0	0%
	Right	382	453	71	19%	407	432	25	6%
	WB Total	851	870	19	2%	825	830	5	1%
TOTAL ENTERING VOLUME		2,452	2,660	208	8%	3,118	3,361	243	8%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	522	1,020			
North Leg	Outbound	770	666			
North Leg	**TOTAL**	**1,292**	**1,686**	**8%**	**11%**	**15,935**
South Leg	Inbound	972	1,121			
South Leg	Outbound	400	646			
South Leg	**TOTAL**	**1,372**	**1,767**	**13%**	**16%**	**10,821**
East Leg	Inbound	870	830			
East Leg	Outbound	1,120	1,695			
East Leg	**TOTAL**	**1,990**	**2,525**	**9%**	**11%**	**22,608**
West Leg	Inbound	296	390			
West Leg	Outbound	370	354			
West Leg	**TOTAL**	**666**	**744**	**10%**	**11%**	**6,606**
OVERALL TOTAL		***5,320***	***6,722***	**10%**	***12%***	***55,970***

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Project:	Colton Housing Element	Job #:	16031
Scenario:	Horizon Year (2050) With Project	Analyst:	IA
		Date:	3/17/25

LOCATION: Reche Canyon Rd. & Washington St.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	608	721	113	19%	540	658	118	22%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	893	1,040	147	16%	457	611	154	34%
	NB Total	1,501	1,761	260	17%	997	1,269	272	27%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,073	1,240	167	16%	560	669	109	19%
	Right	270	420	150	56%	837	1,081	244	29%
	EB Total	1,343	1,660	317	24%	1,397	1,750	353	25%
WEST BOUND	Left	412	600	188	46%	461	517	56	12%
	Through	771	849	78	10%	279	263	-16	-6%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	1,183	1,449	266	22%	740	780	40	5%
TOTAL ENTERING VOLUME		4,027	4,870	843	21%	3,134	3,799	665	21%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	0	0			
North Leg	Outbound	0	0			
North Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
South Leg	Inbound	1,761	1,269			
South Leg	Outbound	1,020	1,598			
South Leg	**TOTAL**	**2,781**	**2,867**	**9%**	**10%**	**29,474**
East Leg	Inbound	1,449	780			
East Leg	Outbound	2,280	1,280			
East Leg	**TOTAL**	**3,729**	**2,060**	**20%**	**11%**	**18,798**
West Leg	Inbound	1,660	1,750			
West Leg	Outbound	1,570	921			
West Leg	**TOTAL**	**3,230**	**2,671**	**14%**	**11%**	**23,793**
OVERALL TOTAL		***9,740***	***7,598***	**#DIV/0!**	***#DIV/0!***	***#DIV/0!***

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APPENDIX 4.3:

HY (2050) INTERSECTION ANALYSIS WITHOUT PROJECT

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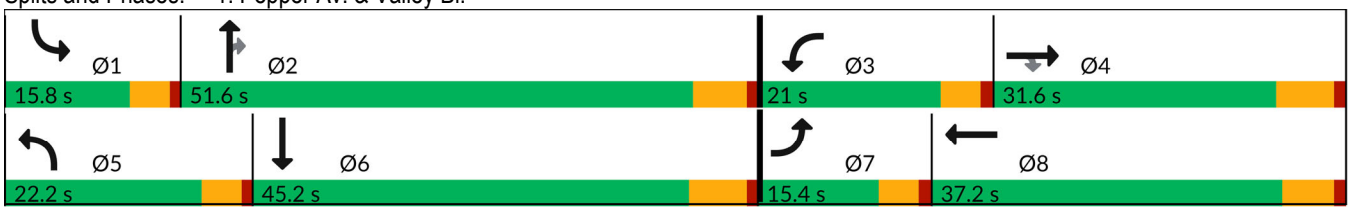
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	190	504	485	371	630	402	918	97	148	1381
Future Volume (vph)	190	504	485	371	630	402	918	97	148	1381
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8	5	2		1	6
Permitted Phases			4					2		
Detector Phase	7	4	4	3	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	30.2	30.2	9.6	29.8	9.6	40.8	40.8	9.6	41.2
Total Split (s)	15.4	31.6	31.6	21.0	37.2	22.2	51.6	51.6	15.8	45.2
Total Split (%)	12.8%	26.3%	26.3%	17.5%	31.0%	18.5%	43.0%	43.0%	13.2%	37.7%
Yellow Time (s)	3.6	5.2	5.2	3.6	4.8	3.6	4.8	4.8	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	5.8	4.6	5.8	5.8	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	10.4	25.4	25.4	16.4	31.8	17.6	47.2	47.2	9.8	39.0
Actuated g/C Ratio	0.09	0.21	0.21	0.14	0.27	0.15	0.39	0.39	0.08	0.33
v/c Ratio	0.75	0.71	0.99	0.93	0.78	0.94	0.48	0.14	0.62	0.97
Control Delay (s/veh)	71.8	49.8	64.9	81.8	47.1	80.9	28.5	1.2	64.3	56.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	71.8	49.8	64.9	81.8	47.1	80.9	28.5	1.2	64.3	56.7
LOS	E	D	E	F	D	F	C	A	E	E
Approach Delay (s/veh)		59.6			59.3		41.5			57.4
Approach LOS		E			E		D			E

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay (s/veh): 54.0	Intersection LOS: D
Intersection Capacity Utilization 86.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Pepper Av. & Valley Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	504	485	371	630	57	402	918	97	148	1381	135
Future Volume (veh/h)	190	504	485	371	630	57	402	918	97	148	1381	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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	1673	1870	1870	1673	1870	1870	1673	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	200	531	300	391	663	43	423	966	68	156	1454	126
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	249	737	329	427	896	58	458	2074	641	206	1553	135
Arrive On Green	0.08	0.21	0.21	0.14	0.26	0.26	0.15	0.41	0.41	0.07	0.32	0.32
Sat Flow, veh/h	3092	3554	1585	3092	3384	219	3092	5106	1579	3092	4785	415
Grp Volume(v), veh/h	200	531	300	391	348	358	423	966	68	156	1034	546
Grp Sat Flow(s),veh/h/ln	1546	1777	1585	1546	1777	1826	1546	1702	1579	1546	1702	1795
Q Serve(g_s), s	7.6	16.5	22.0	14.8	21.3	21.3	16.0	16.5	3.2	5.9	35.0	35.0
Cycle Q Clear(g_c), s	7.6	16.5	22.0	14.8	21.3	21.3	16.0	16.5	3.2	5.9	35.0	35.0
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	249	737	329	427	470	483	458	2074	641	206	1105	583
V/C Ratio(X)	0.80	0.72	0.91	0.92	0.74	0.74	0.92	0.47	0.11	0.76	0.94	0.94
Avail Cap(c_a), veh/h	281	760	339	427	470	483	458	2074	641	291	1117	589
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	53.7	43.9	46.0	50.5	39.9	40.0	49.9	25.8	21.9	54.5	38.9	38.9
Incr Delay (d2), s/veh	12.1	3.2	27.6	23.9	6.1	6.0	24.0	0.2	0.1	3.8	14.1	22.5
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	3.3	7.4	10.8	6.9	9.6	9.9	7.5	6.4	1.1	2.3	15.9	18.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.7	47.1	73.6	74.4	46.0	46.0	74.0	26.0	22.0	58.3	53.0	61.4
LnGrp LOS	E	D	E	E	D	D	E	C	C	E	D	E
Approach Vol, veh/h		1031			1097			1457			1736	
Approach Delay, s/veh		58.4			56.1			39.7			56.1	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	54.5	21.0	30.8	22.2	44.8	14.2	37.7
Change Period (Y+Rc), s	4.6	* 6.2	4.6	6.2	4.6	6.2	4.6	* 6.2
Max Green Setting (Gmax), s	11.2	* 46	16.4	25.4	17.6	39.0	10.8	* 31
Max Q Clear Time (g_c+I1), s	7.9	18.5	16.8	24.0	18.0	37.0	9.6	23.3
Green Ext Time (p_c), s	0.1	7.1	0.0	0.7	0.0	1.5	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	52.1
HCM 7th LOS	D

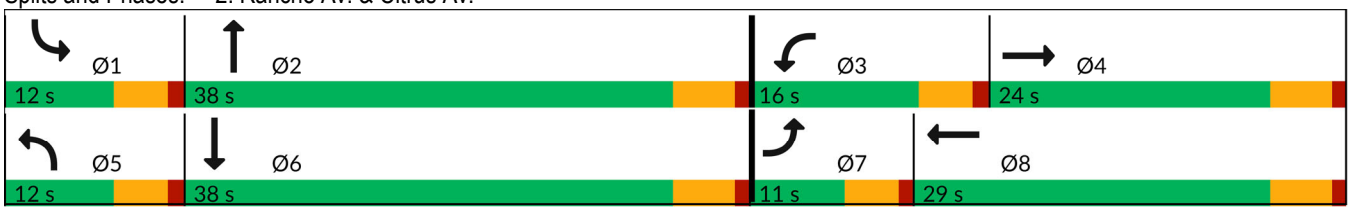
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	34	47	86	30	66	415	39	714
Future Volume (vph)	34	47	86	30	66	415	39	714
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	23.1	9.6	23.1	9.6	23.1	9.6	23.1
Total Split (s)	11.0	24.0	16.0	29.0	12.0	38.0	12.0	38.0
Total Split (%)	12.2%	26.7%	17.8%	32.2%	13.3%	42.2%	13.3%	42.2%
Yellow Time (s)	3.6	4.1	3.6	4.1	3.6	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	4.6	5.1	4.6	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	6.4	12.9	8.7	14.8	7.2	25.6	6.8	23.1
Actuated g/C Ratio	0.10	0.20	0.13	0.22	0.11	0.39	0.10	0.35
v/c Ratio	0.24	0.54	0.45	0.15	0.42	0.42	0.26	0.69
Control Delay (s/veh)	38.9	14.6	38.9	16.7	41.9	16.9	38.3	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.9	14.6	38.9	16.7	41.9	16.9	38.3	23.0
LOS	D	B	D	B	D	B	D	C
Approach Delay (s/veh)		17.9		30.3		19.9		23.8
Approach LOS		B		C		B		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 65.9	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay (s/veh): 22.2	Intersection LOS: C
Intersection Capacity Utilization 59.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Rancho Av. & Citrus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	47	170	86	30	25	66	415	78	39	714	24
Future Volume (veh/h)	34	47	170	86	30	25	66	415	78	39	714	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	39	54	108	99	34	11	76	477	79	45	821	27
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	94	189	125	274	89	106	1076	177	77	1177	39
Arrive On Green	0.04	0.17	0.17	0.07	0.20	0.20	0.06	0.35	0.35	0.05	0.34	0.34
Sat Flow, veh/h	1688	556	1111	1688	1354	438	1688	3049	502	1688	3510	115
Grp Volume(v), veh/h	39	0	162	99	0	45	76	277	279	45	416	432
Grp Sat Flow(s),veh/h/ln	1688	0	1667	1688	0	1792	1688	1777	1774	1688	1777	1849
Q Serve(g_s), s	1.2	0.0	4.8	3.1	0.0	1.1	2.4	6.5	6.5	1.4	11.0	11.0
Cycle Q Clear(g_c), s	1.2	0.0	4.8	3.1	0.0	1.1	2.4	6.5	6.5	1.4	11.0	11.0
Prop In Lane	1.00		0.67	1.00		0.24	1.00		0.28	1.00		0.06
Lane Grp Cap(c), veh/h	69	0	283	125	0	363	106	627	626	77	596	620
V/C Ratio(X)	0.56	0.00	0.57	0.79	0.00	0.12	0.72	0.44	0.45	0.59	0.70	0.70
Avail Cap(c_a), veh/h	199	0	581	355	0	790	230	1079	1077	230	1079	1123
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	0.0	20.7	24.7	0.0	17.7	24.9	13.4	13.5	25.4	15.6	15.6
Incr Delay (d2), s/veh	2.7	0.0	1.8	4.2	0.0	0.2	3.3	0.5	0.5	2.6	1.5	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	0.5	0.0	1.8	1.3	0.0	0.4	1.0	2.3	2.3	0.6	4.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.2	0.0	22.5	28.9	0.0	17.8	28.3	13.9	14.0	28.0	17.1	17.1
LnGrp LOS	C		C	C		B	C	B	B	C	B	B
Approach Vol, veh/h		201			144			632			893	
Approach Delay, s/veh		23.6			25.4			15.7			17.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	24.2	8.6	14.3	8.0	23.3	6.8	16.1
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1	4.6	5.1	4.6	5.1
Max Green Setting (Gmax), s	7.4	32.9	11.4	18.9	7.4	32.9	6.4	23.9
Max Q Clear Time (g_c+I1), s	3.4	8.5	5.1	6.8	4.4	13.0	3.2	3.1
Green Ext Time (p_c), s	0.0	3.4	0.1	0.6	0.0	5.2	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	18.2
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	7.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	126	70	659	12	68	1333
Future Vol, veh/h	126	70	659	12	68	1333
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	100	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	138	77	724	13	75	1465

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2346	370	0	0	738	0
Stage 1	732	-	-	-	-	-
Stage 2	1614	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	~ 35	628	-	-	866	-
Stage 1	438	-	-	-	-	-
Stage 2	178	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 32	628	-	-	865	-
Mov Cap-2 Maneuver	145	-	-	-	-	-
Stage 1	437	-	-	-	-	-
Stage 2	163	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	82.91	0	0.46
HCM LOS	F		

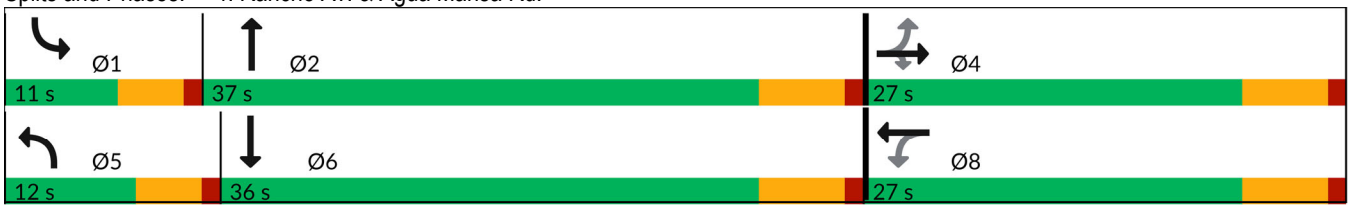
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	145	628	865	-
HCM Lane V/C Ratio	-	-	0.952	0.123	0.086	-
HCM Control Delay (s/veh)	-	-	122.6	11.5	9.6	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	6.8	0.4	0.3	-

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

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	335	27	127	12	55	155	379	38	947
Future Volume (vph)	335	27	127	12	55	155	379	38	947
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4			8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	4	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.8	23.8	23.8	23.8	23.8	9.6	27.8	9.6	23.8
Total Split (s)	27.0	27.0	27.0	27.0	27.0	12.0	37.0	11.0	36.0
Total Split (%)	36.0%	36.0%	36.0%	36.0%	36.0%	16.0%	49.3%	14.7%	48.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.8	5.8		5.8	4.6	5.8	4.6	5.8
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		21.2	21.2		19.0	7.4	35.6	5.9	30.2
Actuated g/C Ratio		0.28	0.28		0.25	0.10	0.47	0.08	0.40
v/c Ratio		1.13	0.26		0.33	1.08	0.27	0.33	1.13
Control Delay (s/veh)		116.2	5.4		24.5	129.3	13.3	39.6	88.7
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		116.2	5.4		24.5	129.3	13.3	39.6	88.7
LOS		F	A		C	F	B	D	F
Approach Delay (s/veh)		87.4			24.5		45.8		87.3
Approach LOS		F			C		D		F

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 75	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay (s/veh): 75.9	Intersection LOS: E
Intersection Capacity Utilization 90.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: Rancho Av. & Agua Mansa Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	335	27	127	12	55	40	155	379	18	38	947	456
Future Volume (veh/h)	335	27	127	12	55	40	155	379	18	38	947	456
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	385	31	123	14	63	35	178	436	19	44	1089	483
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	10	448	54	172	78	167	1600	70	68	973	420
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.10	0.46	0.46	0.04	0.40	0.40
Sat Flow, veh/h	422	34	1585	0	609	277	1688	3469	151	1688	2417	1042
Grp Volume(v), veh/h	416	0	123	112	0	0	178	223	232	44	792	780
Grp Sat Flow(s),veh/h/ln	456	0	1585	885	0	0	1688	1777	1843	1688	1777	1683
Q Serve(g_s), s	0.0	0.0	4.5	0.0	0.0	0.0	7.4	5.8	5.8	1.9	30.2	30.2
Cycle Q Clear(g_c), s	21.2	0.0	4.5	21.2	0.0	0.0	7.4	5.8	5.8	1.9	30.2	30.2
Prop In Lane	0.93		1.00	0.12		0.31	1.00		0.08	1.00		0.62
Lane Grp Cap(c), veh/h	221	0	448	304	0	0	167	820	850	68	715	678
V/C Ratio(X)	1.88	0.00	0.27	0.37	0.00	0.00	1.07	0.27	0.27	0.65	1.11	1.15
Avail Cap(c_a), veh/h	221	0	448	304	0	0	167	820	850	144	715	678
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	0.0	20.9	21.3	0.0	0.0	33.8	12.4	12.4	35.5	22.4	22.4
Incr Delay (d2), s/veh	413.0	0.0	0.3	0.7	0.0	0.0	89.3	0.2	0.2	3.9	66.9	84.2
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	29.2	0.0	1.6	1.4	0.0	0.0	6.9	2.0	2.1	0.8	23.9	25.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	444.3	0.0	21.2	22.1	0.0	0.0	123.1	12.6	12.6	39.4	89.3	106.6
LnGrp LOS	F		C	C			F	B	B	D	F	F
Approach Vol, veh/h		539			112			633			1616	
Approach Delay, s/veh		347.8			22.1			43.7			96.3	
Approach LOS		F			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	40.4		27.0	12.0	36.0		27.0				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		5.8				
Max Green Setting (Gmax), s	6.4	31.2		21.2	7.4	30.2		21.2				
Max Q Clear Time (g_c+I1), s	3.9	7.8		23.2	9.4	32.2		23.2				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	0.0		0.0				

Intersection Summary			
HCM 7th Control Delay, s/veh		128.7	
HCM 7th LOS		F	

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	13	10	5	5	5
Future Vol, veh/h	5	13	10	5	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	17	13	7	7	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	43	10	13	0	-	0
Stage 1	10	-	-	-	-	-
Stage 2	33	-	-	-	-	-
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	967	1071	1605	-	-	-
Stage 1	1013	-	-	-	-	-
Stage 2	989	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	959	1071	1605	-	-	-
Mov Cap-2 Maneuver	959	-	-	-	-	-
Stage 1	1005	-	-	-	-	-
Stage 2	989	-	-	-	-	-

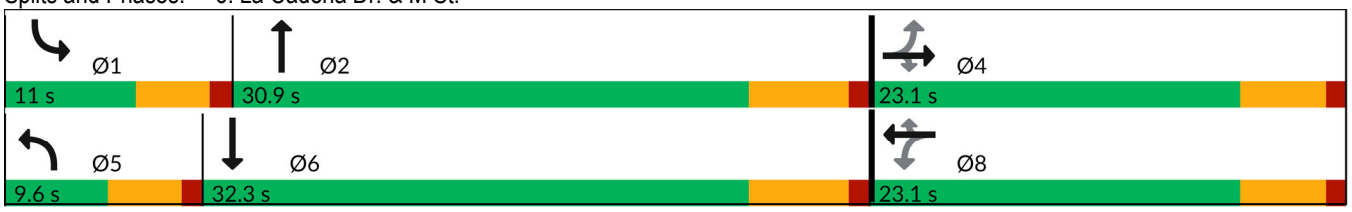
Approach	EB	NB	SB
HCM Control Delay, s/v	8.55	4.84	0
HCM LOS	A		

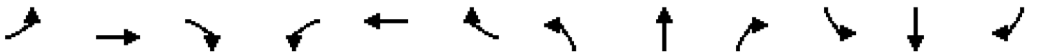
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1200	-	1038	-	-
HCM Lane V/C Ratio	0.008	-	0.023	-	-
HCM Control Delay (s/veh)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	13	7	9	76	5	60	9	722	65	1000
Future Volume (vph)	13	7	9	76	5	60	9	722	65	1000
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.1	23.1	23.1	23.1	23.1	23.1	9.6	30.8	9.6	27.8
Total Split (s)	23.1	23.1	23.1	23.1	23.1	23.1	9.6	30.9	11.0	32.3
Total Split (%)	35.5%	35.5%	35.5%	35.5%	35.5%	35.5%	14.8%	47.5%	16.9%	49.7%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1	5.1		5.1	5.1	4.6	5.8	4.6	5.8
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.9	13.9		13.9	13.9	6.3	24.2	7.1	28.1
Actuated g/C Ratio		0.30	0.30		0.30	0.30	0.14	0.53	0.16	0.62
v/c Ratio		0.05	0.02		0.23	0.13	0.04	0.49	0.29	0.54
Control Delay (s/veh)		18.2	0.1		19.9	1.7	26.1	12.9	27.3	10.6
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		18.2	0.1		19.9	1.7	26.1	12.9	27.3	10.6
LOS		B	A		B	A	C	B	C	B
Approach Delay (s/veh)		12.7			12.2			13.0		11.6
Approach LOS		B			B			B		B

Intersection Summary			
Cycle Length: 65			
Actuated Cycle Length: 45.6			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 12.2		Intersection LOS: B	
Intersection Capacity Utilization 58.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: La Cadena Dr. & M St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	7	9	76	5	60	9	722	64	65	1000	10
Future Volume (veh/h)	13	7	9	76	5	60	9	722	64	65	1000	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	15	8	4	88	6	32	10	840	65	76	1163	12
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	45	316	157	6	315	22	1282	99	115	1585	16
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.01	0.38	0.38	0.07	0.44	0.44
Sat Flow, veh/h	3	224	1583	4	29	1581	1688	3334	258	1688	3603	37
Grp Volume(v), veh/h	23	0	4	94	0	32	10	448	457	76	573	602
Grp Sat Flow(s),veh/h/ln	227	0	1583	33	0	1581	1688	1777	1815	1688	1777	1864
Q Serve(g_s), s	0.0	0.0	0.1	0.0	0.0	0.7	0.3	9.2	9.2	2.0	11.9	11.9
Cycle Q Clear(g_c), s	8.9	0.0	0.1	8.9	0.0	0.7	0.3	9.2	9.2	2.0	11.9	11.9
Prop In Lane	0.65		1.00	0.94		1.00	1.00		0.14	1.00		0.02
Lane Grp Cap(c), veh/h	179	0	316	163	0	315	22	683	698	115	781	820
V/C Ratio(X)	0.13	0.00	0.01	0.58	0.00	0.10	0.45	0.66	0.66	0.66	0.73	0.73
Avail Cap(c_a), veh/h	499	0	639	469	0	638	189	1000	1022	242	1056	1108
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	0.0	14.3	21.8	0.0	14.6	21.8	11.3	11.3	20.3	10.3	10.3
Incr Delay (d2), s/veh	0.3	0.0	0.0	3.2	0.0	0.1	5.3	1.1	1.1	2.4	1.8	1.7
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	0.2	0.0	0.0	1.1	0.0	0.2	0.1	2.6	2.7	0.7	3.2	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.5	0.0	14.3	25.0	0.0	14.7	27.2	12.4	12.3	22.6	12.1	12.0
LnGrp LOS	B		B	C		B	C	B	B	C	B	B
Approach Vol, veh/h		27			126			915			1251	
Approach Delay, s/veh		15.3			22.4			12.5			12.7	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	22.9		14.0	5.2	25.4		14.0				
Change Period (Y+Rc), s	4.6	5.8		5.1	4.6	5.8		5.1				
Max Green Setting (Gmax), s	6.4	25.1		18.0	5.0	26.5		18.0				
Max Q Clear Time (g_c+I1), s	4.0	11.2		10.9	2.3	13.9		10.9				
Green Ext Time (p_c), s	0.0	4.5		0.0	0.0	5.7		0.3				

Intersection Summary		
HCM 7th Control Delay, s/veh		13.2
HCM 7th LOS		B

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	5	27	0	33	5	554	37	122	833	10
Future Vol, veh/h	5	0	5	27	0	33	5	554	37	122	833	10
Conflicting Peds, #/hr	0	0	3	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	80	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	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	6	0	6	32	0	39	6	652	44	144	980	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1612	1981	500	1465	1965	348	993	0	0	695	0	0
Stage 1	1274	1274	-	685	685	-	-	-	-	-	-	-
Stage 2	338	707	-	780	1280	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	70	61	516	89	62	648	692	-	-	896	-	-
Stage 1	177	236	-	404	446	-	-	-	-	-	-	-
Stage 2	650	436	-	354	235	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	54	51	514	73	52	648	692	-	-	896	-	-
Mov Cap-2 Maneuver	119	129	-	185	141	-	-	-	-	-	-	-
Stage 1	148	198	-	401	443	-	-	-	-	-	-	-
Stage 2	606	433	-	293	197	-	-	-	-	-	-	-

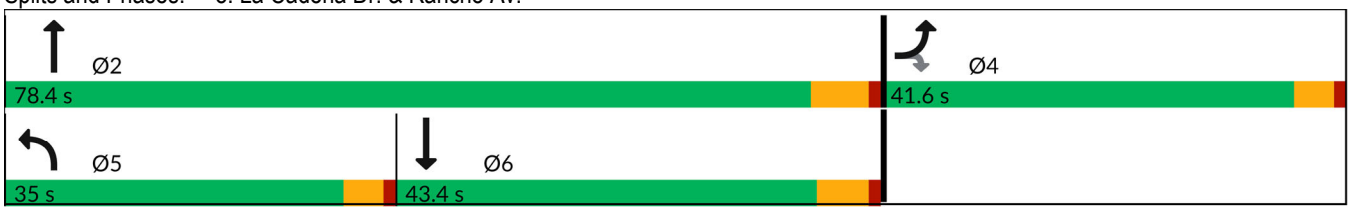
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	24.78	20.32	0.09	1.24
HCM LOS	C	C		

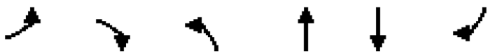
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	692	-	-	194	305	896	-	-
HCM Lane V/C Ratio	0.009	-	-	0.061	0.231	0.16	-	-
HCM Control Delay (s/veh)	10.2	-	-	24.8	20.3	9.8	-	-
HCM Lane LOS	B	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.9	0.6	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	40	957	439	545	756
Future Volume (vph)	40	957	439	545	756
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	41.6	41.6	9.6	24.2	42.8
Total Split (s)	41.6	41.6	35.0	78.4	43.4
Total Split (%)	34.7%	34.7%	29.2%	65.3%	36.2%
Yellow Time (s)	3.6	3.6	3.6	5.2	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	6.2	5.8
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	16.6	16.6	31.1	66.4	31.0
Actuated g/C Ratio	0.18	0.18	0.33	0.71	0.33
v/c Ratio	0.83	0.83	0.90	0.25	0.82
Control Delay (s/veh)	17.3	17.1	54.2	6.2	36.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.3	17.1	54.2	6.2	36.0
LOS	B	B	D	A	D
Approach Delay (s/veh)	17.2			27.6	36.0
Approach LOS	B			C	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 94	
Natural Cycle: 125	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay (s/veh): 26.4	Intersection LOS: C
Intersection Capacity Utilization 85.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 8: La Cadena Dr. & Rancho Av.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	40	957	439	545	756	74
Future Volume (veh/h)	40	957	439	545	756	74
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
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	1772	1870	1772	1870	1870	1870
Adj Flow Rate, veh/h	0	741	499	619	859	67
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	450	845	486	2244	1001	78
Arrive On Green	0.00	0.27	0.29	0.63	0.30	0.30
Sat Flow, veh/h	1688	3170	1688	3647	3432	260
Grp Volume(v), veh/h	0	741	499	619	457	469
Grp Sat Flow(s),veh/h/ln	1688	1585	1688	1777	1777	1822
Q Serve(g_s), s	0.0	23.6	30.4	8.2	25.6	25.6
Cycle Q Clear(g_c), s	0.0	23.6	30.4	8.2	25.6	25.6
Prop In Lane	1.00	1.00	1.00			0.14
Lane Grp Cap(c), veh/h	450	845	486	2244	533	546
V/C Ratio(X)	0.00	0.88	1.03	0.28	0.86	0.86
Avail Cap(c_a), veh/h	591	1111	486	2430	633	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	37.1	37.6	8.7	34.8	34.8
Incr Delay (d2), s/veh	0.0	6.5	48.0	0.1	10.0	9.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.8	18.1	2.7	11.9	12.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	43.6	85.6	8.8	44.8	44.6
LnGrp LOS		D	F	A	D	D
Approach Vol, veh/h	741			1118	926	
Approach Delay, s/veh	43.6			43.0	44.7	
Approach LOS	D			D	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		72.9		32.7	35.0	37.9
Change Period (Y+Rc), s		6.2		4.6	4.6	* 6.2
Max Green Setting (Gmax), s		72.2		37.0	30.4	* 38
Max Q Clear Time (g_c+I1), s		10.2		25.6	32.4	27.6
Green Ext Time (p_c), s		4.1		2.5	0.0	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	43.7
HCM 7th LOS	D

Notes

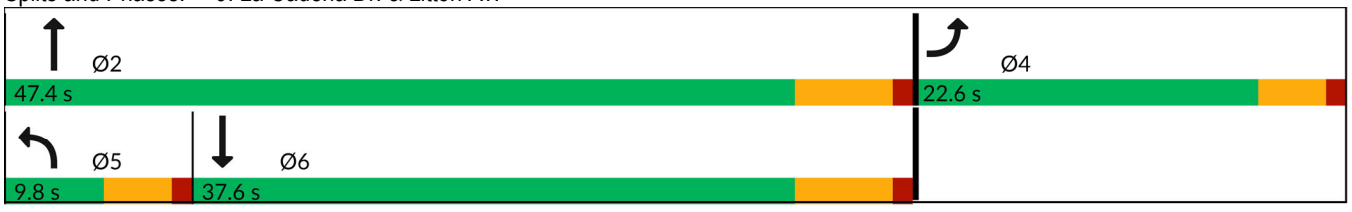
User approved volume balancing among the lanes for turning movement.

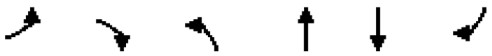
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	58	35	851	1523
Future Volume (vph)	58	35	851	1523
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	10.0	10.0
Minimum Split (s)	22.6	9.6	24.2	24.2
Total Split (s)	22.6	9.8	47.4	37.6
Total Split (%)	32.3%	14.0%	67.7%	53.7%
Yellow Time (s)	3.6	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	6.2	6.2
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	6.9	5.3	37.4	34.2
Actuated g/C Ratio	0.13	0.10	0.73	0.67
v/c Ratio	0.41	0.22	0.35	0.70
Control Delay (s/veh)	20.2	28.3	4.3	12.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.2	28.3	4.3	12.2
LOS	C	C	A	B
Approach Delay (s/veh)	20.2		5.2	12.2
Approach LOS	C		A	B

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 51.2	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay (s/veh): 10.1	Intersection LOS: B
Intersection Capacity Utilization 57.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: La Cadena Dr. & Litton Av.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	58	40	35	851	1523	10
Future Volume (veh/h)	58	40	35	851	1523	10
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
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	1772	1870	1772	1870	1870	1870
Adj Flow Rate, veh/h	62	30	38	915	1638	9
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	80	39	70	2491	2043	11
Arrive On Green	0.07	0.07	0.04	0.70	0.56	0.56
Sat Flow, veh/h	1082	524	1688	3647	3717	20
Grp Volume(v), veh/h	93	0	38	915	803	844
Grp Sat Flow(s),veh/h/ln	1624	0	1688	1777	1777	1866
Q Serve(g_s), s	2.7	0.0	1.1	5.0	17.3	17.3
Cycle Q Clear(g_c), s	2.7	0.0	1.1	5.0	17.3	17.3
Prop In Lane	0.67	0.32	1.00			0.01
Lane Grp Cap(c), veh/h	120	0	70	2491	1002	1052
V/C Ratio(X)	0.77	0.00	0.54	0.37	0.80	0.80
Avail Cap(c_a), veh/h	609	0	183	3049	1162	1220
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	22.6	2.9	8.3	8.3
Incr Delay (d2), s/veh	4.0	0.0	2.4	0.1	3.6	3.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.4	0.1	4.0	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	25.8	0.0	25.0	3.0	11.9	11.8
LnGrp LOS	C		C	A	B	B
Approach Vol, veh/h	93			953	1647	
Approach Delay, s/veh	25.8			3.9	11.9	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		39.9		8.2	6.6	33.3
Change Period (Y+Rc), s		6.2		4.6	4.6	6.2
Max Green Setting (Gmax), s		41.2		18.0	5.2	31.4
Max Q Clear Time (g_c+I1), s		7.0		4.7	3.1	19.3
Green Ext Time (p_c), s		6.5		0.1	0.0	7.8

Intersection Summary	
HCM 7th Control Delay, s/veh	9.5
HCM 7th LOS	A

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	31	5	12	58	30	5	7	36	56	20	50
Future Vol, veh/h	5	31	5	12	58	30	5	7	36	56	20	50
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	43	7	17	81	42	7	10	50	78	28	69
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8	8.3	7.5	8.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	12%	12%	44%
Vol Thru, %	15%	76%	58%	16%
Vol Right, %	75%	12%	30%	40%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	48	41	100	126
LT Vol	5	5	12	56
Through Vol	7	31	58	20
RT Vol	36	5	30	50
Lane Flow Rate	67	57	139	175
Geometry Grp	1	1	1	1
Degree of Util (X)	0.077	0.072	0.169	0.209
Departure Headway (Hd)	4.145	4.576	4.378	4.305
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	865	784	821	837
Service Time	2.165	2.599	2.397	2.321
HCM Lane V/C Ratio	0.077	0.073	0.169	0.209
HCM Control Delay, s/veh	7.5	8	8.3	8.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.2	0.6	0.8

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	216	6	60	179	18	97
Future Vol, veh/h	216	6	60	179	18	97
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	251	7	70	208	21	113

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	258	0	602	255
Stage 1	-	-	-	-	255	-
Stage 2	-	-	-	-	348	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1307	-	462	784
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	715	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1307	-	435	784
Mov Cap-2 Maneuver	-	-	-	-	526	-
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	672	-

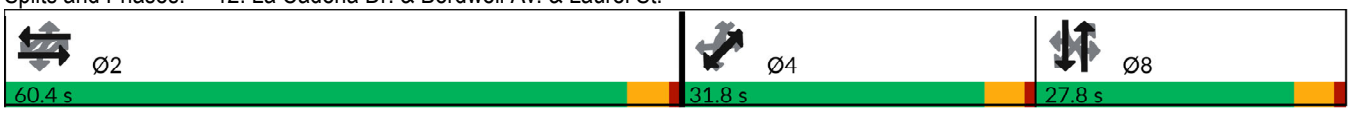
Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.99	10.64
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	526	784	-	-	452	-
HCM Lane V/C Ratio	0.04	0.144	-	-	0.053	-
HCM Control Delay (s/veh)	12.1	10.4	-	-	7.9	0
HCM Lane LOS	B	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.5	-	-	0.2	-

Lane Group	EBL2	EBL	EBT	WBL2	WBL	WBT	NBL2	NBL	NBT	SBL2	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	5	96	150	5	8	194	5	52	5	12	5	16
Future Volume (vph)	5	96	150	5	8	194	5	52	5	12	5	16
Turn Type	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			2			2			8			8
Permitted Phases	2	2		2	2		8	8		8	8	
Detector Phase	2	2	2	2	2	2	8	8	8	8	8	8
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
Total Split (s)	60.4	60.4	60.4	60.4	60.4	60.4	27.8	27.8	27.8	27.8	27.8	27.8
Total Split (%)	50.3%	50.3%	50.3%	50.3%	50.3%	50.3%	23.2%	23.2%	23.2%	23.2%	23.2%	23.2%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)			0.0			0.0			0.0			0.0
Total Lost Time (s)			4.6			4.6			4.6			4.6
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)			36.2			36.2			14.6			14.6
Actuated g/C Ratio			0.45			0.45			0.18			0.18
v/c Ratio			0.73			0.36			0.41			0.21
Control Delay (s/veh)			28.0			18.5			41.3			35.6
Queue Delay			0.0			0.0			0.0			0.0
Total Delay (s/veh)			28.0			18.5			41.3			35.6
LOS			C			B			D			D
Approach Delay (s/veh)			28.0			18.5			41.3			35.6
Approach LOS			C			B			D			D

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 81.3			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 29.6		Intersection LOS: C	
Intersection Capacity Utilization 78.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 12: La Cadena Dr. & Bordwell Av. & Laurel St.



Lane Group	NEL2	NEL	NET	SWL2	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	13	5	175	5	45	266
Future Volume (vph)	13	5	175	5	45	266
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			4			4
Permitted Phases	4	4		4	4	
Detector Phase	4	4	4	4	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.6	31.6
Total Split (s)	31.8	31.8	31.8	31.8	31.8	31.8
Total Split (%)	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.6	4.6		4.6	4.6
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)		20.6	20.6		20.6	20.6
Actuated g/C Ratio		0.25	0.25		0.25	0.25
v/c Ratio		0.15	0.30		0.26	0.56
Control Delay (s/veh)		34.6	30.1		34.4	33.1
Queue Delay		0.0	0.0		0.0	0.0
Total Delay (s/veh)		34.6	30.1		34.4	33.1
LOS		C	C		C	C
Approach Delay (s/veh)			30.5			33.2
Approach LOS			C			C

Intersection Summary

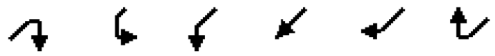
Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	5	96	150	44	65	5	8	194	5	5	5	52
Future Volume (vph)	5	96	150	44	65	5	8	194	5	5	5	52
Ideal Flow (vphpl)	1800	1800	1900	1900	1900	1800	1800	1900	1900	1900	1800	1800
Total Lost time (s)			4.6					4.6				
Lane Util. Factor			1.00					1.00				
Frt			0.96					0.99				
Flt Protected			0.99					1.00				
Satd. Flow (prot)			1762					1845				
Flt Permitted			0.81					0.96				
Satd. Flow (perm)			1448					1782				
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	7	126	197	58	86	7	11	255	7	7	7	68
RTOR Reduction (vph)	0	0	7	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	0	467	0	0	0	0	286	0	0	0	0
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Perm	Perm
Protected Phases			2					2				
Permitted Phases	2	2				2	2				8	8
Actuated Green, G (s)			36.2					36.2				
Effective Green, g (s)			36.2					36.2				
Actuated g/C Ratio			0.45					0.45				
Clearance Time (s)			4.6					4.6				
Vehicle Extension (s)			3.0					3.0				
Lane Grp Cap (vph)			646					795				
v/s Ratio Prot												
v/s Ratio Perm			c0.32					0.16				
v/c Ratio			0.72					0.36				
Uniform Delay, d1			18.4					14.8				
Progression Factor			1.00					1.00				
Incremental Delay, d2			4.0					0.3				
Delay (s)			22.4					15.1				
Level of Service			C					B				
Approach Delay (s/veh)			22.4					15.1				
Approach LOS			C					B				

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	81.1	Sum of lost time (s)	13.8
Intersection Capacity Utilization	78.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	NEL2	NEL	NET	NER
Lane Configurations												
Traffic Volume (vph)	5	16	5	12	5	16	7	5	13	5	175	18
Future Volume (vph)	5	16	5	12	5	16	7	5	13	5	175	18
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1900	1900	1900	1800	1800	1900	1900
Total Lost time (s)	4.6					4.6				4.6	4.6	
Lane Util. Factor	1.00					1.00				1.00	0.95	
Frt	0.97					0.96				1.00	0.98	
Flt Protected	0.97					0.98				0.95	1.00	
Satd. Flow (prot)	1739					1762				1676	3476	
Flt Permitted	0.82					0.88				0.36	1.00	
Satd. Flow (perm)	1477					1580				629	3476	
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	7	21	7	16	7	21	9	7	17	7	230	24
RTOR Reduction (vph)	3	0	0	0	0	4	0	0	0	0	1	0
Lane Group Flow (vph)	107	0	0	0	0	56	0	0	0	24	260	0
Turn Type	NA			Perm	Perm	NA			Perm	Perm	NA	
Protected Phases	8					8					4	
Permitted Phases				8	8				4	4		
Actuated Green, G (s)	10.5					10.5				20.6	20.6	
Effective Green, g (s)	10.5					10.5				20.6	20.6	
Actuated g/C Ratio	0.13					0.13				0.25	0.25	
Clearance Time (s)	4.6					4.6				4.6	4.6	
Vehicle Extension (s)	3.0					3.0				3.0	3.0	
Lane Grp Cap (vph)	191					204				159	882	
v/s Ratio Prot											0.07	
v/s Ratio Perm	c0.07					0.04				0.04		
v/c Ratio	0.56					0.27				0.15	0.29	
Uniform Delay, d1	33.1					31.9				23.5	24.4	
Progression Factor	1.00					1.00				1.00	1.00	
Incremental Delay, d2	3.8					0.7				0.4	0.2	
Delay (s)	36.9					32.6				23.9	24.6	
Level of Service	D					C				C	C	
Approach Delay (s/veh)	36.9					32.6					24.5	
Approach LOS	D					C					C	

Intersection Summary



Movement	NER2	SWL2	SWL	SWT	SWR	SWR2
Lane Configurations						
Traffic Volume (vph)	5	5	45	266	89	9
Future Volume (vph)	5	5	45	266	89	9
Ideal Flow (vphpl)	1900	1800	1800	1900	1900	1900
Total Lost time (s)			4.6	4.6		
Lane Util. Factor			1.00	0.95		
Frt			1.00	0.96		
Flt Protected			0.95	1.00		
Satd. Flow (prot)			1676	3396		
Flt Permitted			0.58	1.00		
Satd. Flow (perm)			1022	3396		
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	7	7	59	350	117	12
RTOR Reduction (vph)	0	0	0	1	0	0
Lane Group Flow (vph)	0	0	66	478	0	0
Turn Type		Perm	Perm	NA		
Protected Phases				4		
Permitted Phases		4	4			
Actuated Green, G (s)			20.6	20.6		
Effective Green, g (s)			20.6	20.6		
Actuated g/C Ratio			0.25	0.25		
Clearance Time (s)			4.6	4.6		
Vehicle Extension (s)			3.0	3.0		
Lane Grp Cap (vph)			259	862		
v/s Ratio Prot				c0.14		
v/s Ratio Perm			0.06			
v/c Ratio			0.25	0.55		
Uniform Delay, d1			24.1	26.3		
Progression Factor			1.00	1.00		
Incremental Delay, d2			0.5	0.8		
Delay (s)			24.7	27.0		
Level of Service			C	C		
Approach Delay (s/veh)				26.7		
Approach LOS				C		

Intersection Summary

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	5	149	5	5	5	162	328	5	5	524	20
Future Vol, veh/h	19	5	149	5	5	5	162	328	5	5	524	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	6	173	6	6	6	188	381	6	6	609	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1206	1402	319	1082	1410	196	636	0	0	389	0	0
Stage 1	636	636	-	763	763	-	-	-	-	-	-	-
Stage 2	570	766	-	319	647	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	139	139	676	172	137	813	944	-	-	1166	-	-
Stage 1	433	470	-	363	411	-	-	-	-	-	-	-
Stage 2	473	410	-	667	465	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	107	110	675	100	109	811	941	-	-	1164	-	-
Mov Cap-2 Maneuver	282	269	-	218	221	-	-	-	-	-	-	-
Stage 1	429	467	-	290	328	-	-	-	-	-	-	-
Stage 2	369	327	-	487	461	-	-	-	-	-	-	-

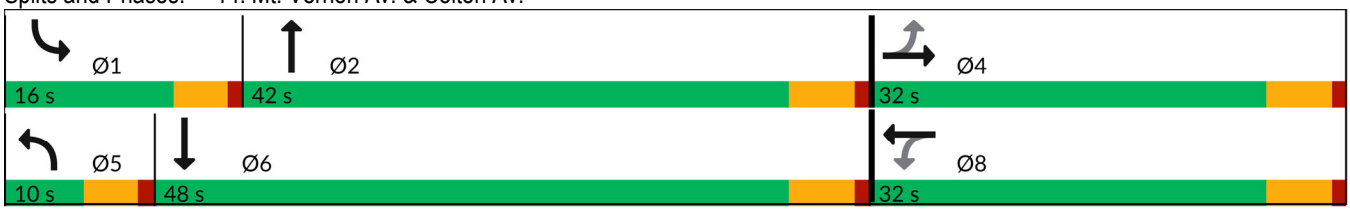
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.89	18.22	3.2	0.07
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	941	-	-	564	290	1164	-	-
HCM Lane V/C Ratio	0.2	-	-	0.357	0.06	0.005	-	-
HCM Control Delay (s/veh)	9.8	-	-	14.9	18.2	8.1	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	1.6	0.2	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	40	145	128	211	14	472	74	626
Future Volume (vph)	40	145	128	211	14	472	74	626
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	24.4	24.4	28.4	28.4	9.6	37.4	9.6	37.4
Total Split (s)	32.0	32.0	32.0	32.0	10.0	42.0	16.0	48.0
Total Split (%)	35.6%	35.6%	35.6%	35.6%	11.1%	46.7%	17.8%	53.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	4.6	5.4	4.6	5.4
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	16.3	16.3	16.3	16.3	5.8	18.2	7.9	23.7
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.11	0.34	0.15	0.44
v/c Ratio	0.18	0.30	0.41	0.56	0.09	0.51	0.33	0.51
Control Delay (s/veh)	20.1	18.9	22.7	21.8	32.6	16.8	30.4	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.1	18.9	22.7	21.8	32.6	16.8	30.4	12.0
LOS	C	B	C	C	C	B	C	B
Approach Delay (s/veh)		19.2		22.1		17.2		13.8
Approach LOS		B		C		B		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 53.5	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay (s/veh): 17.0	Intersection LOS: B
Intersection Capacity Utilization 66.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 14: Mt. Vernon Av. & Colton Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	145	8	128	211	70	14	472	80	74	626	89
Future Volume (veh/h)	40	145	8	128	211	70	14	472	80	74	626	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	44	161	8	142	234	56	16	524	82	82	696	98
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	306	476	24	404	392	94	34	939	146	122	1115	157
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.02	0.30	0.30	0.07	0.36	0.36
Sat Flow, veh/h	1089	1767	88	1216	1454	348	1688	3080	480	1688	3126	440
Grp Volume(v), veh/h	44	0	169	142	0	290	16	301	305	82	395	399
Grp Sat Flow(s),veh/h/ln	1089	0	1855	1216	0	1802	1688	1777	1783	1688	1777	1789
Q Serve(g_s), s	1.6	0.0	3.2	4.6	0.0	6.1	0.4	6.2	6.2	2.1	8.0	8.0
Cycle Q Clear(g_c), s	7.7	0.0	3.2	7.8	0.0	6.1	0.4	6.2	6.2	2.1	8.0	8.0
Prop In Lane	1.00		0.05	1.00		0.19	1.00		0.27	1.00		0.25
Lane Grp Cap(c), veh/h	306	0	500	404	0	486	34	542	543	122	634	638
V/C Ratio(X)	0.14	0.00	0.34	0.35	0.00	0.60	0.47	0.56	0.56	0.67	0.62	0.62
Avail Cap(c_a), veh/h	677	0	1132	819	0	1100	209	1493	1498	442	1737	1749
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	12.8	15.9	0.0	13.9	21.1	12.7	12.7	19.7	11.6	11.6
Incr Delay (d2), s/veh	0.2	0.0	0.4	0.5	0.0	1.2	3.7	0.9	0.9	2.4	1.0	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.1	1.1	0.0	2.1	0.2	2.0	2.0	0.8	2.4	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.4	0.0	13.2	16.5	0.0	15.0	24.8	13.6	13.6	22.1	12.6	12.6
LnGrp LOS	B		B	B		B	C	B	B	C	B	B
Approach Vol, veh/h		213			432			622			876	
Approach Delay, s/veh		14.1			15.5			13.9			13.5	
Approach LOS		B			B			B			B	

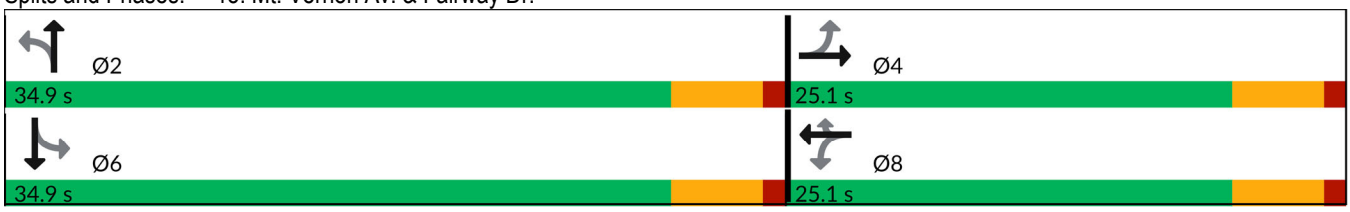
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	18.7		17.1	5.5	20.9		17.1				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	11.4	36.6		26.6	5.4	42.6		26.6				
Max Q Clear Time (g_c+I1), s	4.1	8.2		9.7	2.4	10.0		9.8				
Green Ext Time (p_c), s	0.0	3.7		0.9	0.0	5.2		1.9				

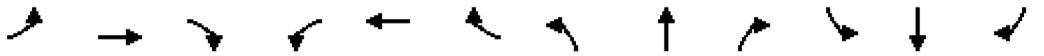
Intersection Summary		
HCM 7th Control Delay, s/veh		14.1
HCM 7th LOS		B

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	44	72	108	50	251	6	355	288	593
Future Volume (vph)	44	72	108	50	251	6	355	288	593
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4		8			2		6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	23.1	23.1	25.1	25.1	25.1	24.1	24.1	26.1	26.1
Total Split (s)	25.1	25.1	25.1	25.1	25.1	34.9	34.9	34.9	34.9
Total Split (%)	41.8%	41.8%	41.8%	41.8%	41.8%	58.2%	58.2%	58.2%	58.2%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	12.5	12.5	12.5	12.5	12.5	22.0	22.0	22.0	22.0
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28	0.49	0.49	0.49	0.49
v/c Ratio	0.13	0.18	0.34	0.06	0.43	0.02	0.27	0.75	0.39
Control Delay (s/veh)	15.4	13.3	18.3	14.1	4.9	6.8	6.3	23.7	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.4	13.3	18.3	14.1	4.9	6.8	6.3	23.7	8.0
LOS	B	B	B	B	A	A	A	C	A
Approach Delay (s/veh)		14.0		9.5			6.3		13.0
Approach LOS		B		A			A		B

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 45.2	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay (s/veh): 10.8	Intersection LOS: B
Intersection Capacity Utilization 54.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Mt. Vernon Av. & Fairway Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	72	16	108	50	251	6	355	79	288	593	22
Future Volume (veh/h)	44	72	16	108	50	251	6	355	79	288	593	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	47	77	13	116	54	142	6	382	75	310	638	22
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	442	369	62	432	841	375	490	1527	297	589	1804	62
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	1187	1559	263	1304	3554	1585	774	2966	577	934	3505	121
Grp Volume(v), veh/h	47	0	90	116	54	142	6	227	230	310	323	337
Grp Sat Flow(s),veh/h/ln	1187	0	1822	1304	1777	1585	774	1777	1767	934	1777	1848
Q Serve(g_s), s	1.3	0.0	1.6	3.2	0.5	3.1	0.2	2.9	3.0	11.4	4.4	4.4
Cycle Q Clear(g_c), s	1.8	0.0	1.6	4.8	0.5	3.1	4.6	2.9	3.0	14.3	4.4	4.4
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.33	1.00		0.07
Lane Grp Cap(c), veh/h	442	0	431	432	841	375	490	915	910	589	915	952
V/C Ratio(X)	0.11	0.00	0.21	0.27	0.06	0.38	0.01	0.25	0.25	0.53	0.35	0.35
Avail Cap(c_a), veh/h	740	0	888	759	1731	772	654	1290	1282	786	1290	1342
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.8	0.0	12.6	14.5	12.1	13.1	7.3	5.5	5.6	9.6	5.9	5.9
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.3	0.0	0.6	0.0	0.1	0.1	0.7	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.6	0.8	0.2	0.9	0.0	0.7	0.7	1.6	1.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.9	0.0	12.8	14.9	12.2	13.8	7.3	5.7	5.7	10.3	6.1	6.1
LnGrp LOS	B		B	B	B	B	A	A	A	B	A	A
Approach Vol, veh/h		137			312			463			970	
Approach Delay, s/veh		12.9			13.9			5.7			7.5	
Approach LOS		B			B			A			A	

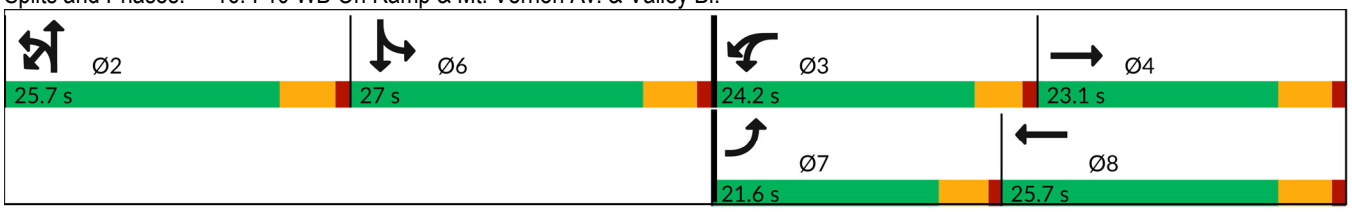
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.2		14.8		26.2		14.8				
Change Period (Y+Rc), s		5.1		5.1		5.1		5.1				
Max Green Setting (Gmax), s		29.8		20.0		29.8		20.0				
Max Q Clear Time (g_c+I1), s		6.6		3.8		16.3		6.8				
Green Ext Time (p_c), s		2.7		0.5		4.8		0.9				

Intersection Summary												
HCM 7th Control Delay, s/veh			8.5									
HCM 7th LOS			A									

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	141	95	41	131	277	5	322
Future Volume (vph)	141	95	41	131	277	5	322
Turn Type	Prot	NA	Prot	NA	NA	Split	NA
Protected Phases	7	4	3	8	2	6	6
Permitted Phases							
Detector Phase	7	4	3	8	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	23.1	9.6	25.1	23.1	23.1	23.1
Total Split (s)	21.6	23.1	24.2	25.7	25.7	27.0	27.0
Total Split (%)	21.6%	23.1%	24.2%	25.7%	25.7%	27.0%	27.0%
Yellow Time (s)	3.6	4.1	3.6	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	4.6	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	None	None	None	None	None	None
Act Effct Green (s)	12.9	17.2	19.2	23.5	20.3	21.9	21.9
Actuated g/C Ratio	0.13	0.17	0.19	0.24	0.21	0.22	0.22
v/c Ratio	0.70	0.88	0.94	0.38	0.92	0.01	0.95
Control Delay (s/veh)	57.7	68.9	77.6	34.0	58.8	30.8	61.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.7	68.9	77.6	34.0	58.8	30.8	61.2
LOS	E	E	E	C	E	C	E
Approach Delay (s/veh)		64.7		62.2	58.8		61.0
Approach LOS		E		E	E		E

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 98.6	
Natural Cycle: 95	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay (s/veh): 61.3	Intersection LOS: E
Intersection Capacity Utilization 83.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 16: I-10 WB On Ramp & Mt. Vernon Av. & Valley Bl.



Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	141	95	135	9	240	41	131	23	230	74	277	24
Future Volume (vph)	141	95	135	9	240	41	131	23	230	74	277	24
Ideal Flow (vphpl)	1800	1900	1900	1900	1800	1800	1900	1900	1800	1800	1900	1900
Total Lost time (s)	4.6	5.1				4.6	5.1				5.1	
Lane Util. Factor	1.00	1.00				1.00	1.00				0.95	
Frt	1.00	0.91				1.00	0.98				0.99	
Flt Protected	0.95	1.00				0.95	1.00				0.98	
Satd. Flow (prot)	1676	1694				1676	1821				3432	
Flt Permitted	0.95	1.00				0.95	1.00				0.98	
Satd. Flow (perm)	1676	1694				1676	1821				3432	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	153	103	147	10	261	45	142	25	250	80	301	26
RTOR Reduction (vph)	0	2	0	0	0	0	6	0	0	0	3	0
Lane Group Flow (vph)	153	258	0	0	0	306	161	0	0	0	654	0
Turn Type	Prot	NA			Prot	Prot	NA		Split	Split	NA	
Protected Phases	7	4			3	3	8		2	2	2	
Permitted Phases												
Actuated Green, G (s)	12.9	17.2				19.2	23.5				20.3	
Effective Green, g (s)	12.9	17.2				19.2	23.5				20.3	
Actuated g/C Ratio	0.13	0.17				0.19	0.24				0.21	
Clearance Time (s)	4.6	5.1				4.6	5.1				5.1	
Vehicle Extension (s)	2.0	3.0				2.0	3.0				3.0	
Lane Grp Cap (vph)	219	295				326	434				707	
v/s Ratio Prot	0.09	c0.15				c0.18	0.09				c0.19	
v/s Ratio Perm												
v/c Ratio	0.70	0.88				0.94	0.37				0.92	
Uniform Delay, d1	40.9	39.6				39.1	31.3				38.4	
Progression Factor	1.00	1.00				1.00	1.00				1.00	
Incremental Delay, d2	7.6	23.9				33.4	0.5				17.9	
Delay (s)	48.6	63.5				72.5	31.9				56.2	
Level of Service	D	E				E	C				E	
Approach Delay (s/veh)		58.0					58.1				56.2	
Approach LOS		E					E				E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	57.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	98.5	Sum of lost time (s)	19.9
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

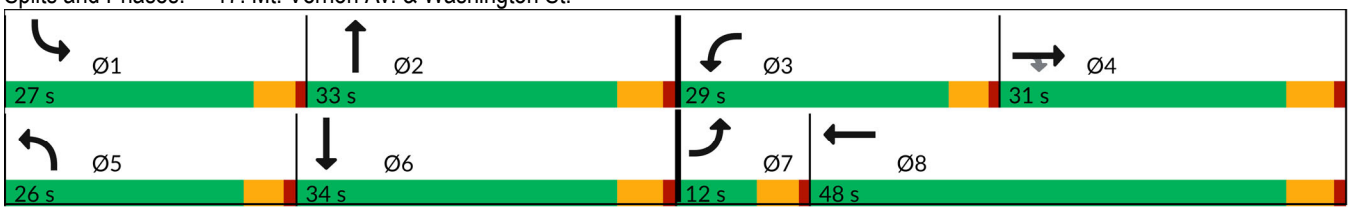
Movement	SBL	SBT	SBR	SBR2
Lane Configurations				
Traffic Volume (vph)	5	322	244	79
Future Volume (vph)	5	322	244	79
Ideal Flow (vphpl)	1800	1900	1900	1900
Total Lost time (s)	5.1	5.1		
Lane Util. Factor	1.00	0.95		
Frt	1.00	0.92		
Flt Protected	0.95	1.00		
Satd. Flow (prot)	1676	3273		
Flt Permitted	0.95	1.00		
Satd. Flow (perm)	1676	3273		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	350	265	86
RTOR Reduction (vph)	0	11	0	0
Lane Group Flow (vph)	5	690	0	0
Turn Type	Split	NA		
Protected Phases	6	6		
Permitted Phases				
Actuated Green, G (s)	21.9	21.9		
Effective Green, g (s)	21.9	21.9		
Actuated g/C Ratio	0.22	0.22		
Clearance Time (s)	5.1	5.1		
Vehicle Extension (s)	3.0	3.0		
Lane Grp Cap (vph)	372	727		
v/s Ratio Prot	0.00	c0.21		
v/s Ratio Perm				
v/c Ratio	0.01	0.95		
Uniform Delay, d1	29.9	37.8		
Progression Factor	1.00	1.00		
Incremental Delay, d2	0.0	21.5		
Delay (s)	29.9	59.3		
Level of Service	C	E		
Approach Delay (s/veh)		59.1		
Approach LOS		E		

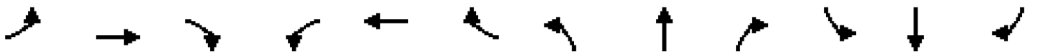
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	191	95	335	228	458	140	288	593	316	175	79
Future Volume (vph)	64	191	95	335	228	458	140	288	593	316	175	79
Turn Type	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	30.4	30.4	9.6	31.4		9.6	23.1		9.6	30.1	
Total Split (s)	12.0	31.0	31.0	29.0	48.0		26.0	33.0		27.0	34.0	
Total Split (%)	10.0%	25.8%	25.8%	24.2%	40.0%		21.7%	27.5%		22.5%	28.3%	
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4		3.6	4.1		3.6	4.1	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4		4.6	5.1		4.6	5.1	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	
Act Effct Green (s)	6.2	11.1	11.1	13.3	20.6	71.0	11.2	13.5	71.0	12.8	15.0	71.0
Actuated g/C Ratio	0.09	0.16	0.16	0.19	0.29	1.00	0.16	0.19	1.00	0.18	0.21	1.00
v/c Ratio	0.25	0.36	0.27	0.62	0.23	0.31	0.55	0.45	0.39	0.60	0.25	0.05
Control Delay (s/veh)	36.9	31.6	4.3	32.9	22.7	0.5	38.1	28.8	0.7	33.2	25.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.9	31.6	4.3	32.9	22.7	0.5	38.1	28.8	0.7	33.2	25.6	0.1
LOS	D	C	A	C	C	A	D	C	A	C	C	A
Approach Delay (s/veh)		25.2			16.1			13.8			26.3	
Approach LOS		C			B			B			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 71	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay (s/veh): 18.3	Intersection LOS: B
Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Mt. Vernon Av. & Washington St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	191	95	335	228	458	140	288	593	316	175	79
Future Volume (veh/h)	64	191	95	335	228	458	140	288	593	316	175	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1870	1870	1673	1870	1870	1772	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	67	201	51	353	240	0	147	303	0	333	184	0
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	178	618	272	477	961		187	624		455	754	
Arrive On Green	0.06	0.17	0.17	0.15	0.27	0.00	0.11	0.18	0.00	0.15	0.21	0.00
Sat Flow, veh/h	3092	3554	1564	3092	3554	1585	1688	3554	1585	3092	3554	1585
Grp Volume(v), veh/h	67	201	51	353	240	0	147	303	0	333	184	0
Grp Sat Flow(s),veh/h/ln	1546	1777	1564	1546	1777	1585	1688	1777	1585	1546	1777	1585
Q Serve(g_s), s	1.2	2.8	1.6	6.2	3.0	0.0	4.8	4.3	0.0	5.8	2.4	0.0
Cycle Q Clear(g_c), s	1.2	2.8	1.6	6.2	3.0	0.0	4.8	4.3	0.0	5.8	2.4	0.0
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	178	618	272	477	961		187	624		455	754	
V/C Ratio(X)	0.38	0.33	0.19	0.74	0.25		0.79	0.49		0.73	0.24	
Avail Cap(c_a), veh/h	406	1612	710	1337	2683		640	1757		1228	1820	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.6	20.4	19.9	22.8	16.1	0.0	24.4	21.0	0.0	23.0	18.5	0.0
Incr Delay (d2), s/veh	0.5	0.3	0.3	0.9	0.1	0.0	2.8	0.6	0.0	0.9	0.2	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	0.4	1.0	0.5	2.0	1.1	0.0	1.9	1.7	0.0	2.0	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.1	20.7	20.2	23.6	16.2	0.0	27.2	21.5	0.0	23.9	18.6	0.0
LnGrp LOS	C	C	C	C	B		C	C		C	B	
Approach Vol, veh/h		319			593			450			517	
Approach Delay, s/veh		21.8			20.6			23.4			22.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	15.0	13.3	15.2	10.8	17.1	7.9	20.7
Change Period (Y+Rc), s	4.6	5.1	4.6	5.4	4.6	5.1	4.6	5.4
Max Green Setting (Gmax), s	22.4	27.9	24.4	25.6	21.4	28.9	7.4	42.6
Max Q Clear Time (g_c+I1), s	7.8	6.3	8.2	4.8	6.8	4.4	3.2	5.0
Green Ext Time (p_c), s	0.5	1.8	0.6	1.2	0.2	1.1	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	21.9
HCM 7th LOS	C

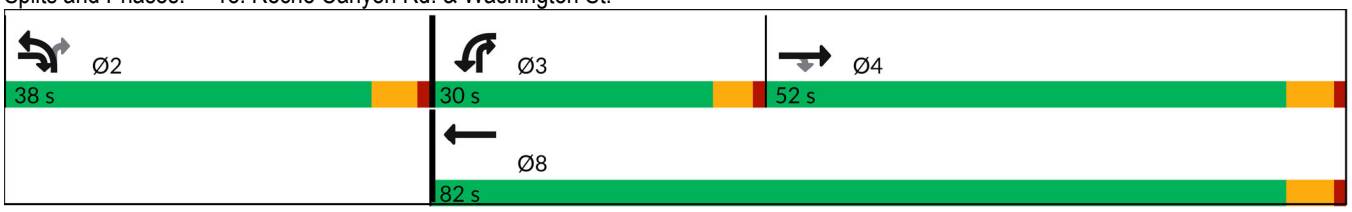
Notes

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1288	414	606	925	730	1072
Future Volume (vph)	1288	414	606	925	730	1072
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Detector Phase	4	2	3	8	2	3
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	42.4	30.1	9.6	23.4	30.1	9.6
Total Split (s)	52.0	38.0	30.0	82.0	38.0	30.0
Total Split (%)	43.3%	31.7%	25.0%	68.3%	31.7%	25.0%
Yellow Time (s)	4.4	4.1	3.6	4.4	4.1	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.1	4.6	5.4	5.1	4.6
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	46.6	79.3	25.4	76.6	32.4	62.9
Actuated g/C Ratio	0.39	0.66	0.21	0.64	0.27	0.53
v/c Ratio	1.00	0.42	1.00	0.44	0.94	0.78
Control Delay (s/veh)	61.8	8.5	82.3	11.5	63.1	27.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	61.8	8.5	82.3	11.5	63.1	27.2
LOS	E	A	F	B	E	C
Approach Delay (s/veh)	48.8			39.5	41.8	
Approach LOS	D			D	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.5	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay (s/veh): 43.5	Intersection LOS: D
Intersection Capacity Utilization 90.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 18: Reche Canyon Rd. & Washington St.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1288	414	606	925	730	1072
Future Volume (veh/h)	1288	414	606	925	730	1072
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		0.98	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	1673	1870	1673	1870
Adj Flow Rate, veh/h	1385	298	652	995	785	1045
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1380	1037	654	2268	848	1355
Arrive On Green	0.39	0.39	0.21	0.64	0.27	0.27
Sat Flow, veh/h	3647	1550	3092	3647	3092	2790
Grp Volume(v), veh/h	1385	298	652	995	785	1045
Grp Sat Flow(s),veh/h/ln	1777	1550	1546	1777	1546	1395
Q Serve(g_s), s	46.6	9.6	25.3	16.9	29.6	32.9
Cycle Q Clear(g_c), s	46.6	9.6	25.3	16.9	29.6	32.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1380	1037	654	2268	848	1355
V/C Ratio(X)	1.00	0.29	1.00	0.44	0.93	0.77
Avail Cap(c_a), veh/h	1380	1037	654	2268	848	1355
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	36.7	8.5	47.3	10.9	42.4	25.4
Incr Delay (d2), s/veh	25.1	0.2	34.2	0.1	15.9	2.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.0	6.3	12.6	6.1	12.7	12.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	61.8	8.6	81.4	11.0	58.3	28.2
LnGrp LOS	F	A	F	B	E	C
Approach Vol, veh/h	1683			1647	1830	
Approach Delay, s/veh	52.4			38.9	41.1	
Approach LOS	D			D	D	

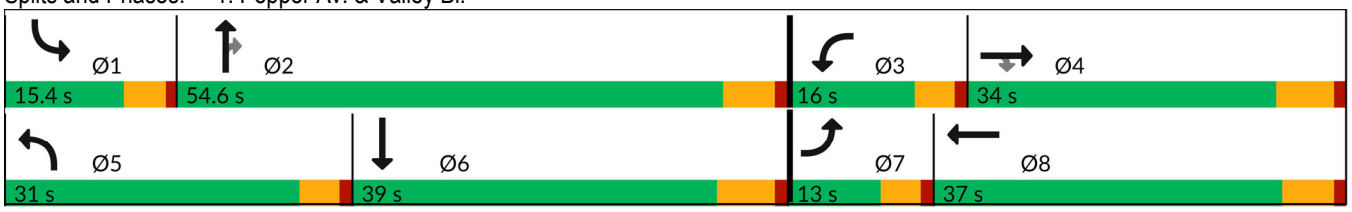
Timer - Assigned Phs	2	3	4	8
Phs Duration (G+Y+Rc), s	38.0	30.0	52.0	82.0
Change Period (Y+Rc), s	5.1	4.6	5.4	5.4
Max Green Setting (Gmax), s	32.9	25.4	46.6	76.6
Max Q Clear Time (g_c+I1), s	34.9	27.3	48.6	18.9
Green Ext Time (p_c), s	0.0	0.0	0.0	8.5

Intersection Summary	
HCM 7th Control Delay, s/veh	44.1
HCM 7th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	167	652	312	209	751	581	931	220	138	934
Future Volume (vph)	167	652	312	209	751	581	931	220	138	934
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8	5	2		1	6
Permitted Phases			4					2		
Detector Phase	7	4	4	3	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	30.2	30.2	9.6	29.8	9.6	35.8	35.8	9.6	36.2
Total Split (s)	13.0	34.0	34.0	16.0	37.0	31.0	54.6	54.6	15.4	39.0
Total Split (%)	10.8%	28.3%	28.3%	13.3%	30.8%	25.8%	45.5%	45.5%	12.8%	32.5%
Yellow Time (s)	3.6	5.2	5.2	3.6	4.8	3.6	4.8	4.8	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	5.8	4.6	5.8	5.8	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	8.3	28.0	28.0	10.8	30.9	25.1	47.2	47.2	9.3	30.9
Actuated g/C Ratio	0.07	0.24	0.24	0.09	0.27	0.22	0.41	0.41	0.08	0.27
v/c Ratio	0.79	0.80	0.52	0.76	0.95	0.91	0.47	0.32	0.59	0.84
Control Delay (s/veh)	79.6	50.6	7.4	70.2	61.1	64.5	26.5	12.1	62.6	46.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	79.6	50.6	7.4	70.2	61.1	64.5	26.5	12.1	62.6	46.2
LOS	E	D	A	E	E	E	C	B	E	D
Approach Delay (s/veh)		43.0			62.9		37.4			48.1
Approach LOS		D			E		D			D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.5	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay (s/veh): 46.4	Intersection LOS: D
Intersection Capacity Utilization 86.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Pepper Av. & Valley Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	652	312	209	751	92	581	931	220	138	934	138
Future Volume (veh/h)	167	652	312	209	751	92	581	931	220	138	934	138
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1870	1870	1673	1870	1870	1673	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	174	679	222	218	782	80	605	970	140	144	973	130
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	225	886	390	271	859	88	660	2074	643	196	1167	156
Arrive On Green	0.07	0.25	0.25	0.09	0.26	0.26	0.21	0.41	0.41	0.06	0.26	0.26
Sat Flow, veh/h	3092	3554	1565	3092	3254	333	3092	5106	1584	3092	4556	607
Grp Volume(v), veh/h	174	679	222	218	427	435	605	970	140	144	726	377
Grp Sat Flow(s),veh/h/ln	1546	1777	1565	1546	1777	1810	1546	1702	1584	1546	1702	1759
Q Serve(g_s), s	6.2	19.8	13.9	7.7	26.0	26.0	21.4	15.6	6.4	5.1	22.5	22.6
Cycle Q Clear(g_c), s	6.2	19.8	13.9	7.7	26.0	26.0	21.4	15.6	6.4	5.1	22.5	22.6
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	225	886	390	271	469	478	660	2074	643	196	872	451
V/C Ratio(X)	0.77	0.77	0.57	0.80	0.91	0.91	0.92	0.47	0.22	0.73	0.83	0.84
Avail Cap(c_a), veh/h	233	886	390	316	496	506	731	2231	692	299	1000	517
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	50.9	38.9	36.7	50.0	39.8	39.8	43.0	24.3	21.6	51.4	39.3	39.3
Incr Delay (d2), s/veh	12.9	4.1	2.0	10.5	20.2	20.0	14.7	0.2	0.2	2.0	5.5	10.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	8.8	5.3	3.3	13.3	13.6	9.2	6.0	2.3	2.0	9.6	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.7	43.0	38.6	60.6	60.0	59.8	57.7	24.5	21.8	53.3	44.7	49.6
LnGrp LOS	E	D	D	E	E	E	E	C	C	D	D	D
Approach Vol, veh/h		1075			1080			1715			1247	
Approach Delay, s/veh		45.4			60.1			36.0			47.2	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	51.6	14.4	34.0	28.4	34.8	12.7	35.7
Change Period (Y+Rc), s	4.6	* 6.2	4.6	6.2	4.6	6.2	4.6	* 6.2
Max Green Setting (Gmax), s	10.8	* 49	11.4	27.8	26.4	32.8	8.4	* 31
Max Q Clear Time (g_c+I1), s	7.1	17.6	9.7	21.8	23.4	24.6	8.2	28.0
Green Ext Time (p_c), s	0.1	7.7	0.1	2.5	0.5	4.0	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	45.8
HCM 7th LOS	D

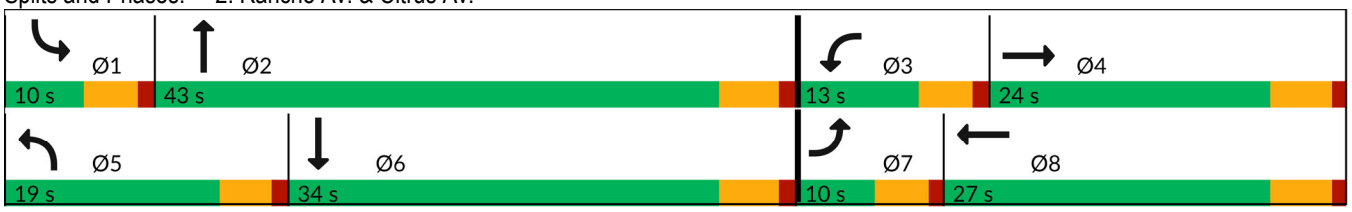
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	21	16	96	52	154	859	17	664
Future Volume (vph)	21	16	96	52	154	859	17	664
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	23.1	9.6	23.1	9.6	23.1	9.6	23.1
Total Split (s)	10.0	24.0	13.0	27.0	19.0	43.0	10.0	34.0
Total Split (%)	11.1%	26.7%	14.4%	30.0%	21.1%	47.8%	11.1%	37.8%
Yellow Time (s)	3.6	4.1	3.6	4.1	3.6	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	4.6	5.1	4.6	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	5.5	11.8	7.8	18.0	10.8	34.9	5.5	20.8
Actuated g/C Ratio	0.08	0.17	0.11	0.26	0.16	0.51	0.08	0.30
v/c Ratio	0.16	0.46	0.53	0.21	0.61	0.55	0.14	0.69
Control Delay (s/veh)	38.9	10.9	45.3	17.0	40.9	14.2	38.6	25.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.9	10.9	45.3	17.0	40.9	14.2	38.6	25.8
LOS	D	B	D	B	D	B	D	C
Approach Delay (s/veh)		13.8		31.2		18.0		26.1
Approach LOS		B		C		B		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 68.6	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay (s/veh): 21.4	Intersection LOS: C
Intersection Capacity Utilization 63.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Rancho Av. & Citrus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	16	164	96	52	43	154	859	68	17	664	36
Future Volume (veh/h)	21	16	164	96	52	43	154	859	68	17	664	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	22	17	110	101	55	28	162	904	67	18	699	31
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	44	34	221	127	243	124	204	1306	97	37	1008	45
Arrive On Green	0.03	0.16	0.16	0.08	0.21	0.21	0.12	0.39	0.39	0.02	0.29	0.29
Sat Flow, veh/h	1688	216	1395	1688	1167	594	1688	3349	248	1688	3465	154
Grp Volume(v), veh/h	22	0	127	101	0	83	162	480	491	18	358	372
Grp Sat Flow(s),veh/h/ln	1688	0	1610	1688	0	1761	1688	1777	1821	1688	1777	1842
Q Serve(g_s), s	0.7	0.0	3.9	3.2	0.0	2.1	5.1	12.4	12.4	0.6	9.8	9.8
Cycle Q Clear(g_c), s	0.7	0.0	3.9	3.2	0.0	2.1	5.1	12.4	12.4	0.6	9.8	9.8
Prop In Lane	1.00		0.87	1.00		0.34	1.00		0.14	1.00		0.08
Lane Grp Cap(c), veh/h	44	0	256	127	0	367	204	693	710	37	517	536
V/C Ratio(X)	0.50	0.00	0.50	0.79	0.00	0.23	0.79	0.69	0.69	0.49	0.69	0.69
Avail Cap(c_a), veh/h	166	0	556	259	0	704	444	1229	1260	166	937	972
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	0.0	21.0	24.9	0.0	18.0	23.4	14.0	14.0	26.5	17.2	17.3
Incr Delay (d2), s/veh	3.3	0.0	1.5	4.2	0.0	0.3	2.7	1.3	1.2	3.7	1.7	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.4	1.3	0.0	0.8	2.0	4.3	4.4	0.3	3.7	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.6	0.0	22.5	29.1	0.0	18.3	26.1	15.2	15.2	30.2	18.9	18.9
LnGrp LOS	C		C	C		B	C	B	B	C	B	B
Approach Vol, veh/h		149			184			1133			748	
Approach Delay, s/veh		23.6			24.3			16.8			19.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	26.5	8.7	13.8	11.2	21.0	6.0	16.5
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1	4.6	5.1	4.6	5.1
Max Green Setting (Gmax), s	5.4	37.9	8.4	18.9	14.4	28.9	5.4	21.9
Max Q Clear Time (g_c+I1), s	2.6	14.4	5.2	5.9	7.1	11.8	2.7	4.1
Green Ext Time (p_c), s	0.0	6.5	0.0	0.5	0.1	4.1	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	18.7
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	65	1086	46	144	1196
Future Vol, veh/h	36	65	1086	46	144	1196
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	100	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	66	1108	47	147	1220

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2647	579	0	0	1156	0
Stage 1	1133	-	-	-	-	-
Stage 2	1514	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	~ 22	460	-	-	602	-
Stage 1	270	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 17	459	-	-	602	-
Mov Cap-2 Maneuver	123	-	-	-	-	-
Stage 1	270	-	-	-	-	-
Stage 2	151	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	25.53	0	1.39
HCM LOS	D		

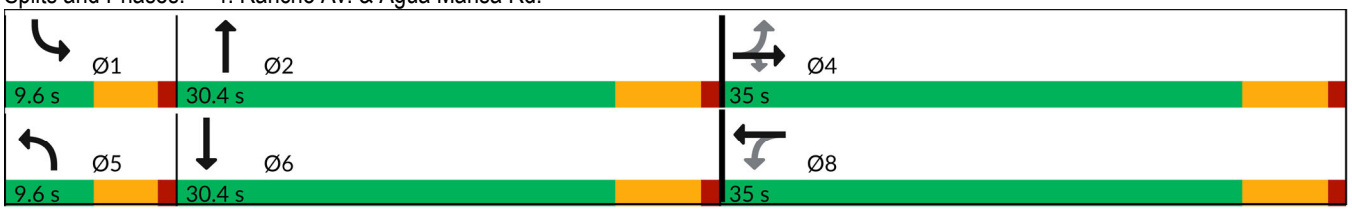
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	123	459	602	-
HCM Lane V/C Ratio	-	-	0.298	0.144	0.244	-
HCM Control Delay (s/veh)	-	-	46.1	14.2	12.9	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	1.1	0.5	1	-

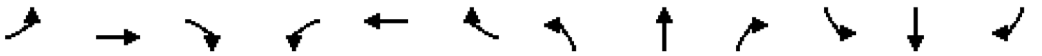
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	586	56	321	5	49	107	543	5	973
Future Volume (vph)	586	56	321	5	49	107	543	5	973
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4			8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	4	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.8	23.8	23.8	23.8	23.8	9.6	27.8	9.6	23.8
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	30.4	9.6	30.4
Total Split (%)	46.7%	46.7%	46.7%	46.7%	46.7%	12.8%	40.5%	12.8%	40.5%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.8	5.8		5.8	4.6	5.8	4.6	5.8
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		29.2	29.2		25.4	5.0	32.3	5.0	24.6
Actuated g/C Ratio		0.39	0.39		0.34	0.07	0.43	0.07	0.33
v/c Ratio		1.32	0.45		0.17	0.98	0.37	0.05	1.09
Control Delay (s/veh)		182.5	8.8		16.1	121.3	16.1	33.8	79.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		182.5	8.8		16.1	121.3	16.1	33.8	79.0
LOS		F	A		B	F	B	C	E
Approach Delay (s/veh)		124.5			16.1		33.2		78.8
Approach LOS		F			B		C		E

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 75	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.32	
Intersection Signal Delay (s/veh): 81.9	Intersection LOS: F
Intersection Capacity Utilization 97.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4: Rancho Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	586	56	321	5	49	28	107	543	5	5	973	258
Future Volume (veh/h)	586	56	321	5	49	28	107	543	5	5	973	258
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	598	57	284	5	50	18	109	554	4	5	993	161
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	204	11	617	51	316	103	113	1403	10	11	1004	163
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.07	0.39	0.39	0.01	0.33	0.33
Sat Flow, veh/h	288	27	1585	0	811	265	1688	3616	26	1688	3062	496
Grp Volume(v), veh/h	655	0	284	73	0	0	109	272	286	5	576	578
Grp Sat Flow(s),veh/h/ln	316	0	1585	1076	0	0	1688	1777	1866	1688	1777	1781
Q Serve(g_s), s	0.0	0.0	10.0	0.0	0.0	0.0	4.8	8.3	8.3	0.2	24.2	24.2
Cycle Q Clear(g_c), s	29.2	0.0	10.0	29.2	0.0	0.0	4.8	8.3	8.3	0.2	24.2	24.2
Prop In Lane	0.91		1.00	0.07		0.25	1.00		0.01	1.00		0.28
Lane Grp Cap(c), veh/h	215	0	617	470	0	0	113	690	724	11	583	584
V/C Ratio(X)	3.05	0.00	0.46	0.16	0.00	0.00	0.97	0.39	0.39	0.45	0.99	0.99
Avail Cap(c_a), veh/h	215	0	617	470	0	0	113	690	724	113	583	584
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	0.0	17.0	15.5	0.0	0.0	34.9	16.6	16.6	37.1	25.1	25.1
Incr Delay (d2), s/veh	934.3	0.0	0.5	0.2	0.0	0.0	74.4	0.4	0.4	10.2	34.1	34.5
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	59.5	0.0	3.3	0.7	0.0	0.0	4.2	3.0	3.2	0.1	14.4	14.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	963.4	0.0	17.6	15.6	0.0	0.0	109.3	16.9	16.9	47.3	59.2	59.6
LnGrp LOS	F		B	B			F	B	B	D	E	E
Approach Vol, veh/h		939			73			667			1159	
Approach Delay, s/veh		677.4			15.6			32.0			59.3	
Approach LOS		F			B			C			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	34.9		35.0	9.6	30.4		35.0				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		5.8				
Max Green Setting (Gmax), s	5.0	24.6		29.2	5.0	24.6		29.2				
Max Q Clear Time (g_c+I1), s	2.2	10.3		31.2	6.8	26.2		31.2				
Green Ext Time (p_c), s	0.0	2.6		0.0	0.0	0.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	256.3
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	10	22	5	5	5
Future Vol, veh/h	5	10	22	5	5	5
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	17	37	8	8	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	96	14	17	0	-	0
Stage 1	13	-	-	-	-	-
Stage 2	83	-	-	-	-	-
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	904	1066	1600	-	-	-
Stage 1	1010	-	-	-	-	-
Stage 2	940	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	882	1065	1600	-	-	-
Mov Cap-2 Maneuver	882	-	-	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	940	-	-	-	-	-

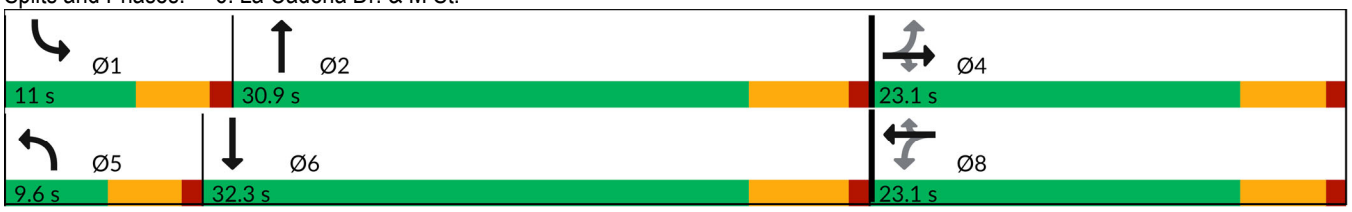
Approach	EB	NB	SB
HCM Control Delay, s/v	8.71	5.95	0
HCM LOS	A		

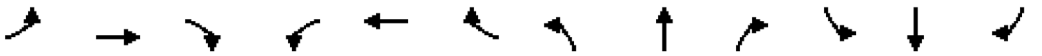
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1467	-	996	-	-
HCM Lane V/C Ratio	0.023	-	0.026	-	-
HCM Control Delay (s/veh)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	22	11	5	115	11	163	8	929	103	926
Future Volume (vph)	22	11	5	115	11	163	8	929	103	926
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.1	23.1	23.1	23.1	23.1	23.1	9.6	30.8	9.6	27.8
Total Split (s)	23.1	23.1	23.1	23.1	23.1	23.1	9.6	30.9	11.0	32.3
Total Split (%)	35.5%	35.5%	35.5%	35.5%	35.5%	35.5%	14.8%	47.5%	16.9%	49.7%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1	5.1		5.1	5.1	4.6	5.8	4.6	5.8
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.1	14.1		14.3	14.3	6.2	26.4	7.2	32.5
Actuated g/C Ratio		0.28	0.28		0.28	0.28	0.12	0.52	0.14	0.64
v/c Ratio		0.09	0.01		0.34	0.30	0.04	0.57	0.45	0.43
Control Delay (s/veh)		19.2	0.0		22.9	5.5	27.1	14.9	34.5	9.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		19.2	0.0		22.9	5.5	27.1	14.9	34.5	9.0
LOS		B	A		C	A	C	B	C	A
Approach Delay (s/veh)		16.7			13.1			15.0		11.5
Approach LOS		B			B			B		B

Intersection Summary			
Cycle Length: 65			
Actuated Cycle Length: 50.4			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 13.3		Intersection LOS: B	
Intersection Capacity Utilization 62.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: La Cadena Dr. & M St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	11	5	115	11	163	8	929	91	103	926	19
Future Volume (veh/h)	22	11	5	115	11	163	8	929	91	103	926	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	23	11	3	119	11	109	8	958	79	106	955	18
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	101	30	477	116	6	476	18	1190	98	133	1525	29
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.01	0.36	0.36	0.08	0.43	0.43
Sat Flow, veh/h	0	99	1579	0	19	1577	1688	3313	273	1688	3566	67
Grp Volume(v), veh/h	34	0	3	130	0	109	8	514	523	106	476	497
Grp Sat Flow(s),veh/h/ln	99	0	1579	19	0	1577	1688	1777	1810	1688	1777	1856
Q Serve(g_s), s	0.0	0.0	0.1	0.0	0.0	3.1	0.3	15.5	15.5	3.7	12.5	12.5
Cycle Q Clear(g_c), s	18.0	0.0	0.1	18.0	0.0	3.1	0.3	15.5	15.5	3.7	12.5	12.5
Prop In Lane	0.68		1.00	0.92		1.00	1.00		0.15	1.00		0.04
Lane Grp Cap(c), veh/h	131	0	477	121	0	476	18	638	650	133	760	794
V/C Ratio(X)	0.26	0.00	0.01	1.07	0.00	0.23	0.46	0.81	0.81	0.80	0.63	0.63
Avail Cap(c_a), veh/h	131	0	477	121	0	476	142	748	762	181	790	825
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	14.6	29.0	0.0	15.6	29.3	17.2	17.2	27.0	13.3	13.3
Incr Delay (d2), s/veh	1.0	0.0	0.0	101.7	0.0	0.2	6.7	5.6	5.5	11.1	1.5	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	0.3	0.0	0.0	5.1	0.0	1.0	0.1	6.1	6.2	1.7	4.2	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.3	0.0	14.6	130.7	0.0	15.8	36.0	22.8	22.7	38.1	14.8	14.8
LnGrp LOS	B		B	F		B	D	C	C	D	B	B
Approach Vol, veh/h		37			239			1045			1079	
Approach Delay, s/veh		18.0			78.3			22.9			17.1	
Approach LOS		B			E			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	27.2		23.1	5.2	31.3		23.1				
Change Period (Y+Rc), s	4.6	5.8		5.1	4.6	5.8		5.1				
Max Green Setting (Gmax), s	6.4	25.1		18.0	5.0	26.5		18.0				
Max Q Clear Time (g_c+I1), s	5.7	17.5		20.0	2.3	14.5		20.0				
Green Ext Time (p_c), s	0.0	3.6		0.0	0.0	4.5		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh		25.7
HCM 7th LOS		C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	5	12	5	42	7	882	29	97	925	13
Future Vol, veh/h	6	0	5	12	5	42	7	882	29	97	925	13
Conflicting Peds, #/hr	0	0	6	0	0	0	0	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	80	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	0	6	14	6	48	8	1002	33	110	1051	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1801	2332	541	1787	2323	518	1068	0	0	1035	0	0
Stage 1	1281	1281	-	1035	1035	-	-	-	-	-	-	-
Stage 2	520	1051	-	752	1288	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	50	36	485	51	37	503	648	-	-	667	-	-
Stage 1	175	235	-	248	307	-	-	-	-	-	-	-
Stage 2	507	302	-	368	233	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	36	30	482	42	30	503	647	-	-	667	-	-
Mov Cap-2 Maneuver	106	101	-	141	118	-	-	-	-	-	-	-
Stage 1	146	195	-	245	304	-	-	-	-	-	-	-
Stage 2	445	298	-	302	194	-	-	-	-	-	-	-

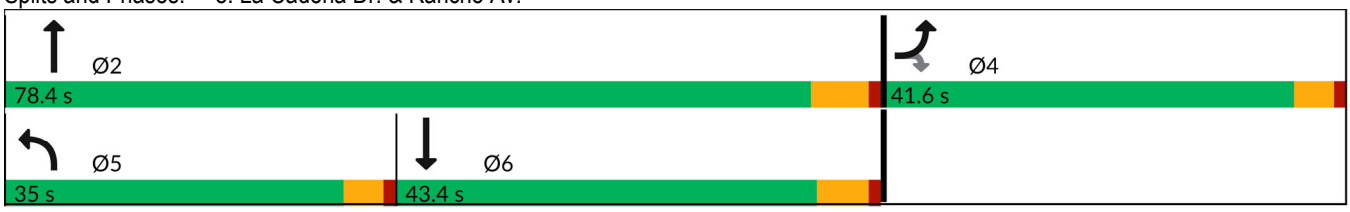
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	28.7	21.89	0.08	1.07
HCM LOS	D	C		

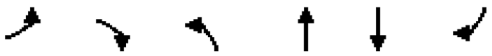
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	647	-	-	164	280	667	-	-
HCM Lane V/C Ratio	0.012	-	-	0.076	0.24	0.165	-	-
HCM Control Delay (s/veh)	10.6	-	-	28.7	21.9	11.5	-	-
HCM Lane LOS	B	-	-	D	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.9	0.6	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	106	1114	481	680	929
Future Volume (vph)	106	1114	481	680	929
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	41.6	41.6	9.6	24.2	42.8
Total Split (s)	41.6	41.6	35.0	78.4	43.4
Total Split (%)	34.7%	34.7%	29.2%	65.3%	36.2%
Yellow Time (s)	3.6	3.6	3.6	5.2	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	6.2	5.8
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	37.0	37.0	30.4	71.9	37.3
Actuated g/C Ratio	0.31	0.31	0.25	0.60	0.31
v/c Ratio	1.09	0.81	1.23	0.35	0.95
Control Delay (s/veh)	89.4	18.0	161.5	12.6	58.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	89.4	18.0	161.5	12.6	58.1
LOS	F	B	F	B	E
Approach Delay (s/veh)	54.2			74.3	58.1
Approach LOS	D			E	E

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 119.7			
Natural Cycle: 125			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.23			
Intersection Signal Delay (s/veh): 62.3		Intersection LOS: E	
Intersection Capacity Utilization 97.7%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 8: La Cadena Dr. & Rancho Av.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	106	1114	481	680	929	32
Future Volume (veh/h)	106	1114	481	680	929	32
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1772	1870	1772	1870	1870	1870
Adj Flow Rate, veh/h	0	791	523	739	1010	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	469	881	457	2224	1114	26
Arrive On Green	0.00	0.28	0.27	0.63	0.31	0.31
Sat Flow, veh/h	1688	3170	1688	3647	3641	84
Grp Volume(v), veh/h	0	791	523	739	506	528
Grp Sat Flow(s),veh/h/ln	1688	1585	1688	1777	1777	1855
Q Serve(g_s), s	0.0	26.9	30.4	11.0	30.6	30.6
Cycle Q Clear(g_c), s	0.0	26.9	30.4	11.0	30.6	30.6
Prop In Lane	1.00	1.00	1.00			0.05
Lane Grp Cap(c), veh/h	469	881	457	2224	558	582
V/C Ratio(X)	0.00	0.90	1.14	0.33	0.91	0.91
Avail Cap(c_a), veh/h	557	1045	457	2287	595	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	39.0	40.9	9.9	36.9	36.9
Incr Delay (d2), s/veh	0.0	9.2	87.8	0.1	17.1	16.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	22.3	23.0	3.7	15.2	15.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	48.2	128.7	10.0	54.0	53.4
LnGrp LOS		D	F	B	D	D
Approach Vol, veh/h	791			1262	1034	
Approach Delay, s/veh	48.2			59.2	53.7	
Approach LOS	D			E	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		76.4		35.8	35.0	41.4
Change Period (Y+Rc), s		6.2		4.6	4.6	* 6.2
Max Green Setting (Gmax), s		72.2		37.0	30.4	* 38
Max Q Clear Time (g_c+I1), s		13.0		28.9	32.4	32.6
Green Ext Time (p_c), s		5.1		2.2	0.0	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	54.5
HCM 7th LOS	D

Notes

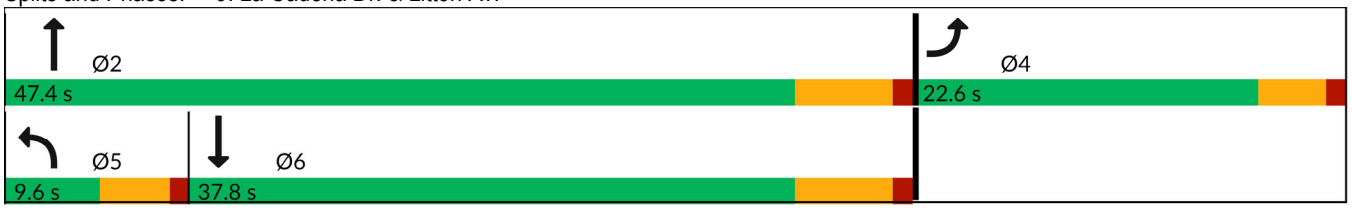
User approved volume balancing among the lanes for turning movement.

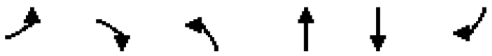
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	52	58	1091	1920
Future Volume (vph)	52	58	1091	1920
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	10.0	10.0
Minimum Split (s)	22.6	9.6	24.2	24.2
Total Split (s)	22.6	9.6	47.4	37.8
Total Split (%)	32.3%	13.7%	67.7%	54.0%
Yellow Time (s)	3.6	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	6.2	6.2
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	6.9	5.2	39.5	34.5
Actuated g/C Ratio	0.13	0.10	0.74	0.65
v/c Ratio	0.39	0.40	0.47	0.98
Control Delay (s/veh)	21.3	35.0	4.8	33.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.3	35.0	4.8	33.0
LOS	C	D	A	C
Approach Delay (s/veh)	21.3		6.4	33.0
Approach LOS	C		A	C

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 53.2	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay (s/veh): 23.2	Intersection LOS: C
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 9: La Cadena Dr. & Litton Av.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	52	32	58	1091	1920	52
Future Volume (veh/h)	52	32	58	1091	1920	52
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1772	1870	1772	1870	1870	1870
Adj Flow Rate, veh/h	59	19	66	1240	2182	57
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	79	25	99	2608	2087	54
Arrive On Green	0.06	0.06	0.06	0.73	0.59	0.59
Sat Flow, veh/h	1225	394	1688	3647	3632	92
Grp Volume(v), veh/h	79	0	66	1240	1091	1148
Grp Sat Flow(s),veh/h/ln	1640	0	1688	1777	1777	1854
Q Serve(g_s), s	2.5	0.0	2.1	7.6	31.6	31.6
Cycle Q Clear(g_c), s	2.5	0.0	2.1	7.6	31.6	31.6
Prop In Lane	0.75	0.24	1.00			0.05
Lane Grp Cap(c), veh/h	106	0	99	2608	1048	1093
V/C Ratio(X)	0.75	0.00	0.67	0.48	1.04	1.05
Avail Cap(c_a), veh/h	551	0	157	2732	1048	1093
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	0.0	24.7	2.9	11.0	11.0
Incr Delay (d2), s/veh	3.9	0.0	2.9	0.1	39.1	41.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.8	0.2	17.3	18.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	28.5	0.0	27.6	3.0	50.0	52.4
LnGrp LOS	C		C	A	F	F
Approach Vol, veh/h	79			1306	2239	
Approach Delay, s/veh	28.5			4.3	51.3	
Approach LOS	C			A	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		45.5		8.1	7.7	37.8
Change Period (Y+Rc), s		6.2		4.6	4.6	6.2
Max Green Setting (Gmax), s		41.2		18.0	5.0	31.6
Max Q Clear Time (g_c+I1), s		9.6		4.5	4.1	33.6
Green Ext Time (p_c), s		9.8		0.1	0.0	0.0

Intersection Summary		
HCM 7th Control Delay, s/veh	33.8	
HCM 7th LOS	C	

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	18	5	13	19	25	5	22	29	35	8	8
Future Vol, veh/h	8	18	5	13	19	25	5	22	29	35	8	8
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	19	5	14	20	27	5	23	31	37	9	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	7.4	7.3	7.2	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	26%	23%	69%
Vol Thru, %	39%	58%	33%	16%
Vol Right, %	52%	16%	44%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	56	31	57	51
LT Vol	5	8	13	35
Through Vol	22	18	19	8
RT Vol	29	5	25	8
Lane Flow Rate	60	33	61	54
Geometry Grp	1	1	1	1
Degree of Util (X)	0.064	0.038	0.066	0.063
Departure Headway (Hd)	3.844	4.132	3.938	4.185
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	925	859	902	851
Service Time	1.898	2.194	1.996	2.236
HCM Lane V/C Ratio	0.065	0.038	0.068	0.063
HCM Control Delay, s/veh	7.2	7.4	7.3	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0.2	0.2

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	289	5	49	310	7	49
Future Vol, veh/h	289	5	49	310	7	49
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	298	5	51	320	7	51

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	305	0	723	303
Stage 1	-	-	-	-	303	-
Stage 2	-	-	-	-	421	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1256	-	393	737
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	663	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1253	-	373	736
Mov Cap-2 Maneuver	-	-	-	-	480	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	630	-

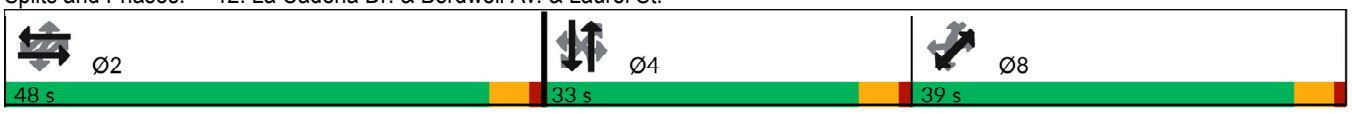
Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.09	10.55
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	480	736	-	-	246	-
HCM Lane V/C Ratio	0.015	0.069	-	-	0.04	-
HCM Control Delay (s/veh)	12.6	10.3	-	-	8	0
HCM Lane LOS	B	B	-	-	A	A
HCM 95th %tile Q(veh)	0	0.2	-	-	0.1	-

Lane Group	EBL2	EBL	EBT	WBL2	WBL	WBT	NBL2	NBL	NBT	SBL2	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	5	98	95	5	18	98	5	36	10	8	6	5
Future Volume (vph)	5	98	95	5	18	98	5	36	10	8	6	5
Turn Type	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2		2	2		4	4		4	4	
Detector Phase	2	2	2	2	2	2	4	4	4	4	4	4
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	22.6	22.6	22.6	22.6	22.6	22.6	31.6	31.6	31.6	31.6	31.6	31.6
Total Split (s)	48.0	48.0	48.0	48.0	48.0	48.0	33.0	33.0	33.0	33.0	33.0	33.0
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	27.5%	27.5%	27.5%	27.5%	27.5%	27.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)			0.0			0.0			0.0			0.0
Total Lost Time (s)			4.6			4.6			4.6			4.6
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)			21.4			21.4			14.3			14.3
Actuated g/C Ratio			0.31			0.31			0.21			0.21
v/c Ratio			0.62			0.27			0.27			0.10
Control Delay (s/veh)			29.2			22.9			31.5			27.4
Queue Delay			0.0			0.0			0.0			0.0
Total Delay (s/veh)			29.2			22.9			31.5			27.4
LOS			C			C			C			C
Approach Delay (s/veh)			29.2			22.9			31.5			27.4
Approach LOS			C			C			C			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 68.6	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay (s/veh): 24.4	Intersection LOS: C
Intersection Capacity Utilization 63.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: La Cadena Dr. & Bordwell Av. & Laurel St.



Lane Group	NEL2	NEL	NET	SWL2	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	12	6	315	5	20	417
Future Volume (vph)	12	6	315	5	20	417
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			8			8
Permitted Phases	8	8		8	8	
Detector Phase	8	8	8	8	8	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.6	27.6	27.6	27.6	27.6	27.6
Total Split (s)	39.0	39.0	39.0	39.0	39.0	39.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.6	4.6		4.6	4.6
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)		22.9	22.9		22.9	22.9
Actuated g/C Ratio		0.33	0.33		0.33	0.33
v/c Ratio		0.10	0.32		0.09	0.54
Control Delay (s/veh)		24.1	21.0		22.8	23.4
Queue Delay		0.0	0.0		0.0	0.0
Total Delay (s/veh)		24.1	21.0		22.8	23.4
LOS		C	C		C	C
Approach Delay (s/veh)			21.2			23.4
Approach LOS			C			C

Intersection Summary

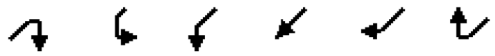
Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	5	98	95	29	44	5	18	98	5	5	5	36
Future Volume (vph)	5	98	95	29	44	5	18	98	5	5	5	36
Ideal Flow (vphpl)	1800	1800	1900	1900	1900	1800	1800	1900	1900	1900	1800	1800
Total Lost time (s)			4.6					4.6				
Lane Util. Factor			1.00					1.00				
Frt			0.96					0.99				
Flt Protected			0.98					0.99				
Satd. Flow (prot)			1761					1829				
Flt Permitted			0.84					0.92				
Satd. Flow (perm)			1509					1690				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	107	103	32	48	5	20	107	5	5	5	39
RTOR Reduction (vph)	0	0	6	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	0	289	0	0	0	0	141	0	0	0	0
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Perm	Perm
Protected Phases			2					2				
Permitted Phases	2	2				2	2				4	4
Actuated Green, G (s)			21.3					21.3				
Effective Green, g (s)			21.3					21.3				
Actuated g/C Ratio			0.31					0.31				
Clearance Time (s)			4.6					4.6				
Vehicle Extension (s)			3.0					3.0				
Lane Grp Cap (vph)			474					530				
v/s Ratio Prot												
v/s Ratio Perm			c0.19					0.08				
v/c Ratio			0.61					0.27				
Uniform Delay, d1			19.7					17.4				
Progression Factor			1.00					1.00				
Incremental Delay, d2			2.2					0.3				
Delay (s)			21.9					17.7				
Level of Service			C					B				
Approach Delay (s/veh)			21.9					17.7				
Approach LOS			C					B				

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	67.8	Sum of lost time (s)	13.8
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	NEL2	NEL	NET	NER
Lane Configurations												
Traffic Volume (vph)	10	20	5	8	6	5	6	5	12	6	315	20
Future Volume (vph)	10	20	5	8	6	5	6	5	12	6	315	20
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1900	1900	1900	1800	1800	1900	1900
Total Lost time (s)	4.6					4.6				4.6	4.6	
Lane Util. Factor	1.00					1.00				1.00	0.95	
Frt	0.96					0.95				1.00	0.99	
Flt Protected	0.97					0.98				0.95	1.00	
Satd. Flow (prot)	1733					1729				1676	3500	
Flt Permitted	0.81					0.84				0.32	1.00	
Satd. Flow (perm)	1450					1494				571	3500	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	22	5	9	7	5	7	5	13	7	342	22
RTOR Reduction (vph)	3	0	0	0	0	4	0	0	0	0	1	0
Lane Group Flow (vph)	79	0	0	0	0	29	0	0	0	20	368	0
Turn Type	NA			Perm	Perm	NA			Perm	Perm	NA	
Protected Phases	4					4					8	
Permitted Phases				4	4				8	8		
Actuated Green, G (s)	9.8					9.8				22.9	22.9	
Effective Green, g (s)	9.8					9.8				22.9	22.9	
Actuated g/C Ratio	0.14					0.14				0.34	0.34	
Clearance Time (s)	4.6					4.6				4.6	4.6	
Vehicle Extension (s)	3.0					3.0				3.0	3.0	
Lane Grp Cap (vph)	209					215				192	1182	
v/s Ratio Prot											0.11	
v/s Ratio Perm	c0.05					0.02				0.04		
v/c Ratio	0.38					0.13				0.10	0.31	
Uniform Delay, d1	26.3					25.3				15.4	16.6	
Progression Factor	1.00					1.00				1.00	1.00	
Incremental Delay, d2	1.2					0.3				0.2	0.2	
Delay (s)	27.4					25.6				15.6	16.8	
Level of Service	C					C				B	B	
Approach Delay (s/veh)	27.4					25.6					16.7	
Approach LOS	C					C					B	

Intersection Summary



Movement	NER2	SWL2	SWL	SWT	SWR	SWR2
Lane Configurations						
Traffic Volume (vph)	5	5	20	417	123	25
Future Volume (vph)	5	5	20	417	123	25
Ideal Flow (vphpl)	1900	1800	1800	1900	1900	1900
Total Lost time (s)			4.6	4.6		
Lane Util. Factor			1.00	0.95		
Frt			1.00	0.96		
Flt Protected			0.95	1.00		
Satd. Flow (prot)			1676	3400		
Flt Permitted			0.51	1.00		
Satd. Flow (perm)			905	3400		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	5	22	453	134	27
RTOR Reduction (vph)	0	0	0	3	0	0
Lane Group Flow (vph)	0	0	27	611	0	0
Turn Type		Perm	Perm	NA		
Protected Phases				8		
Permitted Phases		8	8			
Actuated Green, G (s)			22.9	22.9		
Effective Green, g (s)			22.9	22.9		
Actuated g/C Ratio			0.34	0.34		
Clearance Time (s)			4.6	4.6		
Vehicle Extension (s)			3.0	3.0		
Lane Grp Cap (vph)			305	1148		
v/s Ratio Prot				c0.18		
v/s Ratio Perm			0.03			
v/c Ratio			0.09	0.53		
Uniform Delay, d1			15.3	18.1		
Progression Factor			1.00	1.00		
Incremental Delay, d2			0.1	0.5		
Delay (s)			15.5	18.6		
Level of Service			B	B		
Approach Delay (s/veh)				18.5		
Approach LOS				B		

Intersection Summary

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	5	114	5	5	5	103	638	5	5	632	28
Future Vol, veh/h	13	5	114	5	5	5	103	638	5	5	632	28
Conflicting Peds, #/hr	0	0	2	0	0	1	0	0	3	0	0	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	5	119	5	5	5	107	665	5	5	658	29

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1249	1586	361	1229	1598	339	703	0	0	673	0	0
Stage 1	698	698	-	885	885	-	-	-	-	-	-	-
Stage 2	550	887	-	344	713	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	130	107	636	134	105	657	891	-	-	914	-	-
Stage 1	397	440	-	306	361	-	-	-	-	-	-	-
Stage 2	487	360	-	645	434	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	108	92	626	93	90	654	878	-	-	911	-	-
Mov Cap-2 Maneuver	287	253	-	226	229	-	-	-	-	-	-	-
Stage 1	389	432	-	268	316	-	-	-	-	-	-	-
Stage 2	416	315	-	512	425	-	-	-	-	-	-	-

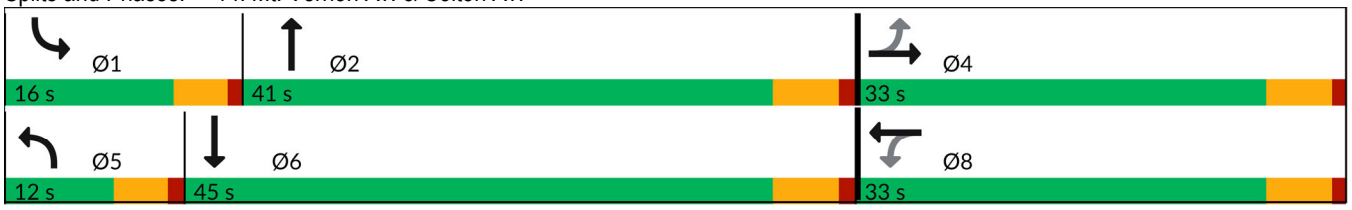
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.07	18.07	1.34	0.07
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	878	-	-	534	291	911	-	-
HCM Lane V/C Ratio	0.122	-	-	0.258	0.054	0.006	-	-
HCM Control Delay (s/veh)	9.7	-	-	14.1	18.1	9	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1	0.2	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	83	270	116	266	51	706	110	641
Future Volume (vph)	83	270	116	266	51	706	110	641
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	24.4	24.4	28.4	28.4	9.6	37.4	9.6	37.4
Total Split (s)	33.0	33.0	33.0	33.0	12.0	41.0	16.0	45.0
Total Split (%)	36.7%	36.7%	36.7%	36.7%	13.3%	45.6%	17.8%	50.0%
Yellow Time (s)	4.4	4.4	4.4	4.4	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	4.6	5.4	4.6	5.4
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	20.4	20.4	20.4	20.4	6.9	26.3	9.3	30.9
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.10	0.38	0.13	0.44
v/c Ratio	0.57	0.59	0.59	0.74	0.33	0.72	0.54	0.51
Control Delay (s/veh)	40.6	28.2	37.5	32.5	42.2	22.7	43.6	16.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.6	28.2	37.5	32.5	42.2	22.7	43.6	16.2
LOS	D	C	D	C	D	C	D	B
Approach Delay (s/veh)		30.9		33.7		23.8		19.8
Approach LOS		C		C		C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 69.5	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay (s/veh): 25.3	Intersection LOS: C
Intersection Capacity Utilization 78.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 14: Mt. Vernon Av. & Colton Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	270	26	116	266	97	51	706	163	110	641	89
Future Volume (veh/h)	83	270	26	116	266	97	51	706	163	110	641	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	90	293	24	126	289	69	55	767	165	120	697	87
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	249	530	43	283	453	108	80	1077	232	151	1318	164
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.05	0.37	0.37	0.09	0.42	0.42
Sat Flow, veh/h	1020	1702	139	1058	1456	348	1688	2881	620	1688	3169	395
Grp Volume(v), veh/h	90	0	317	126	0	358	55	473	459	120	390	394
Grp Sat Flow(s),veh/h/ln	1020	0	1841	1058	0	1804	1688	1777	1724	1688	1777	1788
Q Serve(g_s), s	5.7	0.0	9.8	7.7	0.0	11.7	2.2	15.5	15.5	4.8	11.2	11.3
Cycle Q Clear(g_c), s	17.3	0.0	9.8	17.5	0.0	11.7	2.2	15.5	15.5	4.8	11.2	11.3
Prop In Lane	1.00		0.08	1.00		0.19	1.00		0.36	1.00		0.22
Lane Grp Cap(c), veh/h	249	0	573	283	0	562	80	664	644	151	739	744
V/C Ratio(X)	0.36	0.00	0.55	0.44	0.00	0.64	0.69	0.71	0.71	0.79	0.53	0.53
Avail Cap(c_a), veh/h	343	0	743	381	0	728	183	925	898	281	1029	1036
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	0.0	19.6	26.8	0.0	20.2	32.1	18.3	18.3	30.5	14.9	14.9
Incr Delay (d2), s/veh	0.9	0.0	0.8	1.1	0.0	1.2	3.9	1.5	1.6	3.6	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	3.8	1.9	0.0	4.5	0.9	5.8	5.6	1.9	4.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.6	0.0	20.4	27.9	0.0	21.4	35.9	19.8	19.9	34.1	15.5	15.5
LnGrp LOS	C		C	C		C	D	B	B	C	B	B
Approach Vol, veh/h		407			484			987			904	
Approach Delay, s/veh		22.2			23.1			20.7			18.0	
Approach LOS		C			C			C			B	

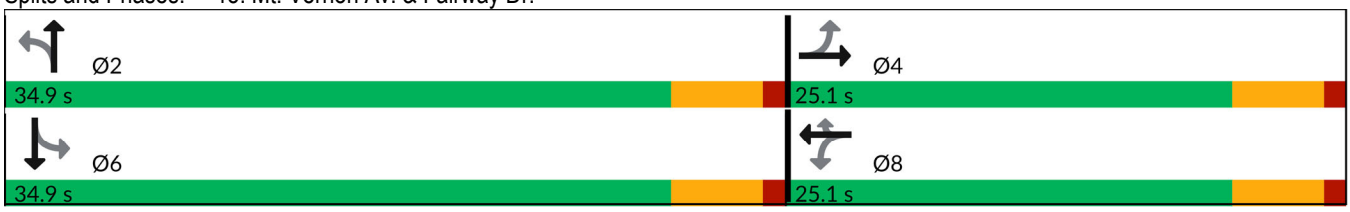
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	31.0		26.7	7.8	33.8		26.7				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	11.4	35.6		27.6	7.4	39.6		27.6				
Max Q Clear Time (g_c+I1), s	6.8	17.5		19.3	4.2	13.3		19.5				
Green Ext Time (p_c), s	0.1	5.5		1.4	0.0	4.9		1.7				

Intersection Summary			
HCM 7th Control Delay, s/veh		20.5	
HCM 7th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	26	114	204	181	432	21	610	246	592
Future Volume (vph)	26	114	204	181	432	21	610	246	592
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4		8			2		6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	23.1	23.1	25.1	25.1	25.1	24.1	24.1	26.1	26.1
Total Split (s)	25.1	25.1	25.1	25.1	25.1	34.9	34.9	34.9	34.9
Total Split (%)	41.8%	41.8%	41.8%	41.8%	41.8%	58.2%	58.2%	58.2%	58.2%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	15.9	15.9	15.9	15.9	15.9	25.3	25.3	25.3	25.3
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.31	0.49	0.49	0.49	0.49
v/c Ratio	0.08	0.25	0.58	0.17	0.73	0.07	0.41	0.82	0.38
Control Delay (s/veh)	14.6	14.4	23.8	14.5	17.4	8.5	9.2	37.9	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.6	14.4	23.8	14.5	17.4	8.5	9.2	37.9	9.1
LOS	B	B	C	B	B	A	A	D	A
Approach Delay (s/veh)		14.4		18.4			9.1		17.2
Approach LOS		B		B			A		B

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 51.9	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay (s/veh): 15.2	Intersection LOS: B
Intersection Capacity Utilization 71.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 15: Mt. Vernon Av. & Fairway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	114	21	204	181	432	21	610	72	246	592	37
Future Volume (veh/h)	26	114	21	204	181	432	21	610	72	246	592	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	27	118	19	210	187	321	22	629	61	254	610	31
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	362	460	74	431	1042	459	458	1677	162	435	1763	89
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	887	1570	253	1246	3554	1567	787	3270	317	751	3438	175
Grp Volume(v), veh/h	27	0	137	210	187	321	22	341	349	254	315	326
Grp Sat Flow(s),veh/h/ln	887	0	1823	1246	1777	1567	787	1777	1810	751	1777	1836
Q Serve(g_s), s	1.2	0.0	3.0	8.1	2.1	9.6	0.9	6.1	6.1	16.2	5.5	5.5
Cycle Q Clear(g_c), s	3.3	0.0	3.0	11.2	2.1	9.6	6.4	6.1	6.1	22.3	5.5	5.5
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.17	1.00		0.10
Lane Grp Cap(c), veh/h	362	0	534	431	1042	459	458	911	928	435	911	941
V/C Ratio(X)	0.07	0.00	0.26	0.49	0.18	0.70	0.05	0.37	0.38	0.58	0.35	0.35
Avail Cap(c_a), veh/h	440	0	694	540	1353	597	501	1008	1027	476	1008	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	0.0	14.2	18.5	13.9	16.5	9.5	7.7	7.7	14.5	7.6	7.6
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.9	0.1	2.5	0.0	0.3	0.3	1.5	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.1	2.1	0.7	3.2	0.1	1.8	1.8	2.4	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.2	0.0	14.4	19.3	13.9	19.0	9.5	8.0	8.0	16.0	7.8	7.8
LnGrp LOS	B		B	B	B	B	A	A	A	B	A	A
Approach Vol, veh/h		164			718			712			895	
Approach Delay, s/veh		14.6			17.8			8.0			10.1	
Approach LOS		B			B			A			B	

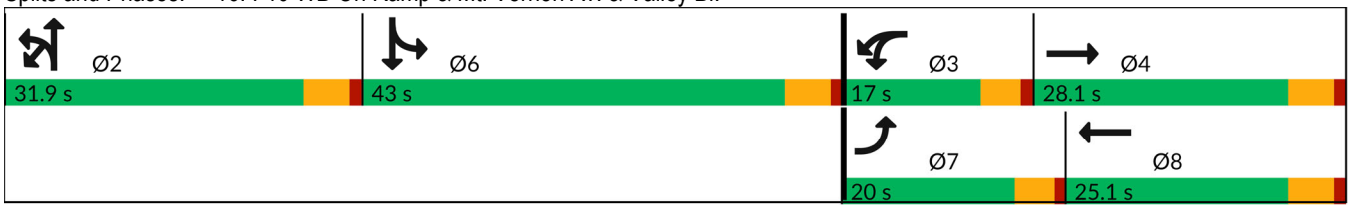
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		32.0		20.5		32.0		20.5				
Change Period (Y+Rc), s		5.1		5.1		5.1		5.1				
Max Green Setting (Gmax), s		29.8		20.0		29.8		20.0				
Max Q Clear Time (g_c+I1), s		8.4		5.3		24.3		13.2				
Green Ext Time (p_c), s		4.3		0.7		2.6		1.8				

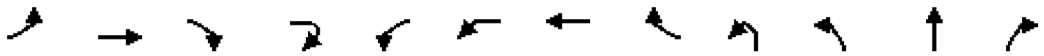
Intersection Summary												
HCM 7th Control Delay, s/veh			12.0									
HCM 7th LOS			B									

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	329	157	51	208	445	12	401
Future Volume (vph)	329	157	51	208	445	12	401
Turn Type	Prot	NA	Prot	NA	NA	Split	NA
Protected Phases	7	4	3	8	2	6	6
Permitted Phases							
Detector Phase	7	4	3	8	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	23.1	9.6	25.1	23.1	23.1	23.1
Total Split (s)	20.0	28.1	17.0	25.1	31.9	43.0	43.0
Total Split (%)	16.7%	23.4%	14.2%	20.9%	26.6%	35.8%	35.8%
Yellow Time (s)	3.6	4.1	3.6	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	4.6	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	None	None	None	None	None	None
Act Effct Green (s)	15.4	23.0	12.4	20.0	26.8	37.9	37.9
Actuated g/C Ratio	0.13	0.19	0.10	0.17	0.22	0.32	0.32
v/c Ratio	1.63	1.24	1.47	0.78	1.19	0.02	1.50
Control Delay (s/veh)	336.7	173.6	277.4	65.3	137.4	28.7	264.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	336.7	173.6	277.4	65.3	137.4	28.7	264.8
LOS	F	F	F	E	F	C	F
Approach Delay (s/veh)		249.3		174.3	137.4		261.2
Approach LOS		F		F	F		F

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 125	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.63	
Intersection Signal Delay (s/veh): 206.2	Intersection LOS: F
Intersection Capacity Utilization 121.1%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 16: I-10 WB On Ramp & Mt. Vernon Av. & Valley Bl.





Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	329	157	206	17	188	51	208	18	269	98	445	47
Future Volume (vph)	329	157	206	17	188	51	208	18	269	98	445	47
Ideal Flow (vphpl)	1800	1900	1900	1900	1800	1800	1900	1900	1800	1800	1900	1900
Total Lost time (s)	4.6	5.1				4.6	5.1				5.1	
Lane Util. Factor	1.00	1.00				1.00	1.00				0.95	
Frt	1.00	0.91				1.00	0.99				0.99	
Flt Protected	0.95	1.00				0.95	1.00				0.98	
Satd. Flow (prot)	1676	1699				1676	1841				3437	
Flt Permitted	0.95	1.00				0.95	1.00				0.98	
Satd. Flow (perm)	1676	1699				1676	1841				3437	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	350	167	219	18	200	54	221	19	286	104	473	50
RTOR Reduction (vph)	0	0	0	0	0	0	3	0	0	0	3	0
Lane Group Flow (vph)	350	404	0	0	0	254	238	0	0	0	910	0
Turn Type	Prot	NA			Prot	Prot	NA		Split	Split	NA	
Protected Phases	7	4			3	3	8		2	2	2	
Permitted Phases												
Actuated Green, G (s)	15.4	23.0				12.4	20.0				26.8	
Effective Green, g (s)	15.4	23.0				12.4	20.0				26.8	
Actuated g/C Ratio	0.13	0.19				0.10	0.17				0.22	
Clearance Time (s)	4.6	5.1				4.6	5.1				5.1	
Vehicle Extension (s)	2.0	3.0				2.0	3.0				3.0	
Lane Grp Cap (vph)	215	325				173	306				767	
v/s Ratio Prot	c0.21	c0.24				0.15	0.13				c0.26	
v/s Ratio Perm												
v/c Ratio	1.63	1.24				1.47	0.78				1.19	
Uniform Delay, d1	52.3	48.5				53.8	47.9				46.6	
Progression Factor	1.00	1.00				1.00	1.00				1.00	
Incremental Delay, d2	302.8	132.7				239.4	11.7				96.8	
Delay (s)	355.1	181.2				293.2	59.5				143.4	
Level of Service	F	F				F	E				F	
Approach Delay (s/veh)		261.9					179.7				143.4	
Approach LOS		F					F				F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	215.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.41		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	121.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

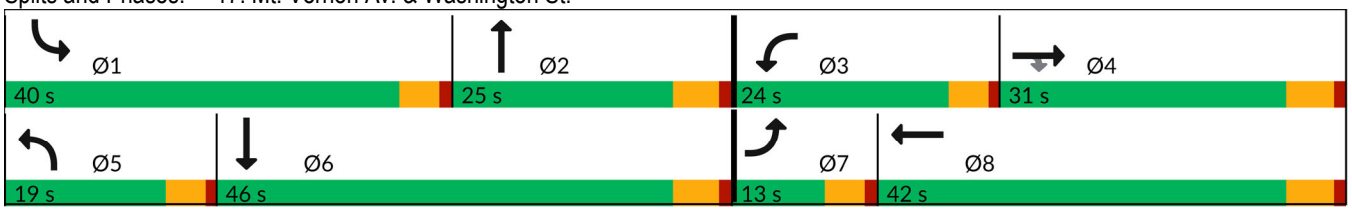
Movement	SBL	SBT	SBR	SBR2
Lane Configurations				
Traffic Volume (vph)	12	401	226	150
Future Volume (vph)	12	401	226	150
Ideal Flow (vphpl)	1800	1900	1900	1900
Total Lost time (s)	5.1	5.1		
Lane Util. Factor	1.00	1.00		
Frt	1.00	0.93		
Flt Protected	0.95	1.00		
Satd. Flow (prot)	1676	1728		
Flt Permitted	0.95	1.00		
Satd. Flow (perm)	1676	1728		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94
Adj. Flow (vph)	13	427	240	160
RTOR Reduction (vph)	0	8	0	0
Lane Group Flow (vph)	13	819	0	0
Turn Type	Split	NA		
Protected Phases	6	6		
Permitted Phases				
Actuated Green, G (s)	37.9	37.9		
Effective Green, g (s)	37.9	37.9		
Actuated g/C Ratio	0.32	0.32		
Clearance Time (s)	5.1	5.1		
Vehicle Extension (s)	3.0	3.0		
Lane Grp Cap (vph)	529	545		
v/s Ratio Prot	0.01	c0.47		
v/s Ratio Perm				
v/c Ratio	0.02	1.50		
Uniform Delay, d1	28.3	41.1		
Progression Factor	1.00	1.00		
Incremental Delay, d2	0.0	236.1		
Delay (s)	28.3	277.1		
Level of Service	C	F		
Approach Delay (s/veh)		273.3		
Approach LOS		F		

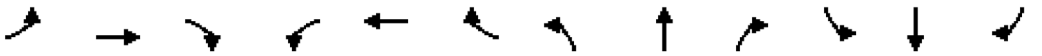
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	262	121	278	223	488	96	187	901	579	433	100
Future Volume (vph)	83	262	121	278	223	488	96	187	901	579	433	100
Turn Type	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	30.4	30.4	9.6	31.4		9.6	23.1		9.6	30.1	
Total Split (s)	13.0	31.0	31.0	24.0	42.0		19.0	25.0		40.0	46.0	
Total Split (%)	10.8%	25.8%	25.8%	20.0%	35.0%		15.8%	20.8%		33.3%	38.3%	
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4		3.6	4.1		3.6	4.1	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4		4.6	5.1		4.6	5.1	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	
Act Effct Green (s)	6.7	12.3	12.3	12.1	20.1	75.3	9.3	11.1	75.3	19.6	23.9	75.3
Actuated g/C Ratio	0.09	0.16	0.16	0.16	0.27	1.00	0.12	0.15	1.00	0.26	0.32	1.00
v/c Ratio	0.31	0.46	0.30	0.58	0.24	0.32	0.47	0.37	0.58	0.74	0.39	0.07
Control Delay (s/veh)	39.0	33.1	3.2	35.8	24.8	0.5	41.3	33.9	1.6	32.3	23.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.0	33.1	3.2	35.8	24.8	0.5	41.3	33.9	1.6	32.3	23.7	0.1
LOS	D	C	A	D	C	A	D	C	A	C	C	A
Approach Delay (s/veh)		26.4			15.9			9.9			26.1	
Approach LOS		C			B			A			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 75.3	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay (s/veh): 18.3	Intersection LOS: B
Intersection Capacity Utilization 60.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 17: Mt. Vernon Av. & Washington St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	262	121	278	223	488	96	187	901	579	433	100
Future Volume (veh/h)	83	262	121	278	223	488	96	187	901	579	433	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1870	1870	1673	1870	1870	1772	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	85	267	68	284	228	0	98	191	0	591	442	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	193	578	253	391	806		124	557		719	1121	
Arrive On Green	0.06	0.16	0.16	0.13	0.23	0.00	0.07	0.16	0.00	0.23	0.32	0.00
Sat Flow, veh/h	3092	3554	1555	3092	3554	1585	1688	3554	1585	3092	3554	1585
Grp Volume(v), veh/h	85	267	68	284	228	0	98	191	0	591	442	0
Grp Sat Flow(s),veh/h/ln	1546	1777	1555	1546	1777	1585	1688	1777	1585	1546	1777	1585
Q Serve(g_s), s	1.6	4.2	2.3	5.4	3.2	0.0	3.5	2.9	0.0	11.1	6.0	0.0
Cycle Q Clear(g_c), s	1.6	4.2	2.3	5.4	3.2	0.0	3.5	2.9	0.0	11.1	6.0	0.0
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	193	578	253	391	806		124	557		719	1121	
V/C Ratio(X)	0.44	0.46	0.27	0.73	0.28		0.79	0.34		0.82	0.39	
Avail Cap(c_a), veh/h	424	1485	650	979	2123		397	1154		1786	2372	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.7	23.2	22.5	25.7	19.6	0.0	27.9	23.0	0.0	22.3	16.4	0.0
Incr Delay (d2), s/veh	0.6	0.6	0.6	1.0	0.2	0.0	4.1	0.4	0.0	0.9	0.2	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	0.6	1.6	0.8	1.9	1.2	0.0	1.5	1.2	0.0	3.7	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.3	23.8	23.0	26.7	19.8	0.0	32.1	23.4	0.0	23.2	16.6	0.0
LnGrp LOS	C	C	C	C	B		C	C		C	B	
Approach Vol, veh/h		420			512			289			1033	
Approach Delay, s/veh		24.6			23.6			26.3			20.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	14.7	12.4	15.4	9.1	24.4	8.4	19.3
Change Period (Y+Rc), s	4.6	5.1	4.6	5.4	4.6	5.1	4.6	5.4
Max Green Setting (Gmax), s	35.4	19.9	19.4	25.6	14.4	40.9	8.4	36.6
Max Q Clear Time (g_c+I1), s	13.1	4.9	7.4	6.2	5.5	8.0	3.6	5.2
Green Ext Time (p_c), s	1.1	0.9	0.4	1.7	0.1	3.1	0.0	1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	22.7
HCM 7th LOS	C

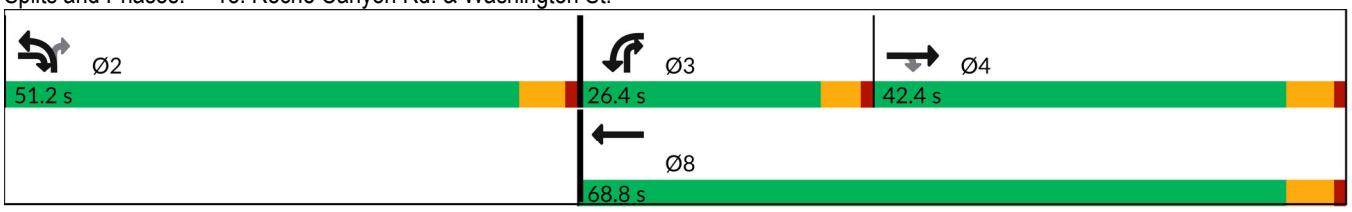
Notes

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	672	1082	553	335	650	619
Future Volume (vph)	672	1082	553	335	650	619
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Detector Phase	4	2	3	8	2	3
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	42.4	23.4	9.6	23.4	23.4	9.6
Total Split (s)	42.4	51.2	26.4	68.8	51.2	26.4
Total Split (%)	35.3%	42.7%	22.0%	57.3%	42.7%	22.0%
Yellow Time (s)	4.4	4.1	3.6	4.4	4.1	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.1	4.6	5.4	5.1	4.6
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	28.1	74.6	21.8	54.6	46.2	73.2
Actuated g/C Ratio	0.25	0.67	0.20	0.49	0.42	0.66
v/c Ratio	0.79	1.07	0.97	0.20	0.54	0.35
Control Delay (s/veh)	45.8	68.2	74.6	16.2	27.3	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.8	68.2	74.6	16.2	27.3	8.4
LOS	D	E	E	B	C	A
Approach Delay (s/veh)	59.6			52.5	18.1	
Approach LOS	E			D	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 111.3	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay (s/veh): 44.5	Intersection LOS: D
Intersection Capacity Utilization 92.8%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 18: Reche Canyon Rd. & Washington St.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	672	1082	553	335	650	619
Future Volume (veh/h)	672	1082	553	335	650	619
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		0.98	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	1673	1870	1673	1870
Adj Flow Rate, veh/h	707	761	582	353	684	583
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1303	1008	637	2198	857	1348
Arrive On Green	0.37	0.37	0.21	0.62	0.28	0.28
Sat Flow, veh/h	3647	1550	3092	3647	3092	2790
Grp Volume(v), veh/h	707	761	582	353	684	583
Grp Sat Flow(s),veh/h/ln	1777	1550	1546	1777	1546	1395
Q Serve(g_s), s	15.8	34.6	18.5	4.2	20.7	13.7
Cycle Q Clear(g_c), s	15.8	34.6	18.5	4.2	20.7	13.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1303	1008	637	2198	857	1348
V/C Ratio(X)	0.54	0.76	0.91	0.16	0.80	0.43
Avail Cap(c_a), veh/h	1306	1009	670	2238	1416	1853
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	25.2	12.5	39.1	8.1	33.8	17.0
Incr Delay (d2), s/veh	0.5	3.3	16.0	0.0	1.8	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	19.6	8.2	1.4	7.5	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	25.7	15.8	55.1	8.2	35.5	17.2
LnGrp LOS	C	B	E	A	D	B
Approach Vol, veh/h	1468			935	1267	
Approach Delay, s/veh	20.6			37.4	27.1	
Approach LOS	C			D	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		33.0	25.3	42.3		67.6
Change Period (Y+Rc), s		5.1	4.6	5.4		5.4
Max Green Setting (Gmax), s		46.1	21.8	37.0		63.4
Max Q Clear Time (g_c+I1), s		22.7	20.5	36.6		6.2
Green Ext Time (p_c), s		5.2	0.2	0.3		2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	27.1
HCM 7th LOS	C

APPENDIX 4.4:

HY (2050) INTERSECTION ANALYSIS WITH PROJECT

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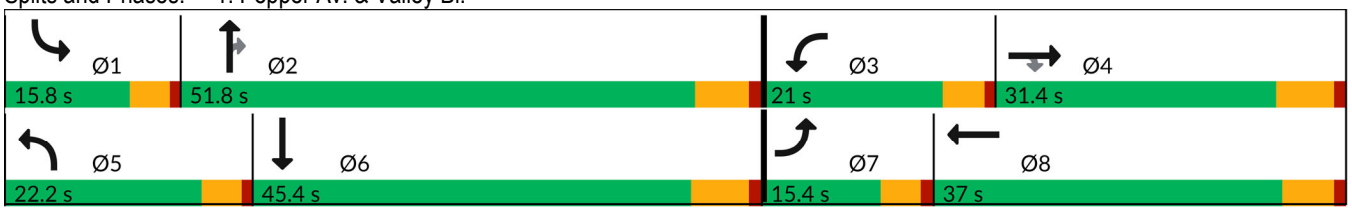
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	189	497	483	371	635	401	918	97	147	1381
Future Volume (vph)	189	497	483	371	635	401	918	97	147	1381
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8	5	2		1	6
Permitted Phases			4					2		
Detector Phase	7	4	4	3	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	30.2	30.2	9.6	29.8	9.6	40.8	40.8	9.6	41.2
Total Split (s)	15.4	31.4	31.4	21.0	37.0	22.2	51.8	51.8	15.8	45.4
Total Split (%)	12.8%	26.2%	26.2%	17.5%	30.8%	18.5%	43.2%	43.2%	13.2%	37.8%
Yellow Time (s)	3.6	5.2	5.2	3.6	4.8	3.6	4.8	4.8	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	5.8	4.6	5.8	5.8	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	10.3	25.2	25.2	16.4	31.7	17.6	47.4	47.4	9.8	39.2
Actuated g/C Ratio	0.09	0.21	0.21	0.14	0.26	0.15	0.40	0.40	0.08	0.33
v/c Ratio	0.75	0.70	0.99	0.93	0.79	0.94	0.48	0.14	0.62	0.97
Control Delay (s/veh)	71.8	49.8	65.0	81.7	47.7	80.7	28.3	1.2	64.2	55.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	71.8	49.8	65.0	81.7	47.7	80.7	28.3	1.2	64.2	55.5
LOS	E	D	E	F	D	F	C	A	E	E
Approach Delay (s/veh)		59.6			59.6		41.3			56.3
Approach LOS		E			E		D			E

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.9	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay (s/veh): 53.7	Intersection LOS: D
Intersection Capacity Utilization 86.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Pepper Av. & Valley Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	497	483	371	635	57	401	918	97	147	1381	135
Future Volume (veh/h)	189	497	483	371	635	57	401	918	97	147	1381	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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	1673	1870	1870	1673	1870	1870	1673	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	199	523	297	391	668	43	422	966	68	155	1454	126
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	249	731	326	427	892	57	458	2083	644	205	1560	135
Arrive On Green	0.08	0.21	0.21	0.14	0.26	0.26	0.15	0.41	0.41	0.07	0.33	0.33
Sat Flow, veh/h	3092	3554	1585	3092	3385	218	3092	5106	1579	3092	4785	415
Grp Volume(v), veh/h	199	523	297	391	350	361	422	966	68	155	1034	546
Grp Sat Flow(s),veh/h/ln	1546	1777	1585	1546	1777	1826	1546	1702	1579	1546	1702	1795
Q Serve(g_s), s	7.5	16.3	21.7	14.8	21.5	21.5	16.0	16.4	3.2	5.8	34.9	34.9
Cycle Q Clear(g_c), s	7.5	16.3	21.7	14.8	21.5	21.5	16.0	16.4	3.2	5.8	34.9	34.9
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	249	731	326	427	468	481	458	2083	644	205	1110	585
V/C Ratio(X)	0.80	0.72	0.91	0.92	0.75	0.75	0.92	0.46	0.11	0.76	0.93	0.93
Avail Cap(c_a), veh/h	281	754	336	427	468	481	458	2083	644	292	1124	593
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	53.6	43.9	46.1	50.5	40.1	40.1	49.9	25.7	21.7	54.5	38.7	38.7
Incr Delay (d2), s/veh	11.9	3.1	27.4	23.7	6.6	6.4	23.5	0.2	0.1	3.6	13.5	21.7
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	3.3	7.2	10.7	6.9	9.8	10.1	7.5	6.4	1.1	2.3	15.8	18.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.5	47.1	73.5	74.2	46.7	46.6	73.3	25.8	21.8	58.1	52.2	60.4
LnGrp LOS	E	D	E	E	D	D	E	C	C	E	D	E
Approach Vol, veh/h		1019			1102			1456			1735	
Approach Delay, s/veh		58.4			56.4			39.4			55.3	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	54.6	21.0	30.6	22.2	44.9	14.1	37.5
Change Period (Y+Rc), s	4.6	* 6.2	4.6	6.2	4.6	6.2	4.6	* 6.2
Max Green Setting (Gmax), s	11.2	* 46	16.4	25.2	17.6	39.2	10.8	* 31
Max Q Clear Time (g_c+I1), s	7.8	18.4	16.8	23.7	18.0	36.9	9.5	23.5
Green Ext Time (p_c), s	0.1	7.1	0.0	0.7	0.0	1.8	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	51.8
HCM 7th LOS	D

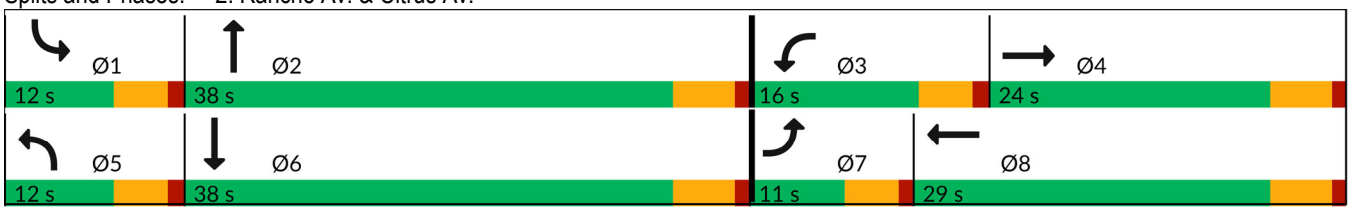
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	34	47	86	30	67	415	38	714
Future Volume (vph)	34	47	86	30	67	415	38	714
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	23.1	9.6	23.1	9.6	23.1	9.6	23.1
Total Split (s)	11.0	24.0	16.0	29.0	12.0	38.0	12.0	38.0
Total Split (%)	12.2%	26.7%	17.8%	32.2%	13.3%	42.2%	13.3%	42.2%
Yellow Time (s)	3.6	4.1	3.6	4.1	3.6	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	4.6	5.1	4.6	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	6.4	12.9	8.7	14.8	7.2	25.6	6.8	23.1
Actuated g/C Ratio	0.10	0.20	0.13	0.22	0.11	0.39	0.10	0.35
v/c Ratio	0.24	0.54	0.45	0.15	0.42	0.42	0.26	0.69
Control Delay (s/veh)	38.9	14.5	38.9	16.7	42.1	16.9	38.2	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.9	14.5	38.9	16.7	42.1	16.9	38.2	23.0
LOS	D	B	D	B	D	B	D	C
Approach Delay (s/veh)		17.8		30.3		19.9		23.8
Approach LOS		B		C		B		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 66	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay (s/veh): 22.2	Intersection LOS: C
Intersection Capacity Utilization 59.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Rancho Av. & Citrus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	47	172	86	30	25	67	415	78	38	714	23
Future Volume (veh/h)	34	47	172	86	30	25	67	415	78	38	714	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	39	54	111	99	34	11	77	477	79	44	821	25
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	93	191	125	275	89	107	1077	177	75	1177	36
Arrive On Green	0.04	0.17	0.17	0.07	0.20	0.20	0.06	0.35	0.35	0.04	0.33	0.33
Sat Flow, veh/h	1688	545	1120	1688	1354	438	1688	3049	502	1688	3520	107
Grp Volume(v), veh/h	39	0	165	99	0	45	77	277	279	44	414	432
Grp Sat Flow(s),veh/h/ln	1688	0	1665	1688	0	1792	1688	1777	1774	1688	1777	1850
Q Serve(g_s), s	1.2	0.0	4.9	3.1	0.0	1.1	2.4	6.5	6.5	1.4	11.0	11.0
Cycle Q Clear(g_c), s	1.2	0.0	4.9	3.1	0.0	1.1	2.4	6.5	6.5	1.4	11.0	11.0
Prop In Lane	1.00		0.67	1.00		0.24	1.00		0.28	1.00		0.06
Lane Grp Cap(c), veh/h	69	0	284	125	0	364	107	627	626	75	594	619
V/C Ratio(X)	0.56	0.00	0.58	0.79	0.00	0.12	0.72	0.44	0.45	0.58	0.70	0.70
Avail Cap(c_a), veh/h	199	0	580	355	0	790	230	1078	1077	230	1078	1123
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	0.0	20.7	24.7	0.0	17.6	24.9	13.4	13.5	25.4	15.7	15.7
Incr Delay (d2), s/veh	2.7	0.0	1.9	4.2	0.0	0.2	3.4	0.5	0.5	2.6	1.5	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	0.5	0.0	1.9	1.3	0.0	0.4	1.0	2.3	2.3	0.6	4.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.2	0.0	22.6	28.9	0.0	17.8	28.3	13.9	14.0	28.0	17.1	17.1
LnGrp LOS	C		C	C		B	C	B	B	C	B	B
Approach Vol, veh/h		204			144			633			890	
Approach Delay, s/veh		23.7			25.4			15.7			17.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	24.2	8.6	14.3	8.0	23.2	6.8	16.1
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1	4.6	5.1	4.6	5.1
Max Green Setting (Gmax), s	7.4	32.9	11.4	18.9	7.4	32.9	6.4	23.9
Max Q Clear Time (g_c+I1), s	3.4	8.5	5.1	6.9	4.4	13.0	3.2	3.1
Green Ext Time (p_c), s	0.0	3.4	0.1	0.6	0.0	5.2	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	18.2
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	6.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	121	70	655	11	69	1333
Future Vol, veh/h	121	70	655	11	69	1333
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	100	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	133	77	720	12	76	1465

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2343	367	0	0	733	0
Stage 1	727	-	-	-	-	-
Stage 2	1616	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	~ 35	631	-	-	870	-
Stage 1	440	-	-	-	-	-
Stage 2	178	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 32	630	-	-	869	-
Mov Cap-2 Maneuver	145	-	-	-	-	-
Stage 1	440	-	-	-	-	-
Stage 2	162	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	76.37	0	0.47
HCM LOS	F		

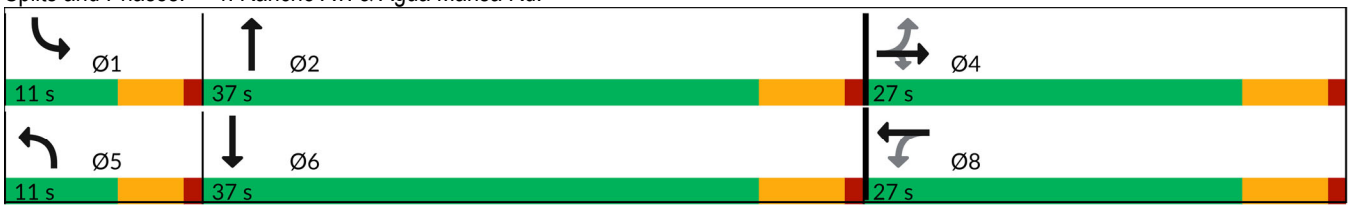
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	145	630	869	-
HCM Lane V/C Ratio	-	-	0.916	0.122	0.087	-
HCM Control Delay (s/veh)	-	-	113.9	11.5	9.5	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	6.3	0.4	0.3	-

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

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	340	27	122	12	55	148	376	38	947
Future Volume (vph)	340	27	122	12	55	148	376	38	947
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4			8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	4	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.8	23.8	23.8	23.8	23.8	9.6	27.8	9.6	23.8
Total Split (s)	27.0	27.0	27.0	27.0	27.0	11.0	37.0	11.0	37.0
Total Split (%)	36.0%	36.0%	36.0%	36.0%	36.0%	14.7%	49.3%	14.7%	49.3%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.8	5.8		5.8	4.6	5.8	4.6	5.8
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		21.2	21.2		19.0	6.4	35.6	5.9	31.2
Actuated g/C Ratio		0.28	0.28		0.25	0.09	0.47	0.08	0.42
v/c Ratio		1.15	0.26		0.34	1.19	0.27	0.33	1.10
Control Delay (s/veh)		121.9	5.5		24.6	169.8	13.3	39.6	77.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		121.9	5.5		24.6	169.8	13.3	39.6	77.0
LOS		F	A		C	F	B	D	E
Approach Delay (s/veh)		92.9			24.6		56.0		76.0
Approach LOS		F			C		E		E

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 75	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.19	
Intersection Signal Delay (s/veh): 72.9	Intersection LOS: E
Intersection Capacity Utilization 90.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: Rancho Av. & Agua Mansa Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	340	27	122	12	55	40	148	376	18	38	947	466
Future Volume (veh/h)	340	27	122	12	55	40	148	376	18	38	947	466
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	391	31	117	14	63	35	170	432	19	44	1089	495
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	9	448	54	172	78	144	1600	70	68	998	440
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.09	0.46	0.46	0.04	0.42	0.42
Sat Flow, veh/h	422	33	1585	0	609	277	1688	3468	152	1688	2399	1058
Grp Volume(v), veh/h	422	0	117	112	0	0	170	221	230	44	798	786
Grp Sat Flow(s),veh/h/ln	455	0	1585	885	0	0	1688	1777	1843	1688	1777	1680
Q Serve(g_s), s	0.0	0.0	4.3	0.0	0.0	0.0	6.4	5.7	5.8	1.9	31.2	31.2
Cycle Q Clear(g_c), s	21.2	0.0	4.3	21.2	0.0	0.0	6.4	5.7	5.8	1.9	31.2	31.2
Prop In Lane	0.93		1.00	0.12		0.31	1.00		0.08	1.00		0.63
Lane Grp Cap(c), veh/h	221	0	448	304	0	0	144	820	850	68	739	699
V/C Ratio(X)	1.91	0.00	0.26	0.37	0.00	0.00	1.18	0.27	0.27	0.65	1.08	1.12
Avail Cap(c_a), veh/h	221	0	448	304	0	0	144	820	850	144	739	699
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	0.0	20.8	21.3	0.0	0.0	34.3	12.4	12.4	35.5	21.9	21.9
Incr Delay (d2), s/veh	425.2	0.0	0.3	0.7	0.0	0.0	131.7	0.2	0.2	3.9	56.7	73.8
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	29.9	0.0	1.5	1.4	0.0	0.0	7.7	2.0	2.1	0.8	22.5	24.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	456.6	0.0	21.1	22.1	0.0	0.0	166.0	12.6	12.6	39.4	78.6	95.7
LnGrp LOS	F		C	C			F	B	B	D	F	F
Approach Vol, veh/h		539			112			621			1628	
Approach Delay, s/veh		362.0			22.1			54.6			85.8	
Approach LOS		F			C			D			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	40.4		27.0	11.0	37.0		27.0				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		5.8				
Max Green Setting (Gmax), s	6.4	31.2		21.2	6.4	31.2		21.2				
Max Q Clear Time (g_c+I1), s	3.9	7.8		23.2	8.4	33.2		23.2				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	0.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	128.0
HCM 7th LOS	F

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	13	10	5	5	5
Future Vol, veh/h	5	13	10	5	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	17	13	7	7	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	43	10	13	0	-	0
Stage 1	10	-	-	-	-	-
Stage 2	33	-	-	-	-	-
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	967	1071	1605	-	-	-
Stage 1	1013	-	-	-	-	-
Stage 2	989	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	959	1071	1605	-	-	-
Mov Cap-2 Maneuver	959	-	-	-	-	-
Stage 1	1005	-	-	-	-	-
Stage 2	989	-	-	-	-	-

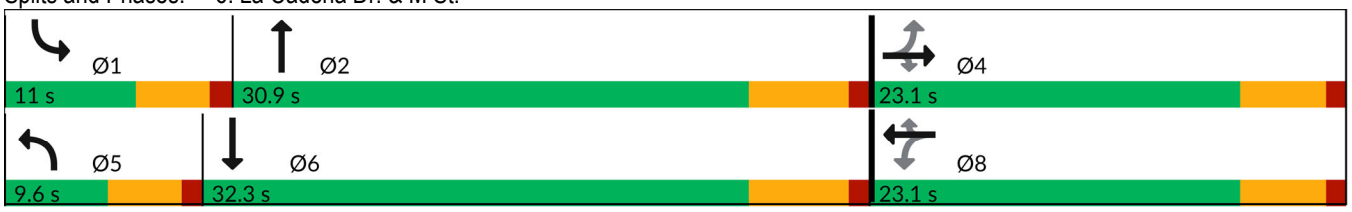
Approach	EB	NB	SB
HCM Control Delay, s/v	8.55	4.84	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1200	-	1038	-	-
HCM Lane V/C Ratio	0.008	-	0.023	-	-
HCM Control Delay (s/veh)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	13	7	8	76	5	60	9	741	65	1001
Future Volume (vph)	13	7	8	76	5	60	9	741	65	1001
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.1	23.1	23.1	23.1	23.1	23.1	9.6	30.8	9.6	27.8
Total Split (s)	23.1	23.1	23.1	23.1	23.1	23.1	9.6	30.9	11.0	32.3
Total Split (%)	35.5%	35.5%	35.5%	35.5%	35.5%	35.5%	14.8%	47.5%	16.9%	49.7%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1	5.1		5.1	5.1	4.6	5.8	4.6	5.8
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.9	13.9		13.9	13.9	6.3	24.6	7.1	28.5
Actuated g/C Ratio		0.30	0.30		0.30	0.30	0.14	0.53	0.15	0.62
v/c Ratio		0.05	0.02		0.23	0.13	0.04	0.50	0.29	0.54
Control Delay (s/veh)		18.4	0.0		20.2	1.7	26.3	12.9	27.6	10.5
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		18.4	0.0		20.2	1.7	26.3	12.9	27.6	10.5
LOS		B	A		C	A	C	B	C	B
Approach Delay (s/veh)		13.2			12.3			13.0		11.6
Approach LOS		B			B			B		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 46	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay (s/veh): 12.2	Intersection LOS: B
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: La Cadena Dr. & M St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	7	8	76	5	60	9	741	64	65	1001	10
Future Volume (veh/h)	13	7	8	76	5	60	9	741	64	65	1001	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	15	8	3	88	6	32	10	862	65	76	1164	12
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	45	316	157	6	315	22	1285	97	115	1585	16
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.01	0.38	0.38	0.07	0.44	0.44
Sat Flow, veh/h	3	224	1583	4	29	1581	1688	3341	252	1688	3603	37
Grp Volume(v), veh/h	23	0	3	94	0	32	10	458	469	76	574	602
Grp Sat Flow(s),veh/h/ln	226	0	1583	33	0	1581	1688	1777	1816	1688	1777	1864
Q Serve(g_s), s	0.0	0.0	0.1	0.0	0.0	0.7	0.3	9.5	9.5	2.0	11.9	11.9
Cycle Q Clear(g_c), s	8.9	0.0	0.1	8.9	0.0	0.7	0.3	9.5	9.5	2.0	11.9	11.9
Prop In Lane	0.65		1.00	0.94		1.00	1.00		0.14	1.00		0.02
Lane Grp Cap(c), veh/h	179	0	316	163	0	315	22	683	699	115	782	820
V/C Ratio(X)	0.13	0.00	0.01	0.58	0.00	0.10	0.45	0.67	0.67	0.66	0.73	0.73
Avail Cap(c_a), veh/h	498	0	639	469	0	638	189	1000	1022	242	1056	1107
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.2	0.0	14.3	21.8	0.0	14.6	21.9	11.4	11.4	20.3	10.3	10.3
Incr Delay (d2), s/veh	0.3	0.0	0.0	3.2	0.0	0.1	5.3	1.2	1.1	2.4	1.8	1.7
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	0.2	0.0	0.0	1.1	0.0	0.2	0.1	2.7	2.8	0.7	3.2	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.5	0.0	14.3	25.0	0.0	14.7	27.2	12.5	12.5	22.7	12.1	12.0
LnGrp LOS	B		B	C		B	C	B	B	C	B	B
Approach Vol, veh/h		26			126			937			1252	
Approach Delay, s/veh		15.3			22.4			12.7			12.7	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	23.0		14.0	5.2	25.4		14.0				
Change Period (Y+Rc), s	4.6	5.8		5.1	4.6	5.8		5.1				
Max Green Setting (Gmax), s	6.4	25.1		18.0	5.0	26.5		18.0				
Max Q Clear Time (g_c+I1), s	4.0	11.5		10.9	2.3	13.9		10.9				
Green Ext Time (p_c), s	0.0	4.5		0.0	0.0	5.7		0.3				

Intersection Summary		
HCM 7th Control Delay, s/veh		13.3
HCM 7th LOS		B

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	5	28	0	32	5	554	39	122	842	10
Future Vol, veh/h	5	0	5	28	0	32	5	554	39	122	842	10
Conflicting Peds, #/hr	0	0	3	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	80	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	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	6	0	6	33	0	38	6	652	46	144	991	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1622	1994	505	1472	1977	349	1003	0	0	698	0	0
Stage 1	1285	1285	-	686	686	-	-	-	-	-	-	-
Stage 2	338	709	-	785	1290	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	68	60	512	88	61	647	686	-	-	895	-	-
Stage 1	174	234	-	403	446	-	-	-	-	-	-	-
Stage 2	650	435	-	352	232	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	53	50	510	73	51	647	685	-	-	895	-	-
Mov Cap-2 Maneuver	118	128	-	184	140	-	-	-	-	-	-	-
Stage 1	146	196	-	400	442	-	-	-	-	-	-	-
Stage 2	607	431	-	291	195	-	-	-	-	-	-	-

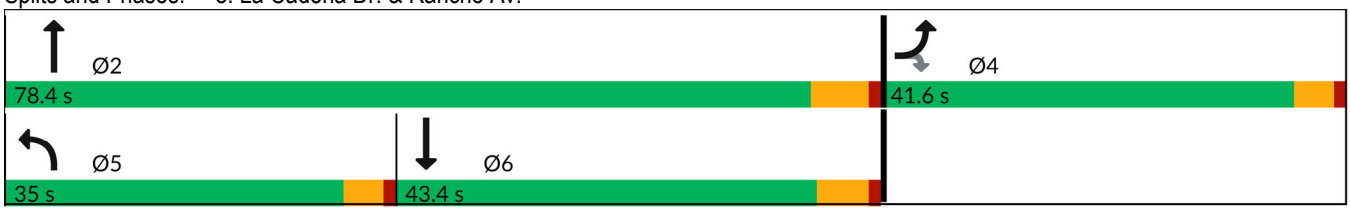
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	25.04	20.83	0.09	1.23
HCM LOS	D	C		

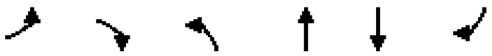
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	685	-	-	191	297	895	-	-
HCM Lane V/C Ratio	0.009	-	-	0.061	0.237	0.16	-	-
HCM Control Delay (s/veh)	10.3	-	-	25	20.8	9.8	-	-
HCM Lane LOS	B	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.9	0.6	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	37	942	428	552	773
Future Volume (vph)	37	942	428	552	773
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	41.6	41.6	9.6	24.2	42.8
Total Split (s)	41.6	41.6	35.0	78.4	43.4
Total Split (%)	34.7%	34.7%	29.2%	65.3%	36.2%
Yellow Time (s)	3.6	3.6	3.6	5.2	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	6.2	5.8
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	15.9	15.9	31.0	66.5	31.2
Actuated g/C Ratio	0.17	0.17	0.33	0.71	0.33
v/c Ratio	0.82	0.82	0.87	0.25	0.82
Control Delay (s/veh)	16.4	16.6	50.5	5.9	35.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.4	16.6	50.5	5.9	35.5
LOS	B	B	D	A	D
Approach Delay (s/veh)	16.5			25.4	35.5
Approach LOS	B			C	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 93.4	
Natural Cycle: 125	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay (s/veh): 25.3	Intersection LOS: C
Intersection Capacity Utilization 84.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 8: La Cadena Dr. & Rancho Av.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	942	428	552	773	69
Future Volume (veh/h)	37	942	428	552	773	69
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1772	1870	1772	1870	1870	1870
Adj Flow Rate, veh/h	0	720	486	627	878	61
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	439	825	489	2263	1022	71
Arrive On Green	0.00	0.26	0.29	0.64	0.30	0.30
Sat Flow, veh/h	1688	3170	1688	3647	3463	234
Grp Volume(v), veh/h	0	720	486	627	463	476
Grp Sat Flow(s),veh/h/ln	1688	1585	1688	1777	1777	1827
Q Serve(g_s), s	0.0	22.8	30.2	8.2	25.8	25.8
Cycle Q Clear(g_c), s	0.0	22.8	30.2	8.2	25.8	25.8
Prop In Lane	1.00	1.00	1.00			0.13
Lane Grp Cap(c), veh/h	439	825	489	2263	539	554
V/C Ratio(X)	0.00	0.87	0.99	0.28	0.86	0.86
Avail Cap(c_a), veh/h	595	1118	489	2445	637	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	37.2	37.2	8.4	34.4	34.4
Incr Delay (d2), s/veh	0.0	6.0	39.1	0.1	10.1	9.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	16.8	2.6	12.0	12.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	43.1	76.3	8.5	44.5	44.3
LnGrp LOS		D	E	A	D	D
Approach Vol, veh/h	720			1113	939	
Approach Delay, s/veh	43.1			38.1	44.4	
Approach LOS	D			D	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		73.0		31.9	35.0	38.0
Change Period (Y+Rc), s		6.2		4.6	4.6	* 6.2
Max Green Setting (Gmax), s		72.2		37.0	30.4	* 38
Max Q Clear Time (g_c+I1), s		10.2		24.8	32.2	27.8
Green Ext Time (p_c), s		4.2		2.5	0.0	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	41.5
HCM 7th LOS	D

Notes

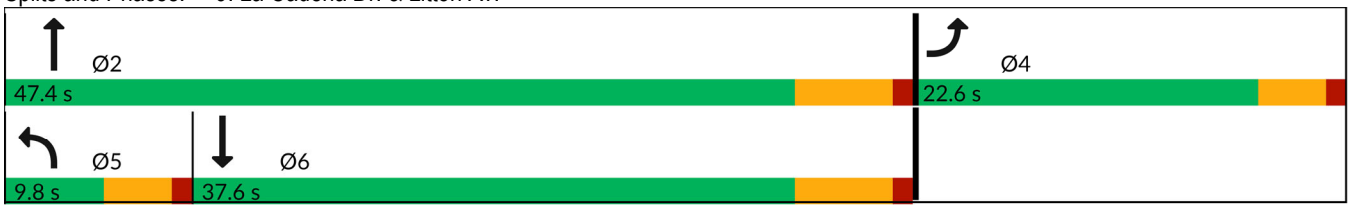
User approved volume balancing among the lanes for turning movement.

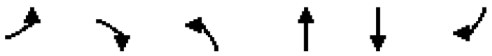
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	58	35	851	1523
Future Volume (vph)	58	35	851	1523
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	10.0	10.0
Minimum Split (s)	22.6	9.6	24.2	24.2
Total Split (s)	22.6	9.8	47.4	37.6
Total Split (%)	32.3%	14.0%	67.7%	53.7%
Yellow Time (s)	3.6	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	6.2	6.2
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	6.9	5.3	37.4	34.2
Actuated g/C Ratio	0.13	0.10	0.73	0.67
v/c Ratio	0.41	0.22	0.35	0.70
Control Delay (s/veh)	20.2	28.3	4.3	12.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.2	28.3	4.3	12.2
LOS	C	C	A	B
Approach Delay (s/veh)	20.2		5.2	12.2
Approach LOS	C		A	B

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 51.2	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay (s/veh): 10.1	Intersection LOS: B
Intersection Capacity Utilization 57.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: La Cadena Dr. & Litton Av.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	58	40	35	851	1523	10
Future Volume (veh/h)	58	40	35	851	1523	10
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
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	1772	1870	1772	1870	1870	1870
Adj Flow Rate, veh/h	62	30	38	915	1638	9
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	80	39	70	2491	2043	11
Arrive On Green	0.07	0.07	0.04	0.70	0.56	0.56
Sat Flow, veh/h	1082	524	1688	3647	3717	20
Grp Volume(v), veh/h	93	0	38	915	803	844
Grp Sat Flow(s),veh/h/ln	1624	0	1688	1777	1777	1866
Q Serve(g_s), s	2.7	0.0	1.1	5.0	17.3	17.3
Cycle Q Clear(g_c), s	2.7	0.0	1.1	5.0	17.3	17.3
Prop In Lane	0.67	0.32	1.00			0.01
Lane Grp Cap(c), veh/h	120	0	70	2491	1002	1052
V/C Ratio(X)	0.77	0.00	0.54	0.37	0.80	0.80
Avail Cap(c_a), veh/h	609	0	183	3049	1162	1220
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	22.6	2.9	8.3	8.3
Incr Delay (d2), s/veh	4.0	0.0	2.4	0.1	3.6	3.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.4	0.1	4.0	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	25.8	0.0	25.0	3.0	11.9	11.8
LnGrp LOS	C		C	A	B	B
Approach Vol, veh/h	93			953	1647	
Approach Delay, s/veh	25.8			3.9	11.9	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		39.9		8.2	6.6	33.3
Change Period (Y+Rc), s		6.2		4.6	4.6	6.2
Max Green Setting (Gmax), s		41.2		18.0	5.2	31.4
Max Q Clear Time (g_c+I1), s		7.0		4.7	3.1	19.3
Green Ext Time (p_c), s		6.5		0.1	0.0	7.8

Intersection Summary	
HCM 7th Control Delay, s/veh	9.5
HCM 7th LOS	A

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	31	5	12	58	30	5	7	36	56	20	50
Future Vol, veh/h	5	31	5	12	58	30	5	7	36	56	20	50
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	43	7	17	81	42	7	10	50	78	28	69
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8	8.3	7.5	8.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	12%	12%	44%
Vol Thru, %	15%	76%	58%	16%
Vol Right, %	75%	12%	30%	40%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	48	41	100	126
LT Vol	5	5	12	56
Through Vol	7	31	58	20
RT Vol	36	5	30	50
Lane Flow Rate	67	57	139	175
Geometry Grp	1	1	1	1
Degree of Util (X)	0.077	0.072	0.169	0.209
Departure Headway (Hd)	4.145	4.576	4.378	4.305
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	865	784	821	837
Service Time	2.165	2.599	2.397	2.321
HCM Lane V/C Ratio	0.077	0.073	0.169	0.209
HCM Control Delay, s/veh	7.5	8	8.3	8.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.2	0.6	0.8

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	216	6	60	179	18	97
Future Vol, veh/h	216	6	60	179	18	97
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	251	7	70	208	21	113

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	258	0	602	255
Stage 1	-	-	-	-	255	-
Stage 2	-	-	-	-	348	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1307	-	462	784
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	715	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1307	-	435	784
Mov Cap-2 Maneuver	-	-	-	-	526	-
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	672	-

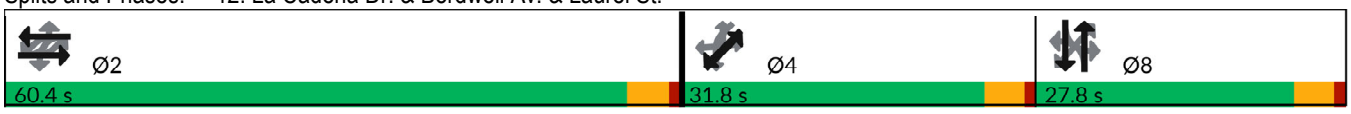
Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.99	10.64
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	526	784	-	-	452	-
HCM Lane V/C Ratio	0.04	0.144	-	-	0.053	-
HCM Control Delay (s/veh)	12.1	10.4	-	-	7.9	0
HCM Lane LOS	B	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.5	-	-	0.2	-

Lane Group	EBL2	EBL	EBT	WBL2	WBL	WBT	NBL2	NBL	NBT	SBL2	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	5	101	150	5	8	194	5	52	5	12	5	16
Future Volume (vph)	5	101	150	5	8	194	5	52	5	12	5	16
Turn Type	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			2			2			8			8
Permitted Phases	2	2		2	2		8	8		8	8	
Detector Phase	2	2	2	2	2	2	8	8	8	8	8	8
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
Total Split (s)	60.4	60.4	60.4	60.4	60.4	60.4	27.8	27.8	27.8	27.8	27.8	27.8
Total Split (%)	50.3%	50.3%	50.3%	50.3%	50.3%	50.3%	23.2%	23.2%	23.2%	23.2%	23.2%	23.2%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)			0.0			0.0			0.0			0.0
Total Lost Time (s)			4.6			4.6			4.6			4.6
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)			36.8			36.8			14.6			14.6
Actuated g/C Ratio			0.45			0.45			0.18			0.18
v/c Ratio			0.74			0.36			0.41			0.21
Control Delay (s/veh)			28.5			18.5			41.7			36.0
Queue Delay			0.0			0.0			0.0			0.0
Total Delay (s/veh)			28.5			18.5			41.7			36.0
LOS			C			B			D			D
Approach Delay (s/veh)			28.5			18.5			41.7			36.0
Approach LOS			C			B			D			D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 82	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay (s/veh): 29.9	Intersection LOS: C
Intersection Capacity Utilization 78.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 12: La Cadena Dr. & Bordwell Av. & Laurel St.



Lane Group	NEL2	NEL	NET	SWL2	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	13	5	177	5	46	266
Future Volume (vph)	13	5	177	5	46	266
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			4			4
Permitted Phases	4	4		4	4	
Detector Phase	4	4	4	4	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	31.6	31.6
Total Split (s)	31.8	31.8	31.8	31.8	31.8	31.8
Total Split (%)	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.6	4.6		4.6	4.6
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)		20.7	20.7		20.7	20.7
Actuated g/C Ratio		0.25	0.25		0.25	0.25
v/c Ratio		0.15	0.30		0.27	0.56
Control Delay (s/veh)		34.9	30.4		35.0	33.4
Queue Delay		0.0	0.0		0.0	0.0
Total Delay (s/veh)		34.9	30.4		35.0	33.4
LOS		C	C		C	C
Approach Delay (s/veh)			30.8			33.6
Approach LOS			C			C

Intersection Summary

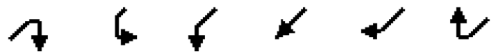
Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	5	101	150	42	64	5	8	194	5	5	5	52
Future Volume (vph)	5	101	150	42	64	5	8	194	5	5	5	52
Ideal Flow (vphpl)	1800	1800	1900	1900	1900	1800	1800	1900	1900	1900	1800	1800
Total Lost time (s)			4.6					4.6				
Lane Util. Factor			1.00					1.00				
Frt			0.96					0.99				
Flt Protected			0.99					1.00				
Satd. Flow (prot)			1763					1845				
Flt Permitted			0.80					0.96				
Satd. Flow (perm)			1428					1782				
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	7	133	197	55	84	7	11	255	7	7	7	68
RTOR Reduction (vph)	0	0	7	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	0	469	0	0	0	0	286	0	0	0	0
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Perm	Perm
Protected Phases			2					2				
Permitted Phases	2	2				2	2				8	8
Actuated Green, G (s)			36.8					36.8				
Effective Green, g (s)			36.8					36.8				
Actuated g/C Ratio			0.45					0.45				
Clearance Time (s)			4.6					4.6				
Vehicle Extension (s)			3.0					3.0				
Lane Grp Cap (vph)			641					800				
v/s Ratio Prot												
v/s Ratio Perm			c0.33					0.16				
v/c Ratio			0.73					0.36				
Uniform Delay, d1			18.5					14.8				
Progression Factor			1.00					1.00				
Incremental Delay, d2			4.3					0.3				
Delay (s)			22.8					15.1				
Level of Service			C					B				
Approach Delay (s/veh)			22.8					15.1				
Approach LOS			C					B				

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	81.9	Sum of lost time (s)	13.8
Intersection Capacity Utilization	78.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	NEL2	NEL	NET	NER
Lane Configurations												
Traffic Volume (vph)	5	16	5	12	5	16	7	5	13	5	177	17
Future Volume (vph)	5	16	5	12	5	16	7	5	13	5	177	17
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1900	1900	1900	1800	1800	1900	1900
Total Lost time (s)	4.6					4.6				4.6	4.6	
Lane Util. Factor	1.00					1.00				1.00	0.95	
Frt	0.97					0.96				1.00	0.98	
Flt Protected	0.97					0.98				0.95	1.00	
Satd. Flow (prot)	1739					1762				1676	3480	
Flt Permitted	0.82					0.88				0.36	1.00	
Satd. Flow (perm)	1477					1580				627	3480	
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	7	21	7	16	7	21	9	7	17	7	233	22
RTOR Reduction (vph)	3	0	0	0	0	4	0	0	0	0	1	0
Lane Group Flow (vph)	107	0	0	0	0	56	0	0	0	24	261	0
Turn Type	NA			Perm	Perm	NA			Perm	Perm	NA	
Protected Phases	8					8					4	
Permitted Phases				8	8				4	4		
Actuated Green, G (s)	10.6					10.6				20.7	20.7	
Effective Green, g (s)	10.6					10.6				20.7	20.7	
Actuated g/C Ratio	0.13					0.13				0.25	0.25	
Clearance Time (s)	4.6					4.6				4.6	4.6	
Vehicle Extension (s)	3.0					3.0				3.0	3.0	
Lane Grp Cap (vph)	191					204				158	879	
v/s Ratio Prot											0.07	
v/s Ratio Perm	c0.07					0.04				0.04		
v/c Ratio	0.56					0.27				0.15	0.30	
Uniform Delay, d1	33.5					32.2				23.8	24.7	
Progression Factor	1.00					1.00				1.00	1.00	
Incremental Delay, d2	3.8					0.7				0.4	0.2	
Delay (s)	37.2					32.9				24.2	24.9	
Level of Service	D					C				C	C	
Approach Delay (s/veh)	37.2					32.9					24.8	
Approach LOS	D					C					C	

Intersection Summary



Movement	NER2	SWL2	SWL	SWT	SWR	SWR2
Lane Configurations						
Traffic Volume (vph)	5	5	46	266	88	9
Future Volume (vph)	5	5	46	266	88	9
Ideal Flow (vphpl)	1900	1800	1800	1900	1900	1900
Total Lost time (s)			4.6	4.6		
Lane Util. Factor			1.00	0.95		
Frt			1.00	0.96		
Flt Protected			0.95	1.00		
Satd. Flow (prot)			1676	3397		
Flt Permitted			0.58	1.00		
Satd. Flow (perm)			1017	3397		
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	7	7	61	350	116	12
RTOR Reduction (vph)	0	0	0	1	0	0
Lane Group Flow (vph)	0	0	68	477	0	0
Turn Type		Perm	Perm	NA		
Protected Phases				4		
Permitted Phases		4	4			
Actuated Green, G (s)			20.7	20.7		
Effective Green, g (s)			20.7	20.7		
Actuated g/C Ratio			0.25	0.25		
Clearance Time (s)			4.6	4.6		
Vehicle Extension (s)			3.0	3.0		
Lane Grp Cap (vph)			257	858		
v/s Ratio Prot				c0.14		
v/s Ratio Perm			0.07			
v/c Ratio			0.26	0.56		
Uniform Delay, d1			24.5	26.6		
Progression Factor			1.00	1.00		
Incremental Delay, d2			0.6	0.8		
Delay (s)			25.1	27.4		
Level of Service			C	C		
Approach Delay (s/veh)				27.1		
Approach LOS				C		

Intersection Summary

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	5	149	5	5	5	162	328	5	5	512	20
Future Vol, veh/h	19	5	149	5	5	5	162	328	5	5	512	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	6	173	6	6	6	188	381	6	6	595	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1192	1388	312	1075	1396	196	622	0	0	389	0	0
Stage 1	622	622	-	763	763	-	-	-	-	-	-	-
Stage 2	570	766	-	312	633	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	143	142	684	174	140	813	955	-	-	1166	-	-
Stage 1	441	477	-	363	411	-	-	-	-	-	-	-
Stage 2	473	410	-	673	471	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	110	113	682	102	111	811	952	-	-	1164	-	-
Mov Cap-2 Maneuver	285	271	-	220	225	-	-	-	-	-	-	-
Stage 1	438	473	-	291	329	-	-	-	-	-	-	-
Stage 2	370	328	-	493	468	-	-	-	-	-	-	-

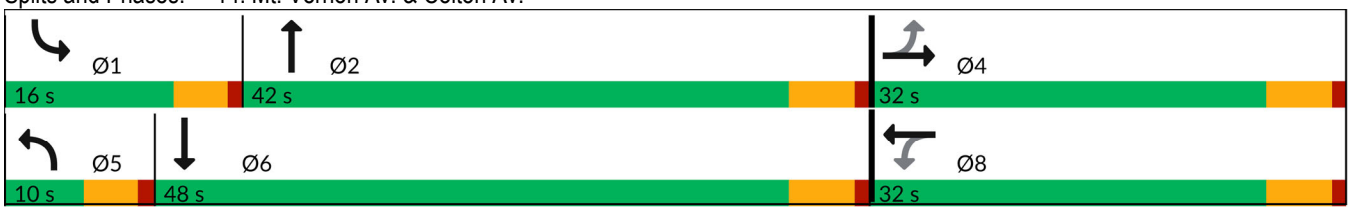
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.73	18.03	3.18	0.08
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	952	-	-	570	294	1164	-	-
HCM Lane V/C Ratio	0.198	-	-	0.353	0.059	0.005	-	-
HCM Control Delay (s/veh)	9.7	-	-	14.7	18	8.1	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	1.6	0.2	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	40	145	128	211	14	472	72	625
Future Volume (vph)	40	145	128	211	14	472	72	625
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	24.4	24.4	28.4	28.4	9.6	37.4	9.6	37.4
Total Split (s)	32.0	32.0	32.0	32.0	10.0	42.0	16.0	48.0
Total Split (%)	35.6%	35.6%	35.6%	35.6%	11.1%	46.7%	17.8%	53.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	4.6	5.4	4.6	5.4
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	16.3	16.3	16.3	16.3	5.8	18.2	7.9	23.6
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.11	0.34	0.15	0.44
v/c Ratio	0.18	0.30	0.41	0.56	0.09	0.52	0.33	0.51
Control Delay (s/veh)	20.1	18.9	22.7	21.8	32.6	16.8	30.3	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.1	18.9	22.7	21.8	32.6	16.8	30.3	12.0
LOS	C	B	C	C	C	B	C	B
Approach Delay (s/veh)		19.1		22.0		17.2		13.7
Approach LOS		B		C		B		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 53.4	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay (s/veh): 17.0	Intersection LOS: B
Intersection Capacity Utilization 65.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 14: Mt. Vernon Av. & Colton Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	145	8	128	211	70	14	472	80	72	625	82
Future Volume (veh/h)	40	145	8	128	211	70	14	472	80	72	625	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	44	161	8	142	234	56	16	524	82	80	694	90
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	308	477	24	406	393	94	34	932	145	120	1118	145
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.02	0.30	0.30	0.07	0.35	0.35
Sat Flow, veh/h	1089	1767	88	1216	1454	348	1688	3080	480	1688	3162	410
Grp Volume(v), veh/h	44	0	169	142	0	290	16	301	305	80	390	394
Grp Sat Flow(s),veh/h/ln	1089	0	1855	1216	0	1802	1688	1777	1783	1688	1777	1795
Q Serve(g_s), s	1.6	0.0	3.2	4.6	0.0	6.1	0.4	6.2	6.2	2.0	7.9	7.9
Cycle Q Clear(g_c), s	7.6	0.0	3.2	7.8	0.0	6.1	0.4	6.2	6.2	2.0	7.9	7.9
Prop In Lane	1.00		0.05	1.00		0.19	1.00		0.27	1.00		0.23
Lane Grp Cap(c), veh/h	308	0	501	406	0	487	34	537	539	120	628	635
V/C Ratio(X)	0.14	0.00	0.34	0.35	0.00	0.60	0.47	0.56	0.56	0.66	0.62	0.62
Avail Cap(c_a), veh/h	684	0	1141	825	0	1108	211	1504	1509	445	1750	1767
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.1	0.0	12.7	15.8	0.0	13.7	21.0	12.7	12.7	19.6	11.6	11.6
Incr Delay (d2), s/veh	0.2	0.0	0.4	0.5	0.0	1.2	3.7	0.9	0.9	2.3	1.0	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.1	1.1	0.0	2.0	0.2	2.0	2.0	0.7	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.3	0.0	13.1	16.3	0.0	14.9	24.6	13.6	13.6	21.9	12.6	12.6
LnGrp LOS	B		B	B		B	C	B	B	C	B	B
Approach Vol, veh/h		213			432			622			864	
Approach Delay, s/veh		13.9			15.4			13.9			13.4	
Approach LOS		B			B			B			B	

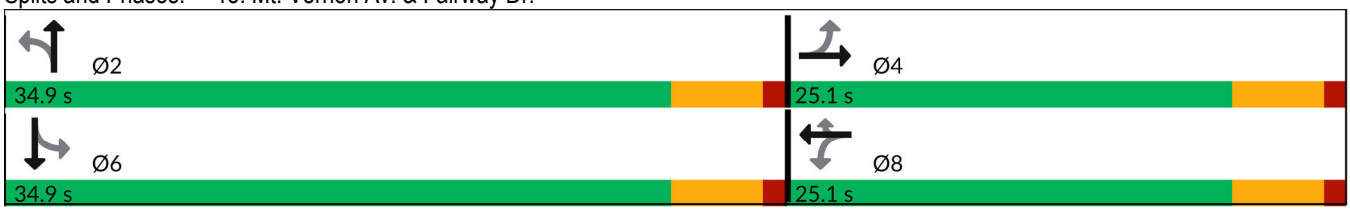
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	18.5		17.1	5.5	20.7		17.1				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	11.4	36.6		26.6	5.4	42.6		26.6				
Max Q Clear Time (g_c+I1), s	4.0	8.2		9.6	2.4	9.9		9.8				
Green Ext Time (p_c), s	0.0	3.7		0.9	0.0	5.1		1.9				

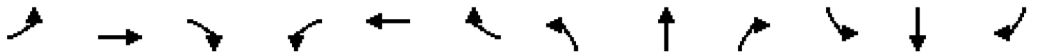
Intersection Summary		
HCM 7th Control Delay, s/veh		14.0
HCM 7th LOS		B

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	40	82	108	50	251	6	351	276	593
Future Volume (vph)	40	82	108	50	251	6	351	276	593
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4		8			2		6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	23.1	23.1	25.1	25.1	25.1	24.1	24.1	26.1	26.1
Total Split (s)	25.1	25.1	25.1	25.1	25.1	34.9	34.9	34.9	34.9
Total Split (%)	41.8%	41.8%	41.8%	41.8%	41.8%	58.2%	58.2%	58.2%	58.2%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	12.5	12.5	12.5	12.5	12.5	21.3	21.3	21.3	21.3
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28	0.48	0.48	0.48	0.48
v/c Ratio	0.12	0.20	0.34	0.05	0.42	0.02	0.28	0.73	0.39
Control Delay (s/veh)	15.1	13.3	18.1	13.9	4.8	6.8	6.4	22.3	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.1	13.3	18.1	13.9	4.8	6.8	6.4	22.3	8.1
LOS	B	B	B	B	A	A	A	C	A
Approach Delay (s/veh)		13.8		9.4			6.4		12.5
Approach LOS		B		A			A		B

Intersection Summary			
Cycle Length: 60			
Actuated Cycle Length: 44.6			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 10.5		Intersection LOS: B	
Intersection Capacity Utilization 54.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 15: Mt. Vernon Av. & Fairway Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	82	18	108	50	251	6	351	79	276	593	19
Future Volume (veh/h)	40	82	18	108	50	251	6	351	79	276	593	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	43	88	15	116	54	142	6	377	75	297	638	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	451	375	64	431	856	382	487	1496	295	585	1785	50
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	1187	1557	265	1289	3554	1585	777	2959	583	939	3530	100
Grp Volume(v), veh/h	43	0	103	116	54	142	6	225	227	297	321	335
Grp Sat Flow(s),veh/h/ln	1187	0	1822	1289	1777	1585	777	1777	1765	939	1777	1852
Q Serve(g_s), s	1.2	0.0	1.8	3.2	0.5	3.0	0.2	2.9	2.9	10.6	4.4	4.4
Cycle Q Clear(g_c), s	1.6	0.0	1.8	5.0	0.5	3.0	4.6	2.9	2.9	13.5	4.4	4.4
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.33	1.00		0.05
Lane Grp Cap(c), veh/h	451	0	439	431	856	382	487	899	893	585	899	937
V/C Ratio(X)	0.10	0.00	0.23	0.27	0.06	0.37	0.01	0.25	0.25	0.51	0.36	0.36
Avail Cap(c_a), veh/h	755	0	905	761	1766	788	669	1316	1307	805	1316	1372
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.4	0.0	12.3	14.3	11.8	12.7	7.4	5.6	5.6	9.5	6.0	6.0
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.3	0.0	0.6	0.0	0.1	0.1	0.7	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.6	0.8	0.2	0.9	0.0	0.7	0.7	1.5	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.5	0.0	12.6	14.6	11.8	13.3	7.4	5.8	5.8	10.2	6.2	6.2
LnGrp LOS	B		B	B	B	B	A	A	A	B	A	A
Approach Vol, veh/h		146			312			458			953	
Approach Delay, s/veh		12.5			13.6			5.8			7.5	
Approach LOS		B			B			A			A	

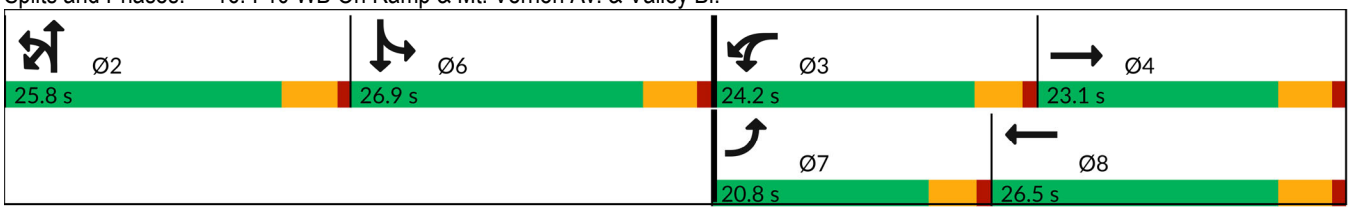
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.5		14.8		25.5		14.8				
Change Period (Y+Rc), s		5.1		5.1		5.1		5.1				
Max Green Setting (Gmax), s		29.8		20.0		29.8		20.0				
Max Q Clear Time (g_c+I1), s		6.6		3.8		15.5		7.0				
Green Ext Time (p_c), s		2.7		0.5		4.8		0.9				

Intersection Summary												
HCM 7th Control Delay, s/veh			8.5									
HCM 7th LOS			A									

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	129	100	41	130	277	5	322
Future Volume (vph)	129	100	41	130	277	5	322
Turn Type	Prot	NA	Prot	NA	NA	Split	NA
Protected Phases	7	4	3	8	2	6	6
Permitted Phases							
Detector Phase	7	4	3	8	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	23.1	9.6	25.1	23.1	23.1	23.1
Total Split (s)	20.8	23.1	24.2	26.5	25.8	26.9	26.9
Total Split (%)	20.8%	23.1%	24.2%	26.5%	25.8%	26.9%	26.9%
Yellow Time (s)	3.6	4.1	3.6	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	4.6	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	None	None	None	None	None	None
Act Effct Green (s)	12.2	17.5	19.2	24.5	20.6	21.8	21.8
Actuated g/C Ratio	0.12	0.18	0.19	0.25	0.21	0.22	0.22
v/c Ratio	0.68	0.90	0.94	0.36	0.93	0.01	0.96
Control Delay (s/veh)	57.7	73.6	78.3	33.1	60.1	31.0	63.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.7	73.6	78.3	33.1	60.1	31.0	63.1
LOS	E	E	E	C	E	C	E
Approach Delay (s/veh)		68.2		62.4	60.1		62.9
Approach LOS		E		E	E		E

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 99	
Natural Cycle: 95	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay (s/veh): 62.9	Intersection LOS: E
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 16: I-10 WB On Ramp & Mt. Vernon Av. & Valley Bl.



Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	129	100	141	9	240	41	130	23	237	76	277	24
Future Volume (vph)	129	100	141	9	240	41	130	23	237	76	277	24
Ideal Flow (vphpl)	1800	1900	1900	1900	1800	1800	1900	1900	1800	1800	1900	1900
Total Lost time (s)	4.6	5.1				4.6	5.1				5.1	
Lane Util. Factor	1.00	1.00				1.00	1.00				0.95	
Frt	1.00	0.91				1.00	0.98				0.99	
Flt Protected	0.95	1.00				0.95	1.00				0.98	
Satd. Flow (prot)	1676	1695				1676	1821				3431	
Flt Permitted	0.95	1.00				0.95	1.00				0.98	
Satd. Flow (perm)	1676	1695				1676	1821				3431	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	140	109	153	10	261	45	141	25	258	83	301	26
RTOR Reduction (vph)	0	2	0	0	0	0	6	0	0	0	3	0
Lane Group Flow (vph)	140	270	0	0	0	306	160	0	0	0	665	0
Turn Type	Prot	NA			Prot	Prot	NA		Split	Split	NA	
Protected Phases	7	4			3	3	8		2	2	2	
Permitted Phases												
Actuated Green, G (s)	12.2	17.5				19.2	24.5				20.6	
Effective Green, g (s)	12.2	17.5				19.2	24.5				20.6	
Actuated g/C Ratio	0.12	0.18				0.19	0.25				0.21	
Clearance Time (s)	4.6	5.1				4.6	5.1				5.1	
Vehicle Extension (s)	2.0	3.0				2.0	3.0				3.0	
Lane Grp Cap (vph)	206	299				325	450				713	
v/s Ratio Prot	0.08	c0.16				c0.18	0.09				c0.19	
v/s Ratio Perm												
v/c Ratio	0.68	0.90				0.94	0.36				0.93	
Uniform Delay, d1	41.5	39.9				39.3	30.7				38.5	
Progression Factor	1.00	1.00				1.00	1.00				1.00	
Incremental Delay, d2	6.8	28.7				34.5	0.5				19.0	
Delay (s)	48.4	68.6				73.8	31.2				57.5	
Level of Service	D	E				E	C				E	
Approach Delay (s/veh)		61.7					58.8				57.5	
Approach LOS		E					E				E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	59.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	99.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

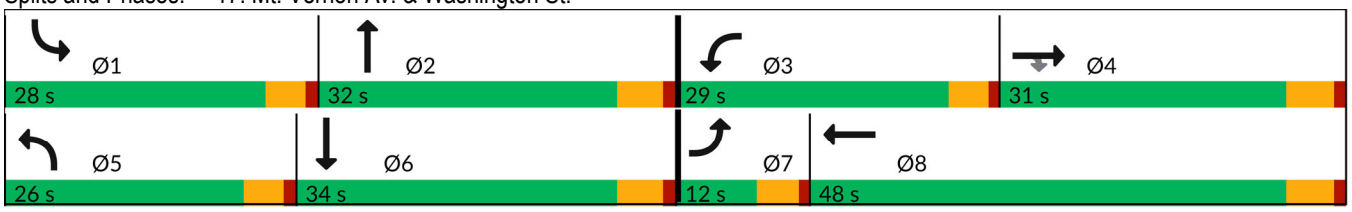
Movement	SBL	SBT	SBR	SBR2
Lane Configurations				
Traffic Volume (vph)	5	322	244	79
Future Volume (vph)	5	322	244	79
Ideal Flow (vphpl)	1800	1900	1900	1900
Total Lost time (s)	5.1	5.1		
Lane Util. Factor	1.00	0.95		
Frt	1.00	0.92		
Flt Protected	0.95	1.00		
Satd. Flow (prot)	1676	3273		
Flt Permitted	0.95	1.00		
Satd. Flow (perm)	1676	3273		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	350	265	86
RTOR Reduction (vph)	0	11	0	0
Lane Group Flow (vph)	5	690	0	0
Turn Type	Split	NA		
Protected Phases	6	6		
Permitted Phases				
Actuated Green, G (s)	21.8	21.8		
Effective Green, g (s)	21.8	21.8		
Actuated g/C Ratio	0.22	0.22		
Clearance Time (s)	5.1	5.1		
Vehicle Extension (s)	3.0	3.0		
Lane Grp Cap (vph)	369	720		
v/s Ratio Prot	0.00	c0.21		
v/s Ratio Perm				
v/c Ratio	0.01	0.96		
Uniform Delay, d1	30.2	38.2		
Progression Factor	1.00	1.00		
Incremental Delay, d2	0.0	23.5		
Delay (s)	30.2	61.7		
Level of Service	C	E		
Approach Delay (s/veh)		61.4		
Approach LOS		E		

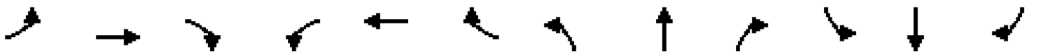
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	191	95	335	228	458	140	288	601	334	175	79
Future Volume (vph)	64	191	95	335	228	458	140	288	601	334	175	79
Turn Type	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	30.4	30.4	9.6	31.4		9.6	23.1		9.6	30.1	
Total Split (s)	12.0	31.0	31.0	29.0	48.0		26.0	32.0		28.0	34.0	
Total Split (%)	10.0%	25.8%	25.8%	24.2%	40.0%		21.7%	26.7%		23.3%	28.3%	
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4		3.6	4.1		3.6	4.1	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4		4.6	5.1		4.6	5.1	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	
Act Effct Green (s)	6.2	11.1	11.1	13.3	20.6	71.5	11.3	13.4	71.5	13.3	15.4	71.5
Actuated g/C Ratio	0.09	0.16	0.16	0.19	0.29	1.00	0.16	0.19	1.00	0.19	0.22	1.00
v/c Ratio	0.25	0.37	0.27	0.62	0.24	0.31	0.55	0.46	0.40	0.62	0.24	0.05
Control Delay (s/veh)	37.1	31.9	4.4	33.2	22.8	0.5	38.3	29.3	0.8	33.2	25.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.1	31.9	4.4	33.2	22.8	0.5	38.3	29.3	0.8	33.2	25.5	0.1
LOS	D	C	A	C	C	A	D	C	A	C	C	A
Approach Delay (s/veh)		25.4			16.2			13.8			26.5	
Approach LOS		C			B			B			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 71.5	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay (s/veh): 18.5	Intersection LOS: B
Intersection Capacity Utilization 54.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Mt. Vernon Av. & Washington St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	191	95	335	228	458	140	288	601	334	175	79
Future Volume (veh/h)	64	191	95	335	228	458	140	288	601	334	175	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1870	1870	1673	1870	1870	1772	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	67	201	51	353	240	0	147	303	0	352	184	0
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	177	613	270	476	955		187	619		475	771	
Arrive On Green	0.06	0.17	0.17	0.15	0.27	0.00	0.11	0.17	0.00	0.15	0.22	0.00
Sat Flow, veh/h	3092	3554	1564	3092	3554	1585	1688	3554	1585	3092	3554	1585
Grp Volume(v), veh/h	67	201	51	353	240	0	147	303	0	352	184	0
Grp Sat Flow(s),veh/h/ln	1546	1777	1564	1546	1777	1585	1688	1777	1585	1546	1777	1585
Q Serve(g_s), s	1.2	2.8	1.6	6.2	3.0	0.0	4.8	4.4	0.0	6.2	2.4	0.0
Cycle Q Clear(g_c), s	1.2	2.8	1.6	6.2	3.0	0.0	4.8	4.4	0.0	6.2	2.4	0.0
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	177	613	270	476	955		187	619		475	771	
V/C Ratio(X)	0.38	0.33	0.19	0.74	0.25		0.79	0.49		0.74	0.24	
Avail Cap(c_a), veh/h	402	1598	703	1325	2659		634	1679		1271	1804	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.9	20.7	20.2	23.0	16.3	0.0	24.7	21.2	0.0	23.0	18.4	0.0
Incr Delay (d2), s/veh	0.5	0.3	0.3	0.9	0.1	0.0	2.8	0.6	0.0	0.9	0.2	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	0.4	1.1	0.5	2.1	1.1	0.0	1.9	1.7	0.0	2.1	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.3	21.0	20.5	23.9	16.5	0.0	27.4	21.8	0.0	23.9	18.6	0.0
LnGrp LOS	C	C	C	C	B		C	C		C	B	
Approach Vol, veh/h		319			593			450			536	
Approach Delay, s/veh		22.0			20.9			23.7			22.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	15.0	13.4	15.2	10.9	17.5	7.9	20.7
Change Period (Y+Rc), s	4.6	5.1	4.6	5.4	4.6	5.1	4.6	5.4
Max Green Setting (Gmax), s	23.4	26.9	24.4	25.6	21.4	28.9	7.4	42.6
Max Q Clear Time (g_c+I1), s	8.2	6.4	8.2	4.8	6.8	4.4	3.2	5.0
Green Ext Time (p_c), s	0.6	1.8	0.6	1.2	0.2	1.1	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.1
HCM 7th LOS	C

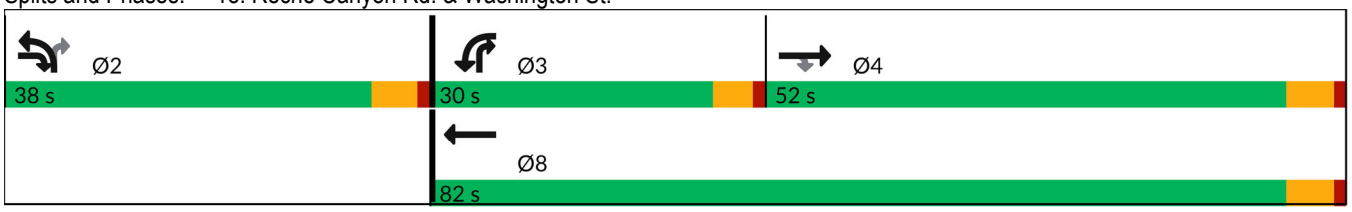
Notes

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1288	420	600	925	730	1072
Future Volume (vph)	1288	420	600	925	730	1072
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Detector Phase	4	2	3	8	2	3
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	42.4	30.1	9.6	23.4	30.1	9.6
Total Split (s)	52.0	38.0	30.0	82.0	38.0	30.0
Total Split (%)	43.3%	31.7%	25.0%	68.3%	31.7%	25.0%
Yellow Time (s)	4.4	4.1	3.6	4.4	4.1	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.1	4.6	5.4	5.1	4.6
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	46.6	79.3	25.4	76.6	32.4	62.9
Actuated g/C Ratio	0.39	0.66	0.21	0.64	0.27	0.53
v/c Ratio	1.00	0.43	0.99	0.44	0.94	0.78
Control Delay (s/veh)	61.8	8.5	79.7	11.5	63.1	27.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	61.8	8.5	79.7	11.5	63.1	27.2
LOS	E	A	E	B	E	C
Approach Delay (s/veh)	48.7			38.3	41.8	
Approach LOS	D			D	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.5	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay (s/veh): 43.1	Intersection LOS: D
Intersection Capacity Utilization 90.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 18: Reche Canyon Rd. & Washington St.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1288	420	600	925	730	1072
Future Volume (veh/h)	1288	420	600	925	730	1072
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		0.98	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	1673	1870	1673	1870
Adj Flow Rate, veh/h	1385	305	645	995	785	1045
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1380	1037	654	2268	848	1355
Arrive On Green	0.39	0.39	0.21	0.64	0.27	0.27
Sat Flow, veh/h	3647	1550	3092	3647	3092	2790
Grp Volume(v), veh/h	1385	305	645	995	785	1045
Grp Sat Flow(s),veh/h/ln	1777	1550	1546	1777	1546	1395
Q Serve(g_s), s	46.6	9.9	24.9	16.9	29.6	32.9
Cycle Q Clear(g_c), s	46.6	9.9	24.9	16.9	29.6	32.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1380	1037	654	2268	848	1355
V/C Ratio(X)	1.00	0.29	0.99	0.44	0.93	0.77
Avail Cap(c_a), veh/h	1380	1037	654	2268	848	1355
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	36.7	8.5	47.1	10.9	42.4	25.4
Incr Delay (d2), s/veh	25.1	0.2	31.4	0.1	15.9	2.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.0	6.5	12.2	6.1	12.7	12.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	61.8	8.7	78.5	11.0	58.3	28.2
LnGrp LOS	F	A	E	B	E	C
Approach Vol, veh/h	1690			1640	1830	
Approach Delay, s/veh	52.2			37.6	41.1	
Approach LOS	D			D	D	

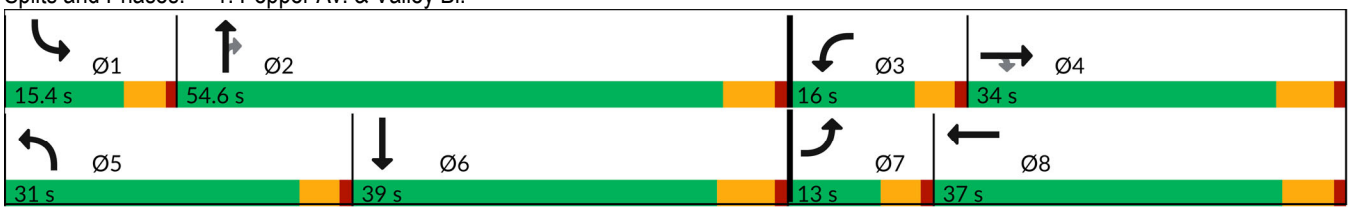
Timer - Assigned Phs	2	3	4	8
Phs Duration (G+Y+Rc), s	38.0	30.0	52.0	82.0
Change Period (Y+Rc), s	5.1	4.6	5.4	5.4
Max Green Setting (Gmax), s	32.9	25.4	46.6	76.6
Max Q Clear Time (g_c+I1), s	34.9	26.9	48.6	18.9
Green Ext Time (p_c), s	0.0	0.0	0.0	8.5

Intersection Summary	
HCM 7th Control Delay, s/veh	43.6
HCM 7th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	164	656	310	209	750	583	931	225	139	934
Future Volume (vph)	164	656	310	209	750	583	931	225	139	934
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8	5	2		1	6
Permitted Phases			4					2		
Detector Phase	7	4	4	3	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	30.2	30.2	9.6	29.8	9.6	35.8	35.8	9.6	36.2
Total Split (s)	13.0	34.0	34.0	16.0	37.0	31.0	54.6	54.6	15.4	39.0
Total Split (%)	10.8%	28.3%	28.3%	13.3%	30.8%	25.8%	45.5%	45.5%	12.8%	32.5%
Yellow Time (s)	3.6	5.2	5.2	3.6	4.8	3.6	4.8	4.8	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	5.8	4.6	5.8	5.8	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	8.3	27.9	27.9	10.8	30.8	25.2	47.1	47.1	9.3	30.9
Actuated g/C Ratio	0.07	0.24	0.24	0.09	0.26	0.22	0.40	0.40	0.08	0.27
v/c Ratio	0.78	0.81	0.52	0.76	0.94	0.92	0.47	0.33	0.59	0.84
Control Delay (s/veh)	78.6	50.9	7.4	70.2	61.0	64.6	26.5	12.1	62.8	46.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	78.6	50.9	7.4	70.2	61.0	64.6	26.5	12.1	62.8	46.2
LOS	E	D	A	E	E	E	C	B	E	D
Approach Delay (s/veh)		43.0			62.8		37.4			48.1
Approach LOS		D			E		D			D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.4	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay (s/veh): 46.4	Intersection LOS: D
Intersection Capacity Utilization 86.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Pepper Av. & Valley Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	656	310	209	750	92	583	931	225	139	934	137
Future Volume (veh/h)	164	656	310	209	750	92	583	931	225	139	934	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1870	1870	1673	1870	1870	1673	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	171	683	220	218	781	80	607	970	145	145	973	129
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	883	389	271	859	88	662	2075	644	198	1169	155
Arrive On Green	0.07	0.25	0.25	0.09	0.26	0.26	0.21	0.41	0.41	0.06	0.26	0.26
Sat Flow, veh/h	3092	3554	1565	3092	3253	333	3092	5106	1584	3092	4561	603
Grp Volume(v), veh/h	171	683	220	218	426	435	607	970	145	145	726	376
Grp Sat Flow(s),veh/h/ln	1546	1777	1565	1546	1777	1809	1546	1702	1584	1546	1702	1760
Q Serve(g_s), s	6.1	19.9	13.7	7.7	25.9	25.9	21.4	15.5	6.7	5.1	22.5	22.6
Cycle Q Clear(g_c), s	6.1	19.9	13.7	7.7	25.9	25.9	21.4	15.5	6.7	5.1	22.5	22.6
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	223	883	389	271	469	478	662	2075	644	198	872	451
V/C Ratio(X)	0.77	0.77	0.57	0.80	0.91	0.91	0.92	0.47	0.23	0.73	0.83	0.83
Avail Cap(c_a), veh/h	233	886	390	316	497	506	732	2235	693	299	1001	518
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	50.8	39.0	36.7	49.9	39.7	39.7	42.8	24.3	21.6	51.3	39.2	39.2
Incr Delay (d2), s/veh	12.2	4.3	1.9	10.5	20.0	19.8	14.8	0.2	0.2	2.0	5.4	10.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	8.9	5.2	3.3	13.3	13.5	9.2	6.0	2.4	2.0	9.5	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.1	43.3	38.5	60.4	59.8	59.6	57.6	24.4	21.8	53.2	44.6	49.4
LnGrp LOS	E	D	D	E	E	E	E	C	C	D	D	D
Approach Vol, veh/h		1074			1079			1722			1247	
Approach Delay, s/veh		45.5			59.8			35.9			47.1	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	51.5	14.4	33.9	28.5	34.8	12.6	35.6
Change Period (Y+Rc), s	4.6	* 6.2	4.6	6.2	4.6	6.2	4.6	* 6.2
Max Green Setting (Gmax), s	10.8	* 49	11.4	27.8	26.4	32.8	8.4	* 31
Max Q Clear Time (g_c+I1), s	7.1	17.5	9.7	21.9	23.4	24.6	8.1	27.9
Green Ext Time (p_c), s	0.1	7.7	0.1	2.5	0.5	4.0	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	45.7
HCM 7th LOS	D

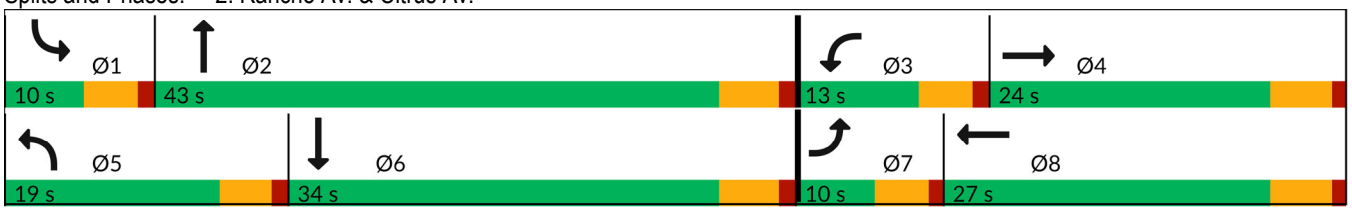
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	23	17	93	53	151	859	17	664
Future Volume (vph)	23	17	93	53	151	859	17	664
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	23.1	9.6	23.1	9.6	23.1	9.6	23.1
Total Split (s)	10.0	24.0	13.0	27.0	19.0	43.0	10.0	34.0
Total Split (%)	11.1%	26.7%	14.4%	30.0%	21.1%	47.8%	11.1%	37.8%
Yellow Time (s)	3.6	4.1	3.6	4.1	3.6	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	4.6	5.1	4.6	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	5.8	12.4	7.9	18.3	10.9	32.0	5.8	21.6
Actuated g/C Ratio	0.09	0.19	0.12	0.28	0.16	0.48	0.09	0.33
v/c Ratio	0.16	0.43	0.49	0.20	0.58	0.58	0.12	0.65
Control Delay (s/veh)	38.6	10.6	43.2	17.0	39.4	14.7	38.2	24.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.6	10.6	43.2	17.0	39.4	14.7	38.2	24.2
LOS	D	B	D	B	D	B	D	C
Approach Delay (s/veh)		13.8		29.8		18.1		24.6
Approach LOS		B		C		B		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 66.4	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay (s/veh): 20.9	Intersection LOS: C
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Rancho Av. & Citrus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	17	161	93	53	45	151	859	68	17	664	37
Future Volume (veh/h)	23	17	161	93	53	45	151	859	68	17	664	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	24	18	106	98	56	30	159	904	67	18	699	32
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	47	37	219	123	233	125	200	1304	97	37	1011	46
Arrive On Green	0.03	0.16	0.16	0.07	0.20	0.20	0.12	0.39	0.39	0.02	0.29	0.29
Sat Flow, veh/h	1688	234	1379	1688	1145	613	1688	3349	248	1688	3460	158
Grp Volume(v), veh/h	24	0	124	98	0	86	159	480	491	18	359	372
Grp Sat Flow(s),veh/h/ln	1688	0	1613	1688	0	1758	1688	1777	1821	1688	1777	1841
Q Serve(g_s), s	0.8	0.0	3.8	3.1	0.0	2.2	5.0	12.3	12.3	0.6	9.7	9.7
Cycle Q Clear(g_c), s	0.8	0.0	3.8	3.1	0.0	2.2	5.0	12.3	12.3	0.6	9.7	9.7
Prop In Lane	1.00		0.85	1.00		0.35	1.00		0.14	1.00		0.09
Lane Grp Cap(c), veh/h	47	0	256	123	0	358	200	692	709	37	519	538
V/C Ratio(X)	0.51	0.00	0.48	0.80	0.00	0.24	0.79	0.69	0.69	0.49	0.69	0.69
Avail Cap(c_a), veh/h	168	0	562	261	0	709	448	1241	1271	168	946	980
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	20.8	24.8	0.0	18.1	23.3	13.9	13.9	26.2	17.0	17.0
Incr Delay (d2), s/veh	3.1	0.0	1.4	4.4	0.0	0.3	2.7	1.3	1.2	3.7	1.7	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.4	1.3	0.0	0.8	1.9	4.3	4.4	0.2	3.6	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.1	0.0	22.2	29.1	0.0	18.4	26.0	15.1	15.1	29.9	18.7	18.6
LnGrp LOS	C		C	C		B	C	B	B	C	B	B
Approach Vol, veh/h		148			184			1130			749	
Approach Delay, s/veh		23.4			24.1			16.6			18.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	26.2	8.6	13.7	11.0	21.0	6.1	16.1
Change Period (Y+Rc), s	4.6	5.1	4.6	5.1	4.6	5.1	4.6	5.1
Max Green Setting (Gmax), s	5.4	37.9	8.4	18.9	14.4	28.9	5.4	21.9
Max Q Clear Time (g_c+I1), s	2.6	14.3	5.1	5.8	7.0	11.7	2.8	4.2
Green Ext Time (p_c), s	0.0	6.5	0.0	0.5	0.1	4.1	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	18.5
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	65	1086	43	147	1196
Future Vol, veh/h	30	65	1086	43	147	1196
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	100	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	66	1108	44	150	1220

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2652	577	0	0	1153	0
Stage 1	1131	-	-	-	-	-
Stage 2	1520	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	~ 22	461	-	-	604	-
Stage 1	271	-	-	-	-	-
Stage 2	198	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 16	460	-	-	603	-
Mov Cap-2 Maneuver	122	-	-	-	-	-
Stage 1	270	-	-	-	-	-
Stage 2	149	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	23.57	0	1.42
HCM LOS	C		

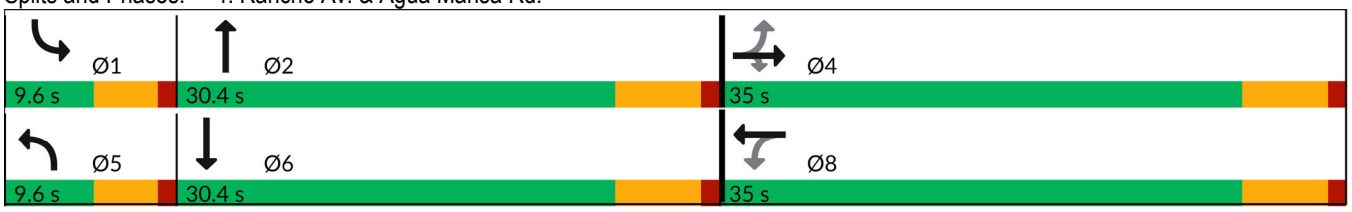
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	122	460	603	-
HCM Lane V/C Ratio	-	-	0.25	0.144	0.249	-
HCM Control Delay (s/veh)	-	-	44	14.1	12.9	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	0.9	0.5	1	-

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

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	594	56	314	5	49	105	545	5	973
Future Volume (vph)	594	56	314	5	49	105	545	5	973
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4			8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	4	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.8	23.8	23.8	23.8	23.8	9.6	27.8	9.6	23.8
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	30.4	9.6	30.4
Total Split (%)	46.7%	46.7%	46.7%	46.7%	46.7%	12.8%	40.5%	12.8%	40.5%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.8	5.8		5.8	4.6	5.8	4.6	5.8
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		29.2	29.2		25.4	5.0	32.3	5.0	24.6
Actuated g/C Ratio		0.39	0.39		0.34	0.07	0.43	0.07	0.33
v/c Ratio		1.34	0.43		0.18	0.96	0.37	0.05	1.09
Control Delay (s/veh)		189.2	8.5		16.2	116.6	16.1	33.8	79.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		189.2	8.5		16.2	116.6	16.1	33.8	79.9
LOS		F	A		B	F	B	C	E
Approach Delay (s/veh)		130.4			16.2		32.2		79.8
Approach LOS		F			B		C		E

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 75	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.34	
Intersection Signal Delay (s/veh): 84.0	Intersection LOS: F
Intersection Capacity Utilization 97.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4: Rancho Av. & Agua Mansa Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	594	56	314	5	49	28	105	545	5	5	973	260
Future Volume (veh/h)	594	56	314	5	49	28	105	545	5	5	973	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	606	57	276	5	50	18	107	556	4	5	993	163
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	204	11	617	51	316	103	113	1403	10	11	1002	164
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.07	0.39	0.39	0.01	0.33	0.33
Sat Flow, veh/h	289	27	1585	0	811	265	1688	3617	26	1688	3056	501
Grp Volume(v), veh/h	663	0	276	73	0	0	107	273	287	5	577	579
Grp Sat Flow(s),veh/h/ln	316	0	1585	1076	0	0	1688	1777	1866	1688	1777	1780
Q Serve(g_s), s	0.0	0.0	9.7	0.0	0.0	0.0	4.7	8.3	8.3	0.2	24.2	24.3
Cycle Q Clear(g_c), s	29.2	0.0	9.7	29.2	0.0	0.0	4.7	8.3	8.3	0.2	24.2	24.3
Prop In Lane	0.91		1.00	0.07		0.25	1.00		0.01	1.00		0.28
Lane Grp Cap(c), veh/h	215	0	617	470	0	0	113	690	724	11	583	584
V/C Ratio(X)	3.09	0.00	0.45	0.16	0.00	0.00	0.95	0.40	0.40	0.45	0.99	0.99
Avail Cap(c_a), veh/h	215	0	617	470	0	0	113	690	724	113	583	584
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	0.0	16.9	15.5	0.0	0.0	34.9	16.6	16.6	37.1	25.1	25.1
Incr Delay (d2), s/veh	951.4	0.0	0.5	0.2	0.0	0.0	68.7	0.4	0.4	10.2	34.6	35.0
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	60.5	0.0	3.1	0.7	0.0	0.0	4.0	3.0	3.2	0.1	14.5	14.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	980.6	0.0	17.4	15.6	0.0	0.0	103.6	17.0	16.9	47.3	59.7	60.1
LnGrp LOS	F		B	B			F	B	B	D	E	E
Approach Vol, veh/h		939			73			667			1161	
Approach Delay, s/veh		697.5			15.6			30.8			59.9	
Approach LOS		F			B			C			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	34.9		35.0	9.6	30.4		35.0				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		5.8				
Max Green Setting (Gmax), s	5.0	24.6		29.2	5.0	24.6		29.2				
Max Q Clear Time (g_c+I1), s	2.2	10.3		31.2	6.7	26.3		31.2				
Green Ext Time (p_c), s	0.0	2.6		0.0	0.0	0.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	262.7
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	10	22	5	5	5
Future Vol, veh/h	5	10	22	5	5	5
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	17	37	8	8	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	96	14	17	0	-	0
Stage 1	13	-	-	-	-	-
Stage 2	83	-	-	-	-	-
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	904	1066	1600	-	-	-
Stage 1	1010	-	-	-	-	-
Stage 2	940	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	882	1065	1600	-	-	-
Mov Cap-2 Maneuver	882	-	-	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	940	-	-	-	-	-

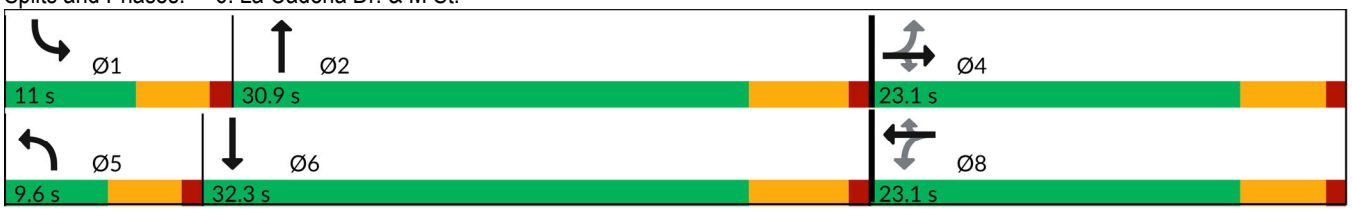
Approach	EB	NB	SB
HCM Control Delay, s/v	8.71	5.95	0
HCM LOS	A		

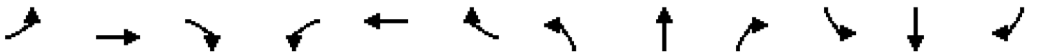
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1467	-	996	-	-
HCM Lane V/C Ratio	0.023	-	0.026	-	-
HCM Control Delay (s/veh)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	22	11	5	115	11	163	8	939	103	936
Future Volume (vph)	22	11	5	115	11	163	8	939	103	936
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.1	23.1	23.1	23.1	23.1	23.1	9.6	30.8	9.6	27.8
Total Split (s)	23.1	23.1	23.1	23.1	23.1	23.1	9.6	30.9	11.0	32.3
Total Split (%)	35.5%	35.5%	35.5%	35.5%	35.5%	35.5%	14.8%	47.5%	16.9%	49.7%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1	5.1		5.1	5.1	4.6	5.8	4.6	5.8
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.1	14.1		14.2	14.2	6.2	26.5	7.2	32.6
Actuated g/C Ratio		0.28	0.28		0.28	0.28	0.12	0.52	0.14	0.65
v/c Ratio		0.09	0.01		0.34	0.30	0.04	0.58	0.45	0.43
Control Delay (s/veh)		19.2	0.0		23.0	5.5	27.1	15.1	34.6	9.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)		19.2	0.0		23.0	5.5	27.1	15.1	34.6	9.0
LOS		B	A		C	A	C	B	C	A
Approach Delay (s/veh)		16.7			13.1			15.2		11.5
Approach LOS		B			B			B		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 50.5	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay (s/veh): 13.3	Intersection LOS: B
Intersection Capacity Utilization 62.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: La Cadena Dr. & M St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	11	5	115	11	163	8	939	91	103	936	19
Future Volume (veh/h)	22	11	5	115	11	163	8	939	91	103	936	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	23	11	3	119	11	109	8	968	79	106	965	18
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	101	30	475	115	6	475	18	1196	98	133	1531	29
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.01	0.36	0.36	0.08	0.43	0.43
Sat Flow, veh/h	0	99	1579	0	19	1577	1688	3317	271	1688	3567	67
Grp Volume(v), veh/h	34	0	3	130	0	109	8	519	528	106	481	502
Grp Sat Flow(s),veh/h/ln	99	0	1579	19	0	1577	1688	1777	1810	1688	1777	1856
Q Serve(g_s), s	0.0	0.0	0.1	0.0	0.0	3.1	0.3	15.8	15.8	3.7	12.7	12.7
Cycle Q Clear(g_c), s	18.0	0.0	0.1	18.0	0.0	3.1	0.3	15.8	15.8	3.7	12.7	12.7
Prop In Lane	0.68		1.00	0.92		1.00	1.00		0.15	1.00		0.04
Lane Grp Cap(c), veh/h	131	0	475	121	0	475	18	641	653	133	763	797
V/C Ratio(X)	0.26	0.00	0.01	1.07	0.00	0.23	0.46	0.81	0.81	0.80	0.63	0.63
Avail Cap(c_a), veh/h	131	0	475	121	0	475	141	746	760	181	788	823
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	0.0	14.6	29.0	0.0	15.7	29.4	17.2	17.3	27.1	13.3	13.3
Incr Delay (d2), s/veh	1.0	0.0	0.0	102.8	0.0	0.2	6.7	5.8	5.7	11.3	1.6	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	0.3	0.0	0.0	5.1	0.0	1.1	0.1	6.2	6.3	1.7	4.2	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.3	0.0	14.6	131.9	0.0	15.9	36.1	23.1	23.0	38.3	14.9	14.8
LnGrp LOS	B		B	F		B	D	C	C	D	B	B
Approach Vol, veh/h		37			239			1055			1089	
Approach Delay, s/veh		18.0			79.0			23.1			17.1	
Approach LOS		B			E			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	27.4		23.1	5.2	31.5		23.1				
Change Period (Y+Rc), s	4.6	5.8		5.1	4.6	5.8		5.1				
Max Green Setting (Gmax), s	6.4	25.1		18.0	5.0	26.5		18.0				
Max Q Clear Time (g_c+I1), s	5.7	17.8		20.0	2.3	14.7		20.0				
Green Ext Time (p_c), s	0.0	3.5		0.0	0.0	4.5		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh		25.9
HCM 7th LOS		C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	5	15	6	48	7	882	31	97	941	13
Future Vol, veh/h	6	0	5	15	6	48	7	882	31	97	941	13
Conflicting Peds, #/hr	0	0	6	0	0	0	0	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	80	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	0	6	17	7	55	8	1002	35	110	1069	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1820	2353	550	1797	2342	519	1086	0	0	1038	0	0
Stage 1	1299	1299	-	1036	1036	-	-	-	-	-	-	-
Stage 2	520	1053	-	761	1307	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	48	35	479	50	36	502	638	-	-	666	-	-
Stage 1	171	230	-	248	307	-	-	-	-	-	-	-
Stage 2	507	301	-	364	228	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	34	29	475	41	29	502	637	-	-	666	-	-
Mov Cap-2 Maneuver	103	100	-	140	116	-	-	-	-	-	-	-
Stage 1	142	191	-	245	303	-	-	-	-	-	-	-
Stage 2	436	297	-	298	190	-	-	-	-	-	-	-

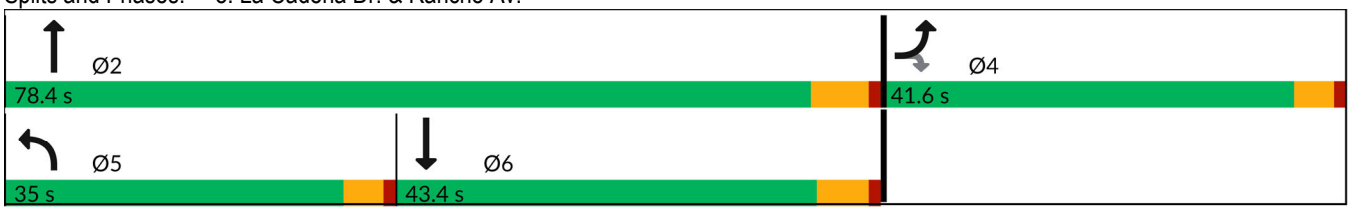
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	29.42	23.61	0.08	1.06
HCM LOS	D	C		

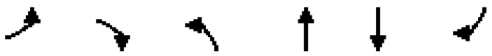
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	637	-	-	160	271	666	-	-
HCM Lane V/C Ratio	0.012	-	-	0.078	0.289	0.166	-	-
HCM Control Delay (s/veh)	10.7	-	-	29.4	23.6	11.5	-	-
HCM Lane LOS	B	-	-	D	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	1.2	0.6	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	111	1097	479	683	935
Future Volume (vph)	111	1097	479	683	935
Turn Type	Prot	Perm	Prot	NA	NA
Protected Phases	4		5	2	6
Permitted Phases		4			
Detector Phase	4	4	5	2	6
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	41.6	41.6	9.6	24.2	42.8
Total Split (s)	41.6	41.6	35.0	78.4	43.4
Total Split (%)	34.7%	34.7%	29.2%	65.3%	36.2%
Yellow Time (s)	3.6	3.6	3.6	5.2	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	6.2	5.8
Lead/Lag			Lead		Lag
Lead-Lag Optimize?			Yes		Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	37.0	37.0	30.4	72.1	37.5
Actuated g/C Ratio	0.31	0.31	0.25	0.60	0.31
v/c Ratio	1.08	0.81	1.23	0.35	0.95
Control Delay (s/veh)	89.9	18.2	160.5	12.6	58.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	89.9	18.2	160.5	12.6	58.8
LOS	F	B	F	B	E
Approach Delay (s/veh)	54.1			73.6	58.8
Approach LOS	D			E	E

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.9	
Natural Cycle: 125	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.23	
Intersection Signal Delay (s/veh): 62.2	Intersection LOS: E
Intersection Capacity Utilization 97.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 8: La Cadena Dr. & Rancho Av.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	111	1097	479	683	935	34
Future Volume (veh/h)	111	1097	479	683	935	34
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1772	1870	1772	1870	1870	1870
Adj Flow Rate, veh/h	0	778	521	742	1016	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	463	870	459	2235	1118	29
Arrive On Green	0.00	0.27	0.27	0.63	0.32	0.32
Sat Flow, veh/h	1688	3170	1688	3647	3634	91
Grp Volume(v), veh/h	0	778	521	742	510	532
Grp Sat Flow(s),veh/h/ln	1688	1585	1688	1777	1777	1854
Q Serve(g_s), s	0.0	26.4	30.4	10.9	30.8	30.8
Cycle Q Clear(g_c), s	0.0	26.4	30.4	10.9	30.8	30.8
Prop In Lane	1.00	1.00	1.00			0.05
Lane Grp Cap(c), veh/h	463	870	459	2235	561	586
V/C Ratio(X)	0.00	0.89	1.14	0.33	0.91	0.91
Avail Cap(c_a), veh/h	559	1049	459	2295	598	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	39.0	40.7	9.7	36.7	36.7
Incr Delay (d2), s/veh	0.0	8.8	84.6	0.1	17.3	16.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	21.9	22.6	3.7	15.3	15.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	47.8	125.3	9.8	53.9	53.4
LnGrp LOS		D	F	A	D	D
Approach Vol, veh/h	778			1263	1042	
Approach Delay, s/veh	47.8			57.4	53.7	
Approach LOS	D			E	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		76.5		35.3	35.0	41.5
Change Period (Y+Rc), s		6.2		4.6	4.6	* 6.2
Max Green Setting (Gmax), s		72.2		37.0	30.4	* 38
Max Q Clear Time (g_c+I1), s		12.9		28.4	32.4	32.8
Green Ext Time (p_c), s		5.2		2.3	0.0	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	53.7
HCM 7th LOS	D

Notes

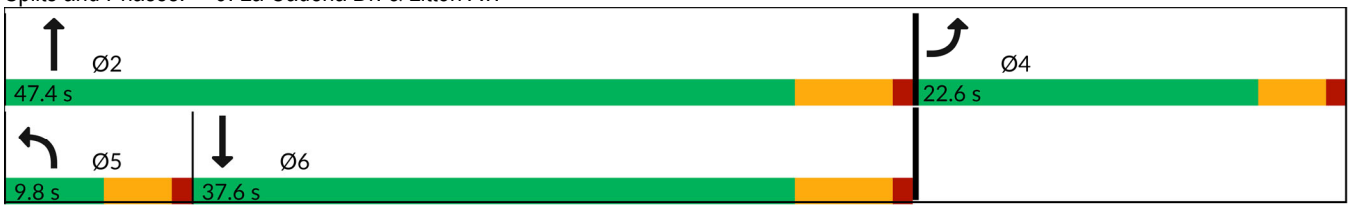
User approved volume balancing among the lanes for turning movement.

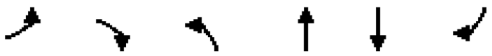
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	52	58	1091	1920
Future Volume (vph)	52	58	1091	1920
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	10.0	10.0
Minimum Split (s)	22.6	9.6	24.2	24.2
Total Split (s)	22.6	9.8	47.4	37.6
Total Split (%)	32.3%	14.0%	67.7%	53.7%
Yellow Time (s)	3.6	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	6.2	6.2
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	6.9	5.3	39.5	34.3
Actuated g/C Ratio	0.13	0.10	0.74	0.65
v/c Ratio	0.39	0.39	0.47	0.98
Control Delay (s/veh)	21.2	33.7	4.8	33.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.2	33.7	4.8	33.9
LOS	C	C	A	C
Approach Delay (s/veh)	21.2		6.3	33.9
Approach LOS	C		A	C

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 53.1	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay (s/veh): 23.7	Intersection LOS: C
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 9: La Cadena Dr. & Litton Av.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	52	32	58	1091	1920	52
Future Volume (veh/h)	52	32	58	1091	1920	52
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1772	1870	1772	1870	1870	1870
Adj Flow Rate, veh/h	59	25	66	1240	2182	57
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	76	32	99	2598	2076	54
Arrive On Green	0.07	0.07	0.06	0.73	0.59	0.59
Sat Flow, veh/h	1131	479	1688	3647	3632	92
Grp Volume(v), veh/h	85	0	66	1240	1091	1148
Grp Sat Flow(s),veh/h/ln	1629	0	1688	1777	1777	1854
Q Serve(g_s), s	2.7	0.0	2.1	7.7	31.4	31.4
Cycle Q Clear(g_c), s	2.7	0.0	2.1	7.7	31.4	31.4
Prop In Lane	0.69	0.29	1.00			0.05
Lane Grp Cap(c), veh/h	109	0	99	2598	1043	1088
V/C Ratio(X)	0.78	0.00	0.67	0.48	1.05	1.06
Avail Cap(c_a), veh/h	548	0	164	2736	1043	1088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	0.0	24.7	3.0	11.1	11.1
Incr Delay (d2), s/veh	4.4	0.0	2.9	0.1	40.7	43.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.8	0.2	17.8	19.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	29.0	0.0	27.6	3.1	51.8	54.3
LnGrp LOS	C		C	A	F	F
Approach Vol, veh/h	85			1306	2239	
Approach Delay, s/veh	29.0			4.3	53.1	
Approach LOS	C			A	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		45.3		8.2	7.7	37.6
Change Period (Y+Rc), s		6.2		4.6	4.6	6.2
Max Green Setting (Gmax), s		41.2		18.0	5.2	31.4
Max Q Clear Time (g_c+I1), s		9.7		4.7	4.1	33.4
Green Ext Time (p_c), s		9.8		0.1	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	35.0
HCM 7th LOS	C

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	18	5	13	19	25	5	22	29	35	8	8
Future Vol, veh/h	8	18	5	13	19	25	5	22	29	35	8	8
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	19	5	14	20	27	5	23	31	37	9	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	7.4	7.3	7.2	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	26%	23%	69%
Vol Thru, %	39%	58%	33%	16%
Vol Right, %	52%	16%	44%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	56	31	57	51
LT Vol	5	8	13	35
Through Vol	22	18	19	8
RT Vol	29	5	25	8
Lane Flow Rate	60	33	61	54
Geometry Grp	1	1	1	1
Degree of Util (X)	0.064	0.038	0.066	0.063
Departure Headway (Hd)	3.844	4.132	3.938	4.185
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	925	859	902	851
Service Time	1.898	2.194	1.996	2.236
HCM Lane V/C Ratio	0.065	0.038	0.068	0.063
HCM Control Delay, s/veh	7.2	7.4	7.3	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0.2	0.2

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	289	5	49	310	7	49
Future Vol, veh/h	289	5	49	310	7	49
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	298	5	51	320	7	51

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	305	0	723	303
Stage 1	-	-	-	-	303	-
Stage 2	-	-	-	-	421	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1256	-	393	737
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	663	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1253	-	373	736
Mov Cap-2 Maneuver	-	-	-	-	480	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	630	-

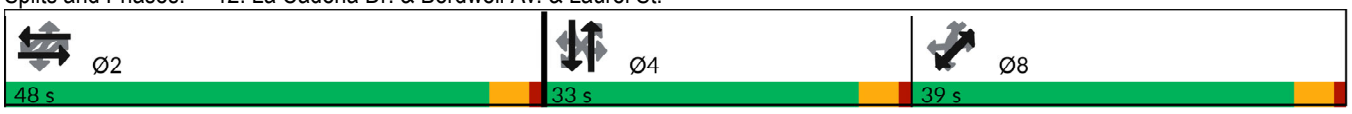
Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.09	10.55
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	480	736	-	-	246	-
HCM Lane V/C Ratio	0.015	0.069	-	-	0.04	-
HCM Control Delay (s/veh)	12.6	10.3	-	-	8	0
HCM Lane LOS	B	B	-	-	A	A
HCM 95th %tile Q(veh)	0	0.2	-	-	0.1	-

Lane Group	EBL2	EBL	EBT	WBL2	WBL	WBT	NBL2	NBL	NBT	SBL2	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	5	97	95	5	18	98	5	36	10	8	6	5
Future Volume (vph)	5	97	95	5	18	98	5	36	10	8	6	5
Turn Type	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			2			2			4			4
Permitted Phases	2	2		2	2		4	4		4	4	
Detector Phase	2	2	2	2	2	2	4	4	4	4	4	4
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	22.6	22.6	22.6	22.6	22.6	22.6	31.6	31.6	31.6	31.6	31.6	31.6
Total Split (s)	48.0	48.0	48.0	48.0	48.0	48.0	33.0	33.0	33.0	33.0	33.0	33.0
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	27.5%	27.5%	27.5%	27.5%	27.5%	27.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)			0.0			0.0			0.0			0.0
Total Lost Time (s)			4.6			4.6			4.6			4.6
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)			21.2			21.2			14.3			14.3
Actuated g/C Ratio			0.31			0.31			0.21			0.21
v/c Ratio			0.62			0.27			0.27			0.10
Control Delay (s/veh)			29.3			23.1			31.5			27.3
Queue Delay			0.0			0.0			0.0			0.0
Total Delay (s/veh)			29.3			23.1			31.5			27.3
LOS			C			C			C			C
Approach Delay (s/veh)			29.3			23.1			31.5			27.3
Approach LOS			C			C			C			C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 68.6	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay (s/veh): 24.4	Intersection LOS: C
Intersection Capacity Utilization 63.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: La Cadena Dr. & Bordwell Av. & Laurel St.



Lane Group	NEL2	NEL	NET	SWL2	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	11	6	315	5	20	426
Future Volume (vph)	11	6	315	5	20	426
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			8			8
Permitted Phases	8	8		8	8	
Detector Phase	8	8	8	8	8	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.6	27.6	27.6	27.6	27.6	27.6
Total Split (s)	39.0	39.0	39.0	39.0	39.0	39.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.6	4.6		4.6	4.6
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)		23.1	23.1		23.1	23.1
Actuated g/C Ratio		0.34	0.34		0.34	0.34
v/c Ratio		0.10	0.31		0.09	0.55
Control Delay (s/veh)		23.9	20.9		22.6	23.4
Queue Delay		0.0	0.0		0.0	0.0
Total Delay (s/veh)		23.9	20.9		22.6	23.4
LOS		C	C		C	C
Approach Delay (s/veh)			21.1			23.3
Approach LOS			C			C

Intersection Summary

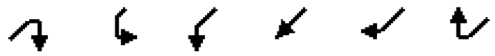
Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	5	97	95	30	44	5	18	98	5	5	5	36
Future Volume (vph)	5	97	95	30	44	5	18	98	5	5	5	36
Ideal Flow (vphpl)	1800	1800	1900	1900	1900	1800	1800	1900	1900	1900	1800	1800
Total Lost time (s)			4.6					4.6				
Lane Util. Factor			1.00					1.00				
Frt			0.96					0.99				
Flt Protected			0.98					0.99				
Satd. Flow (prot)			1761					1829				
Flt Permitted			0.84					0.92				
Satd. Flow (perm)			1513					1690				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	105	103	33	48	5	20	107	5	5	5	39
RTOR Reduction (vph)	0	0	6	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	0	288	0	0	0	0	141	0	0	0	0
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Perm	Perm
Protected Phases			2					2				
Permitted Phases	2	2				2	2				4	4
Actuated Green, G (s)			21.2					21.2				
Effective Green, g (s)			21.2					21.2				
Actuated g/C Ratio			0.31					0.31				
Clearance Time (s)			4.6					4.6				
Vehicle Extension (s)			3.0					3.0				
Lane Grp Cap (vph)			472					527				
v/s Ratio Prot												
v/s Ratio Perm			c0.19					0.08				
v/c Ratio			0.61					0.27				
Uniform Delay, d1			19.8					17.5				
Progression Factor			1.00					1.00				
Incremental Delay, d2			2.2					0.3				
Delay (s)			22.1					17.8				
Level of Service			C					B				
Approach Delay (s/veh)			22.1					17.8				
Approach LOS			C					B				

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	67.9	Sum of lost time (s)	13.8
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	NEL2	NEL	NET	NER
Lane Configurations												
Traffic Volume (vph)	10	20	5	8	6	5	6	5	11	6	315	20
Future Volume (vph)	10	20	5	8	6	5	6	5	11	6	315	20
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1900	1900	1900	1800	1800	1900	1900
Total Lost time (s)	4.6					4.6				4.6	4.6	
Lane Util. Factor	1.00					1.00				1.00	0.95	
Frt	0.96					0.95				1.00	0.99	
Flt Protected	0.97					0.98				0.95	1.00	
Satd. Flow (prot)	1733					1729				1676	3500	
Flt Permitted	0.81					0.84				0.32	1.00	
Satd. Flow (perm)	1450					1494				560	3500	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	22	5	9	7	5	7	5	12	7	342	22
RTOR Reduction (vph)	3	0	0	0	0	4	0	0	0	0	1	0
Lane Group Flow (vph)	79	0	0	0	0	29	0	0	0	19	368	0
Turn Type	NA			Perm	Perm	NA			Perm	Perm	NA	
Protected Phases	4					4					8	
Permitted Phases				4	4				8	8		
Actuated Green, G (s)	9.8					9.8				23.1	23.1	
Effective Green, g (s)	9.8					9.8				23.1	23.1	
Actuated g/C Ratio	0.14					0.14				0.34	0.34	
Clearance Time (s)	4.6					4.6				4.6	4.6	
Vehicle Extension (s)	3.0					3.0				3.0	3.0	
Lane Grp Cap (vph)	209					215				190	1190	
v/s Ratio Prot											0.11	
v/s Ratio Perm	c0.05					0.02				0.03		
v/c Ratio	0.38					0.13				0.10	0.31	
Uniform Delay, d1	26.3					25.3				15.3	16.5	
Progression Factor	1.00					1.00				1.00	1.00	
Incremental Delay, d2	1.2					0.3				0.2	0.1	
Delay (s)	27.5					25.6				15.5	16.7	
Level of Service	C					C				B	B	
Approach Delay (s/veh)	27.5					25.6					16.6	
Approach LOS	C					C					B	

Intersection Summary



Movement	NER2	SWL2	SWL	SWT	SWR	SWR2
Lane Configurations						
Traffic Volume (vph)	5	5	20	426	124	25
Future Volume (vph)	5	5	20	426	124	25
Ideal Flow (vphpl)	1900	1800	1800	1900	1900	1900
Total Lost time (s)			4.6	4.6		
Lane Util. Factor			1.00	0.95		
Frt			1.00	0.96		
Flt Protected			0.95	1.00		
Satd. Flow (prot)			1676	3402		
Flt Permitted			0.51	1.00		
Satd. Flow (perm)			906	3402		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	5	22	463	135	27
RTOR Reduction (vph)	0	0	0	3	0	0
Lane Group Flow (vph)	0	0	27	622	0	0
Turn Type		Perm	Perm	NA		
Protected Phases				8		
Permitted Phases		8	8			
Actuated Green, G (s)			23.1	23.1		
Effective Green, g (s)			23.1	23.1		
Actuated g/C Ratio			0.34	0.34		
Clearance Time (s)			4.6	4.6		
Vehicle Extension (s)			3.0	3.0		
Lane Grp Cap (vph)			308	1157		
v/s Ratio Prot				c0.18		
v/s Ratio Perm			0.03			
v/c Ratio			0.09	0.54		
Uniform Delay, d1			15.2	18.1		
Progression Factor			1.00	1.00		
Incremental Delay, d2			0.1	0.5		
Delay (s)			15.4	18.6		
Level of Service			B	B		
Approach Delay (s/veh)				18.4		
Approach LOS				B		

Intersection Summary

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	5	114	5	5	5	103	638	5	5	662	29
Future Vol, veh/h	13	5	114	5	5	5	103	638	5	5	662	29
Conflicting Peds, #/hr	0	0	2	0	0	1	0	0	3	0	0	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	5	119	5	5	5	107	665	5	5	690	30

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1281	1617	377	1245	1630	339	735	0	0	673	0	0
Stage 1	730	730	-	885	885	-	-	-	-	-	-	-
Stage 2	550	887	-	360	745	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	123	102	621	130	101	657	866	-	-	914	-	-
Stage 1	380	426	-	306	361	-	-	-	-	-	-	-
Stage 2	487	360	-	631	419	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	102	88	611	89	86	654	854	-	-	911	-	-
Mov Cap-2 Maneuver	279	249	-	223	223	-	-	-	-	-	-	-
Stage 1	372	417	-	267	315	-	-	-	-	-	-	-
Stage 2	415	314	-	498	411	-	-	-	-	-	-	-

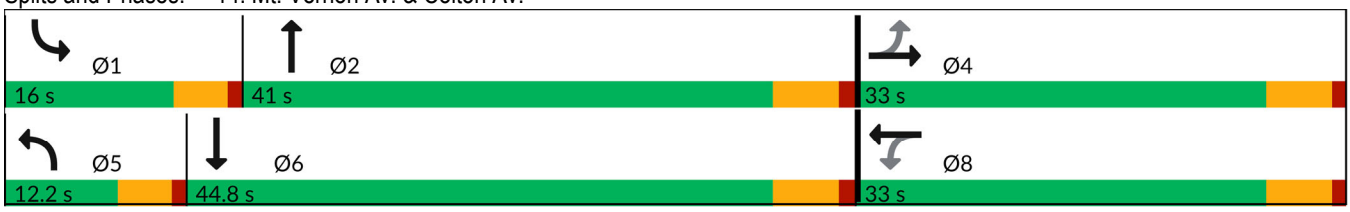
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.37	18.33	1.36	0.06
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	854	-	-	521	286	911	-	-
HCM Lane V/C Ratio	0.126	-	-	0.264	0.055	0.006	-	-
HCM Control Delay (s/veh)	9.8	-	-	14.4	18.3	9	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1.1	0.2	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	83	270	116	266	52	706	110	668
Future Volume (vph)	83	270	116	266	52	706	110	668
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	24.4	24.4	28.4	28.4	9.6	37.4	9.6	37.4
Total Split (s)	33.0	33.0	33.0	33.0	12.2	41.0	16.0	44.8
Total Split (%)	36.7%	36.7%	36.7%	36.7%	13.6%	45.6%	17.8%	49.8%
Yellow Time (s)	4.4	4.4	4.4	4.4	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	5.4	5.4	4.6	5.4	4.6	5.4
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	20.4	20.4	20.4	20.4	7.0	26.3	9.3	30.9
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.10	0.38	0.13	0.44
v/c Ratio	0.57	0.59	0.59	0.74	0.34	0.72	0.54	0.53
Control Delay (s/veh)	40.8	28.3	37.7	32.5	42.1	22.7	43.6	16.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.8	28.3	37.7	32.5	42.1	22.7	43.6	16.5
LOS	D	C	D	C	D	C	D	B
Approach Delay (s/veh)		31.0		33.8		23.8		20.0
Approach LOS		C		C		C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 69.5	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay (s/veh): 25.4	Intersection LOS: C
Intersection Capacity Utilization 78.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 14: Mt. Vernon Av. & Colton Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	270	27	116	266	97	52	706	163	110	668	87
Future Volume (veh/h)	83	270	27	116	266	97	52	706	163	110	668	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	90	293	25	126	289	69	57	767	165	120	726	85
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	249	529	45	283	454	108	82	1077	232	151	1325	155
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.05	0.37	0.37	0.09	0.41	0.41
Sat Flow, veh/h	1020	1696	145	1057	1456	348	1688	2881	620	1688	3195	374
Grp Volume(v), veh/h	90	0	318	126	0	358	57	473	459	120	404	407
Grp Sat Flow(s),veh/h/ln	1020	0	1840	1057	0	1804	1688	1777	1724	1688	1777	1792
Q Serve(g_s), s	5.7	0.0	9.8	7.7	0.0	11.7	2.3	15.5	15.6	4.8	11.8	11.8
Cycle Q Clear(g_c), s	17.3	0.0	9.8	17.5	0.0	11.7	2.3	15.5	15.6	4.8	11.8	11.8
Prop In Lane	1.00		0.08	1.00		0.19	1.00		0.36	1.00		0.21
Lane Grp Cap(c), veh/h	249	0	574	283	0	563	82	664	644	151	737	743
V/C Ratio(X)	0.36	0.00	0.55	0.45	0.00	0.64	0.70	0.71	0.71	0.79	0.55	0.55
Avail Cap(c_a), veh/h	343	0	742	380	0	728	187	924	897	281	1023	1032
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	0.0	19.6	26.9	0.0	20.2	32.1	18.3	18.3	30.5	15.2	15.2
Incr Delay (d2), s/veh	0.9	0.0	0.8	1.1	0.0	1.2	4.0	1.6	1.6	3.6	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	3.9	1.9	0.0	4.5	1.0	5.8	5.6	2.0	4.2	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	0.0	20.4	28.0	0.0	21.4	36.1	19.8	19.9	34.1	15.8	15.8
LnGrp LOS	C		C	C		C	D	B	B	C	B	B
Approach Vol, veh/h		408			484			989			931	
Approach Delay, s/veh		22.2			23.1			20.8			18.2	
Approach LOS		C			C			C			B	

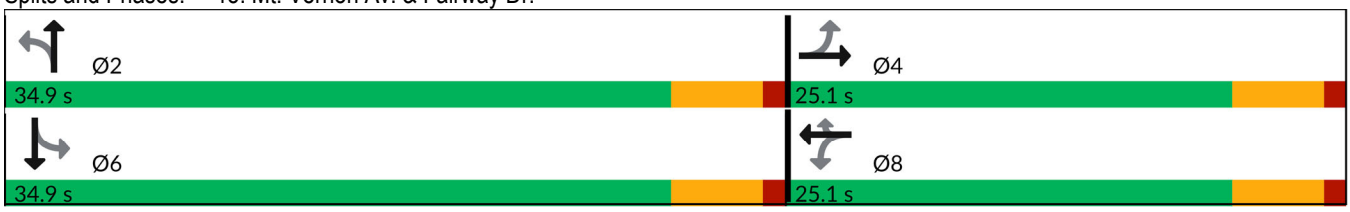
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	31.0		26.7	7.9	33.8		26.7				
Change Period (Y+Rc), s	4.6	5.4		5.4	4.6	5.4		5.4				
Max Green Setting (Gmax), s	11.4	35.6		27.6	7.6	39.4		27.6				
Max Q Clear Time (g_c+I1), s	6.8	17.6		19.3	4.3	13.8		19.5				
Green Ext Time (p_c), s	0.1	5.5		1.4	0.0	5.1		1.6				

Intersection Summary												
HCM 7th Control Delay, s/veh			20.5									
HCM 7th LOS			C									

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	21	114	204	199	432	24	610	246	603
Future Volume (vph)	21	114	204	199	432	24	610	246	603
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4		8			2		6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	23.1	23.1	25.1	25.1	25.1	24.1	24.1	26.1	26.1
Total Split (s)	25.1	25.1	25.1	25.1	25.1	34.9	34.9	34.9	34.9
Total Split (%)	41.8%	41.8%	41.8%	41.8%	41.8%	58.2%	58.2%	58.2%	58.2%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	15.9	15.9	15.9	15.9	15.9	25.3	25.3	25.3	25.3
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.31	0.49	0.49	0.49	0.49
v/c Ratio	0.07	0.25	0.58	0.19	0.73	0.08	0.41	0.82	0.38
Control Delay (s/veh)	14.4	14.4	23.8	14.6	17.4	8.6	9.2	37.9	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.4	14.4	23.8	14.6	17.4	8.6	9.2	37.9	9.1
LOS	B	B	C	B	B	A	A	D	A
Approach Delay (s/veh)		14.4		18.3			9.1		17.1
Approach LOS		B		B			A		B

Intersection Summary		
Cycle Length: 60		
Actuated Cycle Length: 51.9		
Natural Cycle: 65		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.82		
Intersection Signal Delay (s/veh): 15.2	Intersection LOS: B	
Intersection Capacity Utilization 71.7%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 15: Mt. Vernon Av. & Fairway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	114	20	204	199	432	24	610	72	246	603	37
Future Volume (veh/h)	21	114	20	204	199	432	24	610	72	246	603	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	22	118	18	210	205	321	25	629	61	254	622	31
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	355	464	71	432	1042	460	452	1677	162	435	1765	88
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	872	1583	242	1247	3554	1567	779	3270	317	751	3442	171
Grp Volume(v), veh/h	22	0	136	210	205	321	25	341	349	254	321	332
Grp Sat Flow(s),veh/h/ln	872	0	1825	1247	1777	1567	779	1777	1810	751	1777	1836
Q Serve(g_s), s	1.0	0.0	3.0	8.1	2.3	9.6	1.0	6.1	6.1	16.2	5.6	5.7
Cycle Q Clear(g_c), s	3.3	0.0	3.0	11.1	2.3	9.6	6.7	6.1	6.1	22.3	5.6	5.7
Prop In Lane	1.00		0.13	1.00		1.00	1.00		0.17	1.00		0.09
Lane Grp Cap(c), veh/h	355	0	535	432	1042	460	452	911	928	435	911	942
V/C Ratio(X)	0.06	0.00	0.25	0.49	0.20	0.70	0.06	0.37	0.38	0.58	0.35	0.35
Avail Cap(c_a), veh/h	431	0	694	540	1351	596	494	1006	1025	475	1006	1040
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.2	0.0	14.2	18.4	13.9	16.5	9.6	7.7	7.7	14.5	7.6	7.6
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.9	0.1	2.5	0.1	0.3	0.3	1.6	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.1	2.1	0.8	3.2	0.2	1.8	1.8	2.4	1.6	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.2	0.0	14.4	19.3	14.0	19.0	9.7	8.0	8.0	16.0	7.9	7.8
LnGrp LOS	B		B	B	B	B	A	A	A	B	A	A
Approach Vol, veh/h		158			736			715			907	
Approach Delay, s/veh		14.6			17.7			8.0			10.1	
Approach LOS		B			B			A			B	

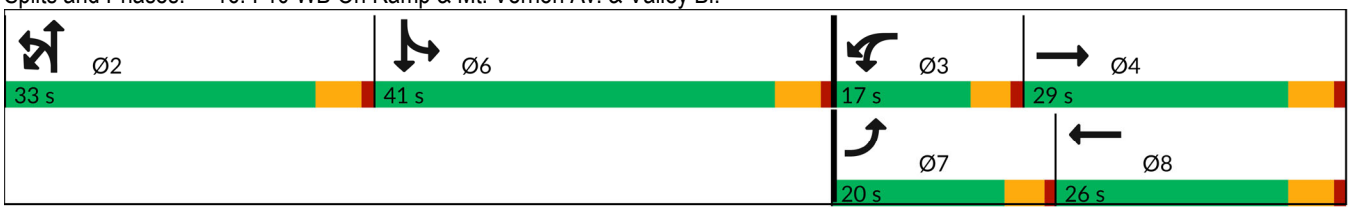
Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	32.1	20.5	32.1	20.5
Change Period (Y+Rc), s	5.1	5.1	5.1	5.1
Max Green Setting (Gmax), s	29.8	20.0	29.8	20.0
Max Q Clear Time (g_c+I1), s	8.7	5.3	24.3	13.1
Green Ext Time (p_c), s	4.3	0.6	2.6	1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	12.0
HCM 7th LOS	B

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	325	201	55	203	445	12	402
Future Volume (vph)	325	201	55	203	445	12	402
Turn Type	Prot	NA	Prot	NA	NA	Split	NA
Protected Phases	7	4	3	8	2	6	6
Permitted Phases							
Detector Phase	7	4	3	8	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	23.1	9.6	25.1	23.1	23.1	23.1
Total Split (s)	20.0	29.0	17.0	26.0	33.0	41.0	41.0
Total Split (%)	16.7%	24.2%	14.2%	21.7%	27.5%	34.2%	34.2%
Yellow Time (s)	3.6	4.1	3.6	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	4.6	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	None	None	None	None	None	None
Act Effct Green (s)	15.4	23.9	12.4	20.9	27.9	35.9	35.9
Actuated g/C Ratio	0.13	0.20	0.10	0.17	0.23	0.30	0.30
v/c Ratio	1.61	1.33	1.58	0.73	1.16	0.03	1.58
Control Delay (s/veh)	329.0	204.0	321.5	60.6	126.3	30.1	300.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	329.0	204.0	321.5	60.6	126.3	30.1	300.6
LOS	F	F	F	E	F	C	F
Approach Delay (s/veh)		258.2		200.8	126.3		296.4
Approach LOS		F		F	F		F

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 125	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.61	
Intersection Signal Delay (s/veh): 219.3	Intersection LOS: F
Intersection Capacity Utilization 124.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 16: I-10 WB On Ramp & Mt. Vernon Av. & Valley Bl.



Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	325	201	207	17	201	55	203	18	279	102	445	47
Future Volume (vph)	325	201	207	17	201	55	203	18	279	102	445	47
Ideal Flow (vphpl)	1800	1900	1900	1900	1800	1800	1900	1900	1800	1800	1900	1900
Total Lost time (s)	4.6	5.1				4.6	5.1				5.1	
Lane Util. Factor	1.00	1.00				1.00	1.00				0.95	
Frt	1.00	0.92				1.00	0.99				0.99	
Flt Protected	0.95	1.00				0.95	1.00				0.98	
Satd. Flow (prot)	1676	1716				1676	1840				3436	
Flt Permitted	0.95	1.00				0.95	1.00				0.98	
Satd. Flow (perm)	1676	1716				1676	1840				3436	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	346	214	220	18	214	59	216	19	297	109	473	50
RTOR Reduction (vph)	0	0	0	0	0	0	2	0	0	0	3	0
Lane Group Flow (vph)	346	452	0	0	0	273	233	0	0	0	926	0
Turn Type	Prot	NA			Prot	Prot	NA		Split	Split	NA	
Protected Phases	7	4			3	3	8		2	2	2	
Permitted Phases												
Actuated Green, G (s)	15.4	23.9				12.4	20.9				27.9	
Effective Green, g (s)	15.4	23.9				12.4	20.9				27.9	
Actuated g/C Ratio	0.13	0.20				0.10	0.17				0.23	
Clearance Time (s)	4.6	5.1				4.6	5.1				5.1	
Vehicle Extension (s)	2.0	3.0				2.0	3.0				3.0	
Lane Grp Cap (vph)	215	341				173	320				798	
v/s Ratio Prot	c0.21	c0.26				0.16	0.13				c0.27	
v/s Ratio Perm												
v/c Ratio	1.61	1.33				1.58	0.73				1.16	
Uniform Delay, d1	52.3	48.1				53.8	46.8				46.1	
Progression Factor	1.00	1.00				1.00	1.00				1.00	
Incremental Delay, d2	294.8	165.5				286.0	8.0				85.9	
Delay (s)	347.1	213.6				339.8	54.8				131.9	
Level of Service	F	F				F	D				F	
Approach Delay (s/veh)		271.4					207.9				131.9	
Approach LOS		F					F				F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	230.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.44		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	124.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2
Lane Configurations				
Traffic Volume (vph)	12	402	226	150
Future Volume (vph)	12	402	226	150
Ideal Flow (vphpl)	1800	1900	1900	1900
Total Lost time (s)	5.1	5.1		
Lane Util. Factor	1.00	1.00		
Frt	1.00	0.93		
Flt Protected	0.95	1.00		
Satd. Flow (prot)	1676	1728		
Flt Permitted	0.95	1.00		
Satd. Flow (perm)	1676	1728		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94
Adj. Flow (vph)	13	428	240	160
RTOR Reduction (vph)	0	7	0	0
Lane Group Flow (vph)	13	821	0	0
Turn Type	Split	NA		
Protected Phases	6	6		
Permitted Phases				
Actuated Green, G (s)	35.9	35.9		
Effective Green, g (s)	35.9	35.9		
Actuated g/C Ratio	0.30	0.30		
Clearance Time (s)	5.1	5.1		
Vehicle Extension (s)	3.0	3.0		
Lane Grp Cap (vph)	501	516		
v/s Ratio Prot	0.01	c0.48		
v/s Ratio Perm				
v/c Ratio	0.03	1.59		
Uniform Delay, d1	29.7	42.1		
Progression Factor	1.00	1.00		
Incremental Delay, d2	0.0	275.1		
Delay (s)	29.7	317.1		
Level of Service	C	F		
Approach Delay (s/veh)		312.7		
Approach LOS		F		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	262	121	278	223	488	96	187	901	584	433	100
Future Volume (vph)	83	262	121	278	223	488	96	187	901	584	433	100
Turn Type	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	30.4	30.4	9.6	31.4		9.6	23.1		9.6	30.1	
Total Split (s)	13.0	31.0	31.0	23.0	41.0		19.0	26.0		40.0	47.0	
Total Split (%)	10.8%	25.8%	25.8%	19.2%	34.2%		15.8%	21.7%		33.3%	39.2%	
Yellow Time (s)	3.6	4.4	4.4	3.6	4.4		3.6	4.1		3.6	4.1	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.4	5.4	4.6	5.4		4.6	5.1		4.6	5.1	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	
Act Effct Green (s)	6.7	12.3	12.3	12.1	20.0	75.4	9.3	11.1	75.4	19.7	24.0	75.4
Actuated g/C Ratio	0.09	0.16	0.16	0.16	0.27	1.00	0.12	0.15	1.00	0.26	0.32	1.00
v/c Ratio	0.31	0.46	0.30	0.58	0.24	0.32	0.48	0.37	0.58	0.74	0.39	0.07
Control Delay (s/veh)	38.9	33.1	3.2	35.8	24.9	0.5	41.4	33.9	1.6	32.4	23.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.9	33.1	3.2	35.8	24.9	0.5	41.4	33.9	1.6	32.4	23.7	0.1
LOS	D	C	A	D	C	A	D	C	A	C	C	A
Approach Delay (s/veh)		26.4			16.0			9.9			26.1	
Approach LOS		C			B			A			C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 75.4		
Natural Cycle: 85		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.74		
Intersection Signal Delay (s/veh): 18.4	Intersection LOS: B	
Intersection Capacity Utilization 60.6%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 17: Mt. Vernon Av. & Washington St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	262	121	278	223	488	96	187	901	584	433	100
Future Volume (veh/h)	83	262	121	278	223	488	96	187	901	584	433	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1870	1870	1673	1870	1870	1772	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	85	267	68	284	228	0	98	191	0	596	442	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	193	577	252	391	804		124	556		723	1126	
Arrive On Green	0.06	0.16	0.16	0.13	0.23	0.00	0.07	0.16	0.00	0.23	0.32	0.00
Sat Flow, veh/h	3092	3554	1555	3092	3554	1585	1688	3554	1585	3092	3554	1585
Grp Volume(v), veh/h	85	267	68	284	228	0	98	191	0	596	442	0
Grp Sat Flow(s),veh/h/ln	1546	1777	1555	1546	1777	1585	1688	1777	1585	1546	1777	1585
Q Serve(g_s), s	1.6	4.2	2.4	5.4	3.3	0.0	3.5	2.9	0.0	11.2	6.0	0.0
Cycle Q Clear(g_c), s	1.6	4.2	2.4	5.4	3.3	0.0	3.5	2.9	0.0	11.2	6.0	0.0
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	193	577	252	391	804		124	556		723	1126	
V/C Ratio(X)	0.44	0.46	0.27	0.73	0.28		0.79	0.34		0.82	0.39	
Avail Cap(c_a), veh/h	423	1481	648	926	2060		396	1209		1782	2425	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.8	23.3	22.5	25.8	19.6	0.0	28.0	23.1	0.0	22.3	16.4	0.0
Incr Delay (d2), s/veh	0.6	0.6	0.6	1.0	0.2	0.0	4.1	0.4	0.0	0.9	0.2	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	0.6	1.6	0.8	1.9	1.2	0.0	1.5	1.2	0.0	3.8	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.3	23.9	23.1	26.8	19.8	0.0	32.1	23.4	0.0	23.2	16.6	0.0
LnGrp LOS	C	C	C	C	B		C	C		C	B	
Approach Vol, veh/h		420			512			289			1038	
Approach Delay, s/veh		24.7			23.7			26.4			20.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	14.7	12.4	15.4	9.1	24.6	8.4	19.3
Change Period (Y+Rc), s	4.6	5.1	4.6	5.4	4.6	5.1	4.6	5.4
Max Green Setting (Gmax), s	35.4	20.9	18.4	25.6	14.4	41.9	8.4	35.6
Max Q Clear Time (g_c+I1), s	13.2	4.9	7.4	6.2	5.5	8.0	3.6	5.3
Green Ext Time (p_c), s	1.1	0.9	0.4	1.7	0.1	3.1	0.0	1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	22.7
HCM 7th LOS	C

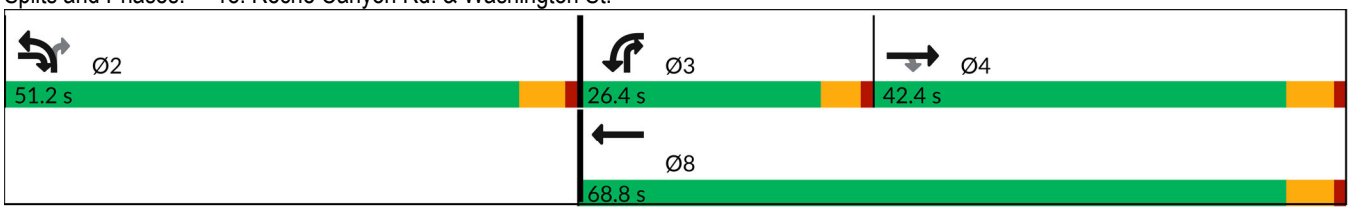
Notes

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	672	1081	553	335	658	611
Future Volume (vph)	672	1081	553	335	658	611
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	4	2	3	8	2	3
Permitted Phases		4				2
Detector Phase	4	2	3	8	2	3
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	42.4	23.4	9.6	23.4	23.4	9.6
Total Split (s)	42.4	51.2	26.4	68.8	51.2	26.4
Total Split (%)	35.3%	42.7%	22.0%	57.3%	42.7%	22.0%
Yellow Time (s)	4.4	4.1	3.6	4.4	4.1	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.1	4.6	5.4	5.1	4.6
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	28.1	74.6	21.8	54.6	46.2	73.2
Actuated g/C Ratio	0.25	0.67	0.20	0.49	0.42	0.66
v/c Ratio	0.79	1.07	0.97	0.20	0.54	0.35
Control Delay (s/veh)	45.8	67.9	74.6	16.2	27.4	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.8	67.9	74.6	16.2	27.4	8.4
LOS	D	E	E	B	C	A
Approach Delay (s/veh)	59.4			52.5	18.2	
Approach LOS	E			D	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 111.3	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay (s/veh): 44.5	Intersection LOS: D
Intersection Capacity Utilization 92.8%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 18: Reche Canyon Rd. & Washington St.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	672	1081	553	335	658	611
Future Volume (veh/h)	672	1081	553	335	658	611
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		0.98	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	1673	1870	1673	1870
Adj Flow Rate, veh/h	707	760	582	353	693	574
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1297	1009	637	2191	864	1354
Arrive On Green	0.37	0.37	0.21	0.62	0.28	0.28
Sat Flow, veh/h	3647	1550	3092	3647	3092	2790
Grp Volume(v), veh/h	707	760	582	353	693	574
Grp Sat Flow(s),veh/h/ln	1777	1550	1546	1777	1546	1395
Q Serve(g_s), s	15.9	34.6	18.6	4.3	21.0	13.5
Cycle Q Clear(g_c), s	15.9	34.6	18.6	4.3	21.0	13.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1297	1009	637	2191	864	1354
V/C Ratio(X)	0.54	0.75	0.91	0.16	0.80	0.42
Avail Cap(c_a), veh/h	1301	1010	667	2229	1410	1847
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	25.4	12.5	39.2	8.3	33.8	16.8
Incr Delay (d2), s/veh	0.5	3.2	16.2	0.0	1.8	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	19.7	8.2	1.5	7.7	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	25.9	15.8	55.5	8.3	35.6	17.1
LnGrp LOS	C	B	E	A	D	B
Approach Vol, veh/h	1467			935	1267	
Approach Delay, s/veh	20.6			37.6	27.2	
Approach LOS	C			D	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		33.4	25.4	42.3		67.7
Change Period (Y+Rc), s		5.1	4.6	5.4		5.4
Max Green Setting (Gmax), s		46.1	21.8	37.0		63.4
Max Q Clear Time (g_c+I1), s		23.0	20.6	36.6		6.3
Green Ext Time (p_c), s		5.2	0.2	0.3		2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	27.2
HCM 7th LOS	C

APPENDIX 4.5:

HY (2050) WITHOUT PROJECT SIGNAL WARRANTS

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

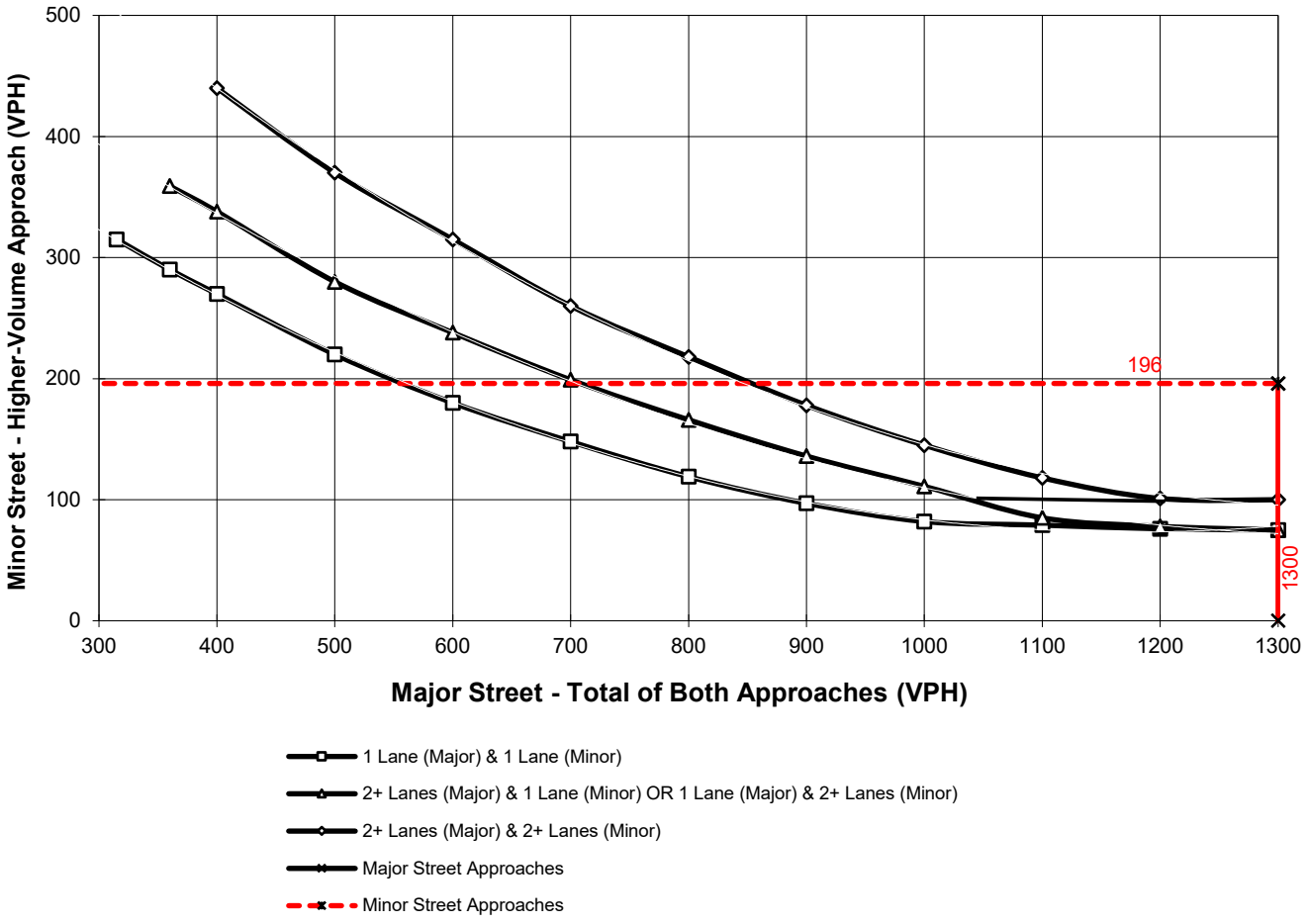
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year (2050) No Project Conditions - Weekday AM Peak Hour**

Major Street Name = **Rancho Av.**
Total of Both Approaches (VPH) = **2072**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **N St.**
High Volume Approach (VPH) = **196**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



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

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

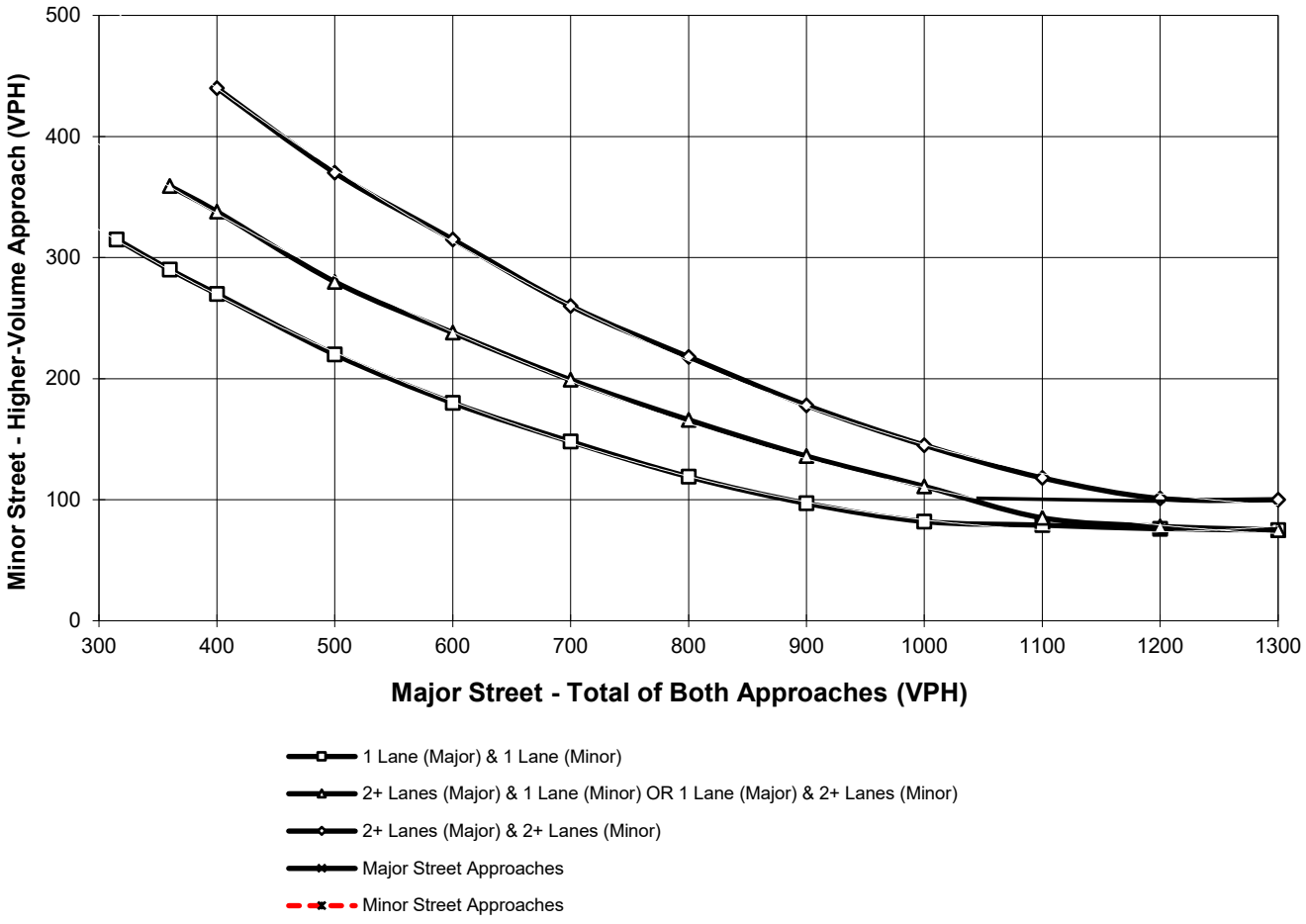
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year(2050) No Project Conditions - Weekday AM Peak Hour**

Major Street Name = **5th St.**
Total of Both Approaches (VPH) = **25**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **K St.**
High Volume Approach (VPH) = **18**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

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

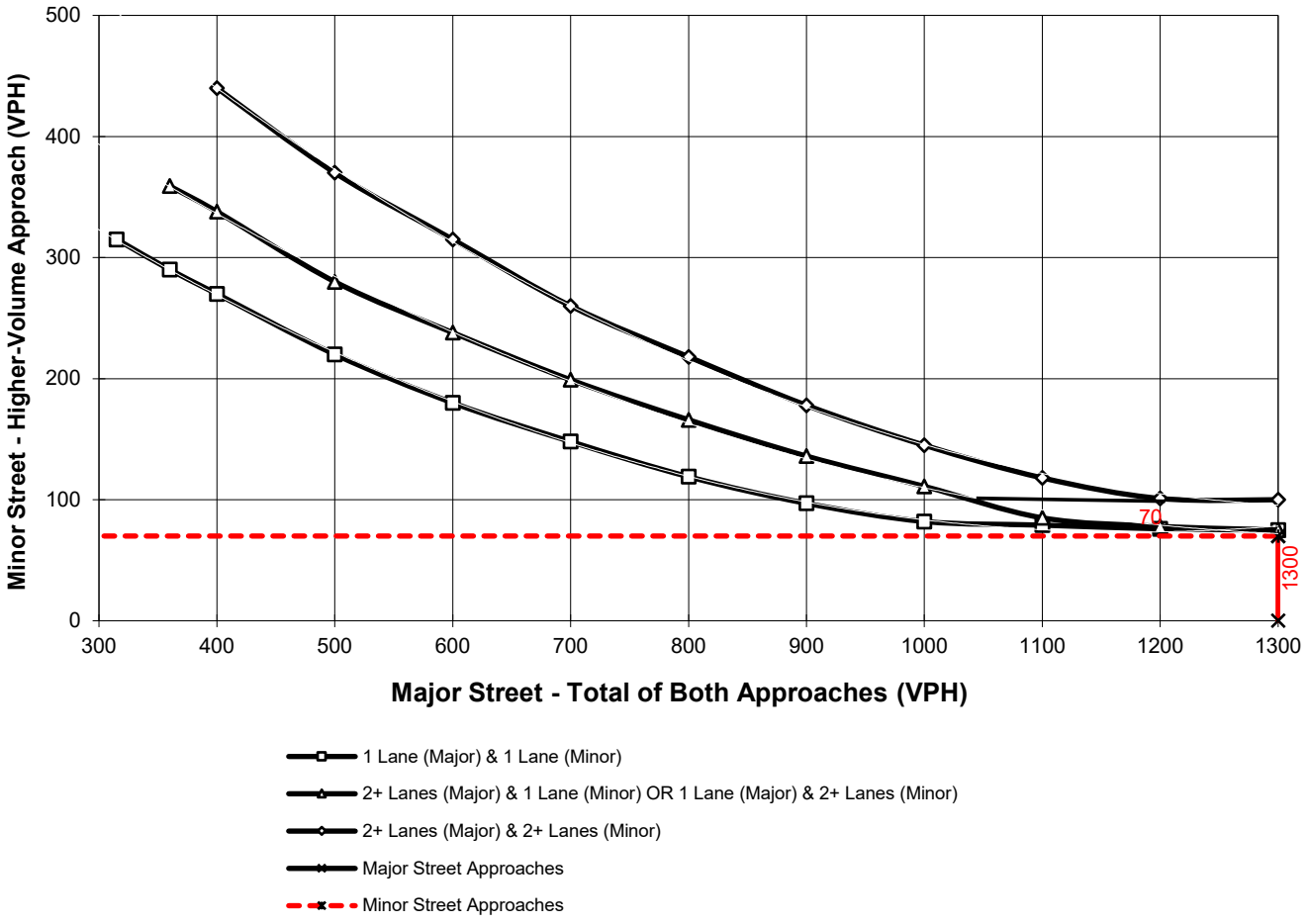
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year (2050) No Project Conditions - Weekday PM Peak Hour**

Major Street Name = **La Cadena Dr.**
Total of Both Approaches (VPH) = **1953**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **O St.**
High Volume Approach (VPH) = **70**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

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

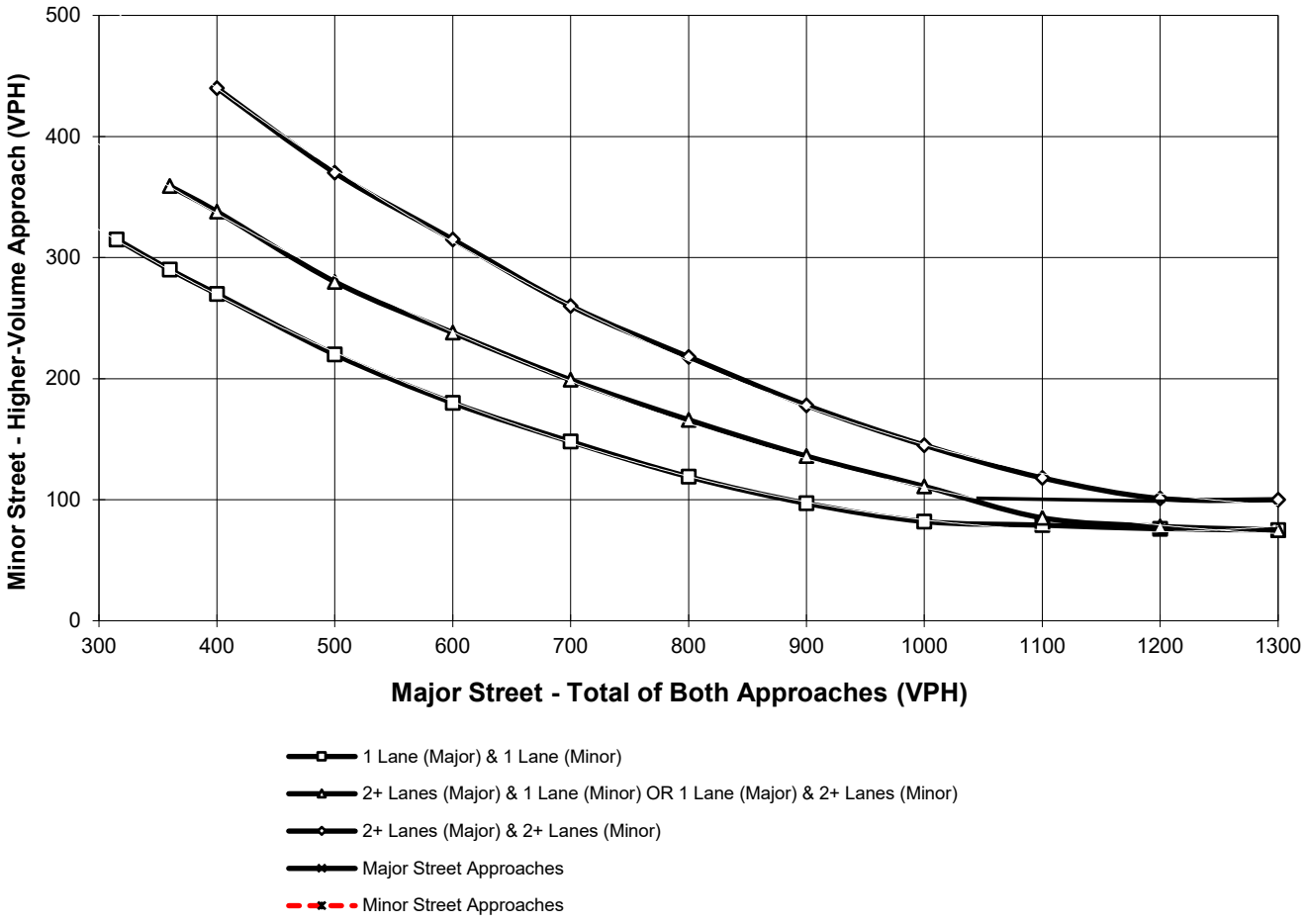
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year (2050) No Project Conditions - Weekday AM Peak Hour**

Major Street Name = **8th St.**
Total of Both Approaches (VPH) = **174**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Congress St.**
High Volume Approach (VPH) = **141**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

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

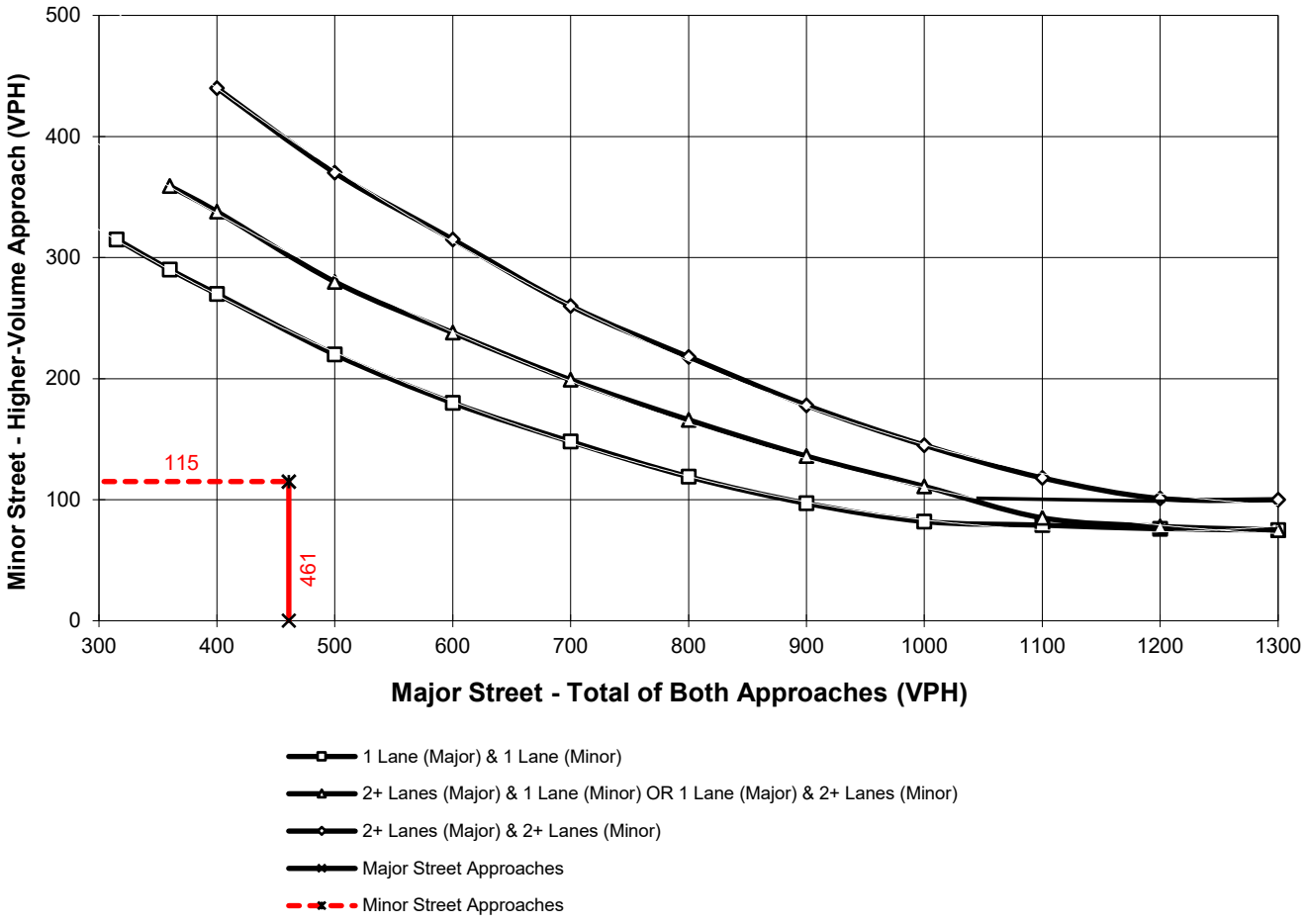
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year (2050) No Project Conditions - Weekday AM Peak Hour**

Major Street Name = **M St.**
Total of Both Approaches (VPH) = **461**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Fogg St.**
High Volume Approach (VPH) = **115**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

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

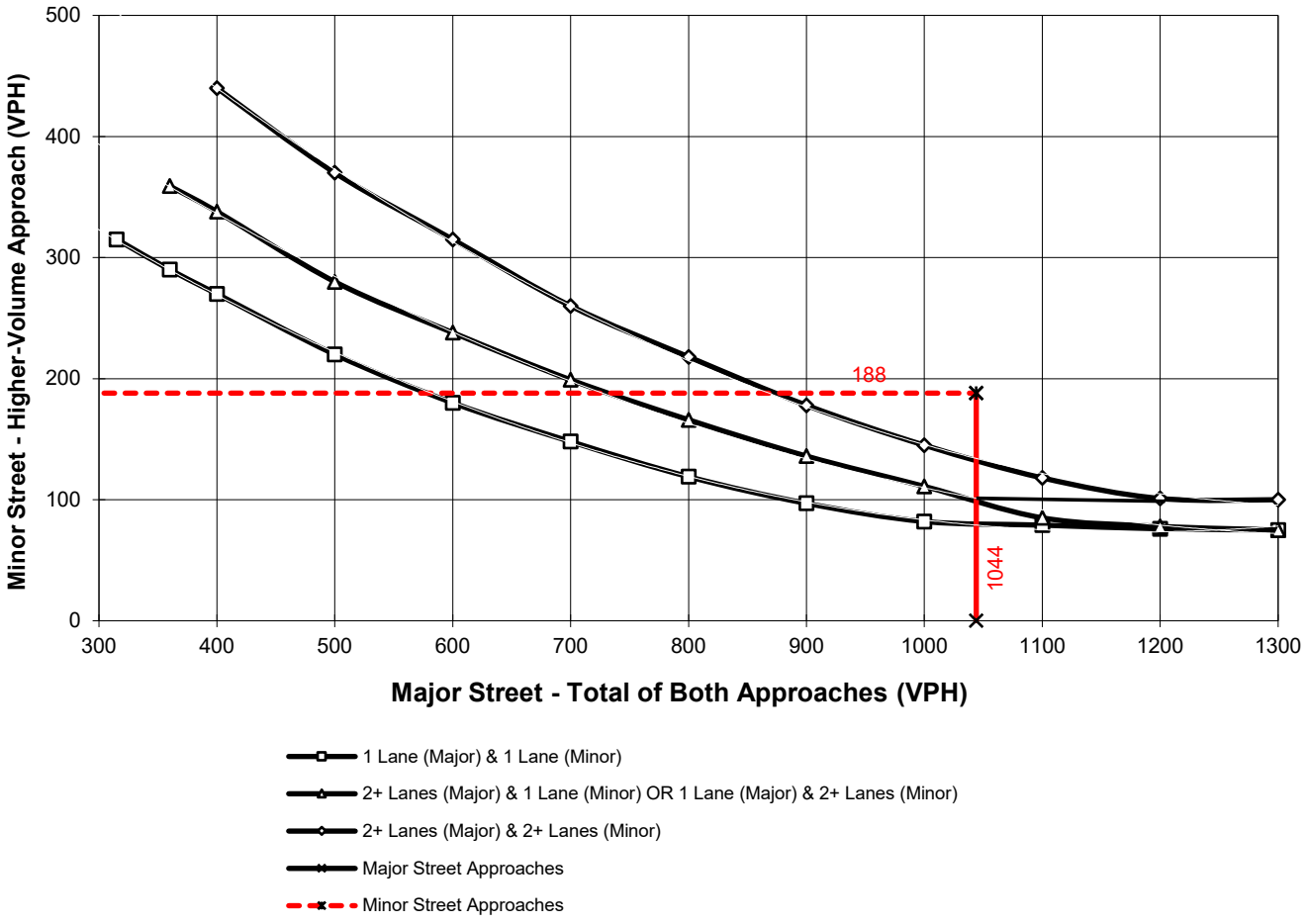
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year (2050) No Project Conditions - Weekday AM Peak Hour**

Major Street Name = **Mt. Vernon Av.**
Total of Both Approaches (VPH) = **1044**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Laurel St.**
High Volume Approach (VPH) = **188**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



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

APPENDIX 4.6:

HY (2050) WITH PROJECT SIGNAL WARRANTS

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

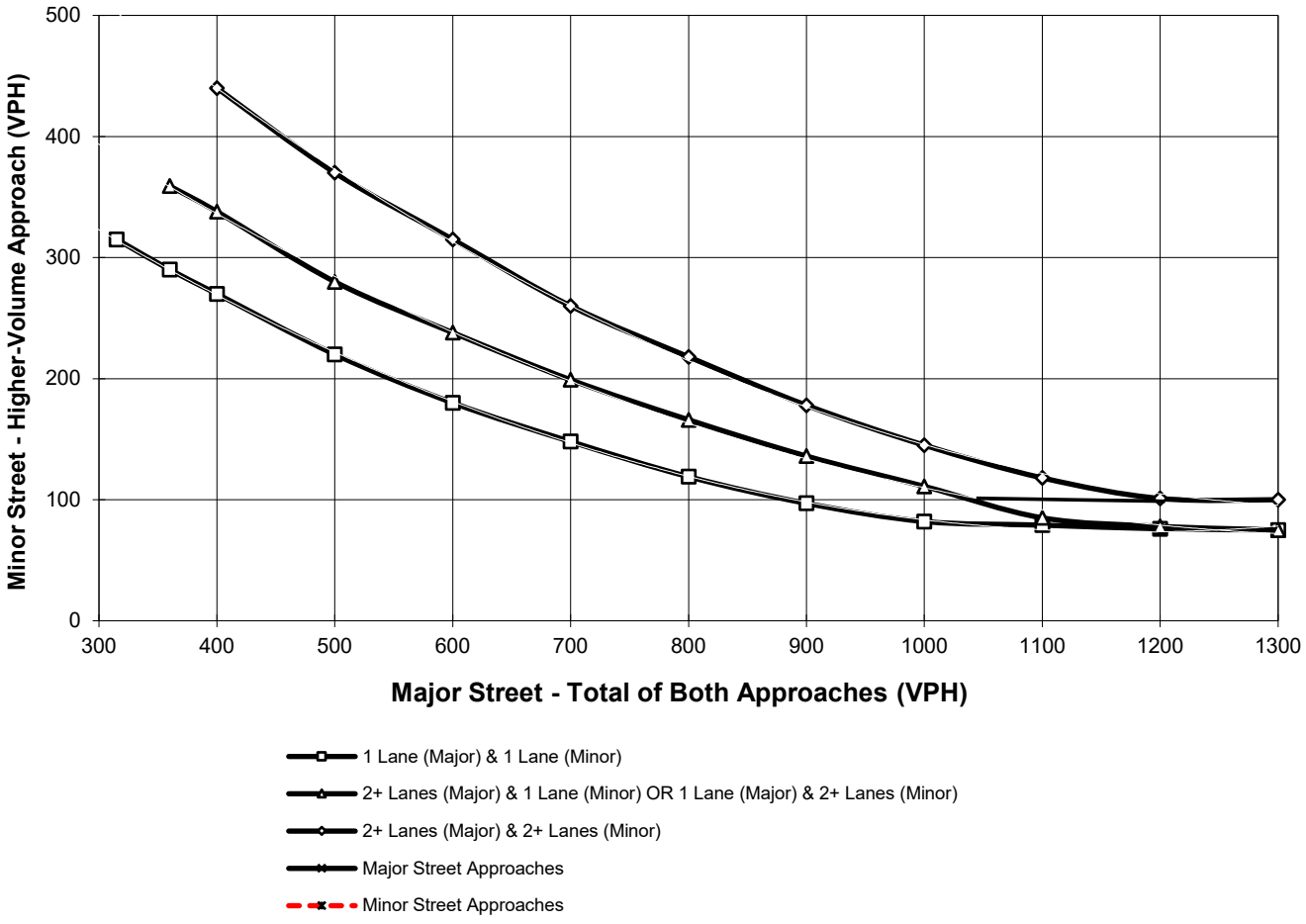
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year(2050) With Project Conditions - Weekday AM Peak Hour**

Major Street Name = **5th St.**
Total of Both Approaches (VPH) = **25**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **K St.**
High Volume Approach (VPH) = **18**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

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

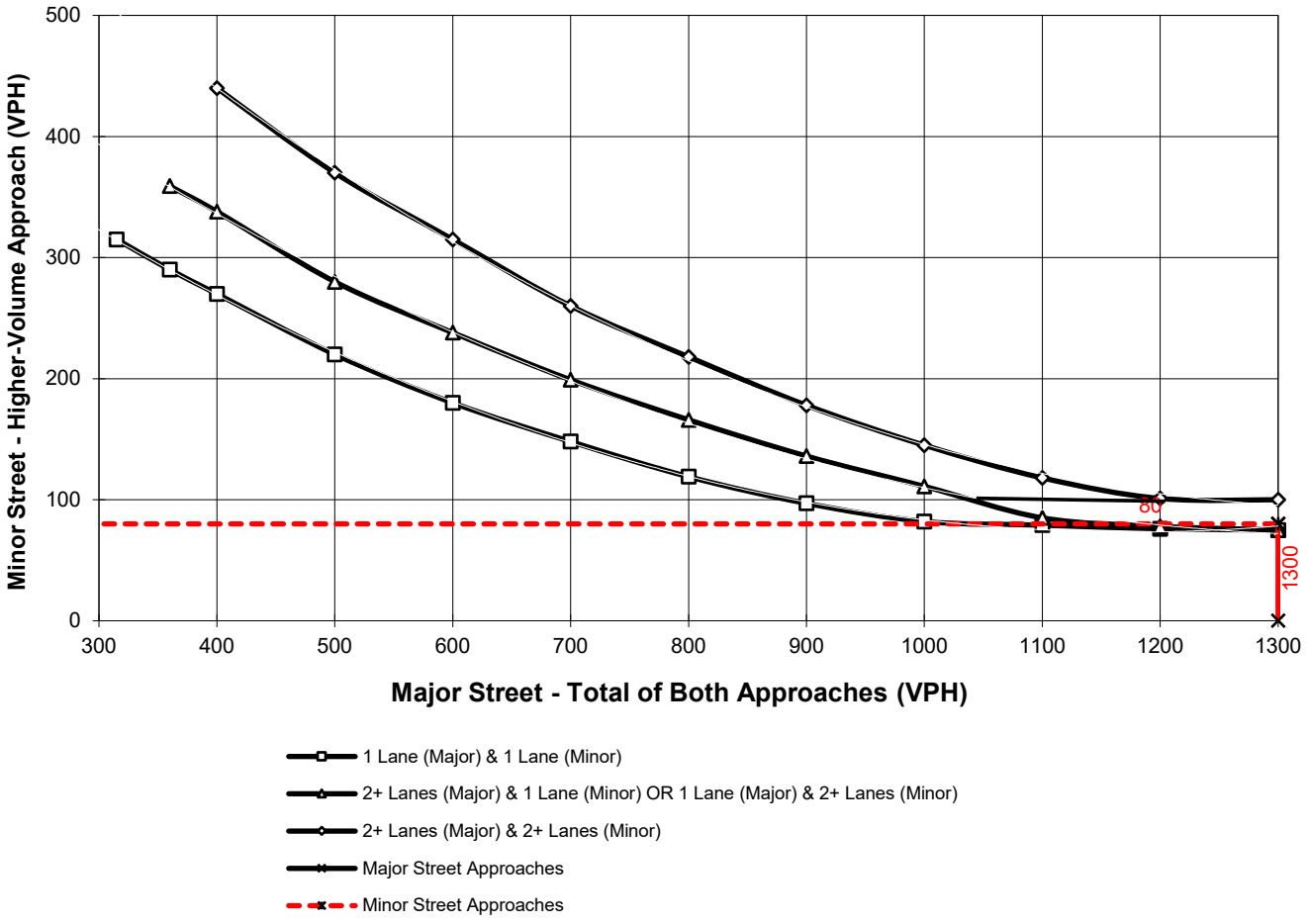
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year (2050) With Project Conditions - Weekday PM Peak Hour**

Major Street Name = **La Cadena Dr.**
Total of Both Approaches (VPH) = **1971**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **O St.**
High Volume Approach (VPH) = **80**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



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

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

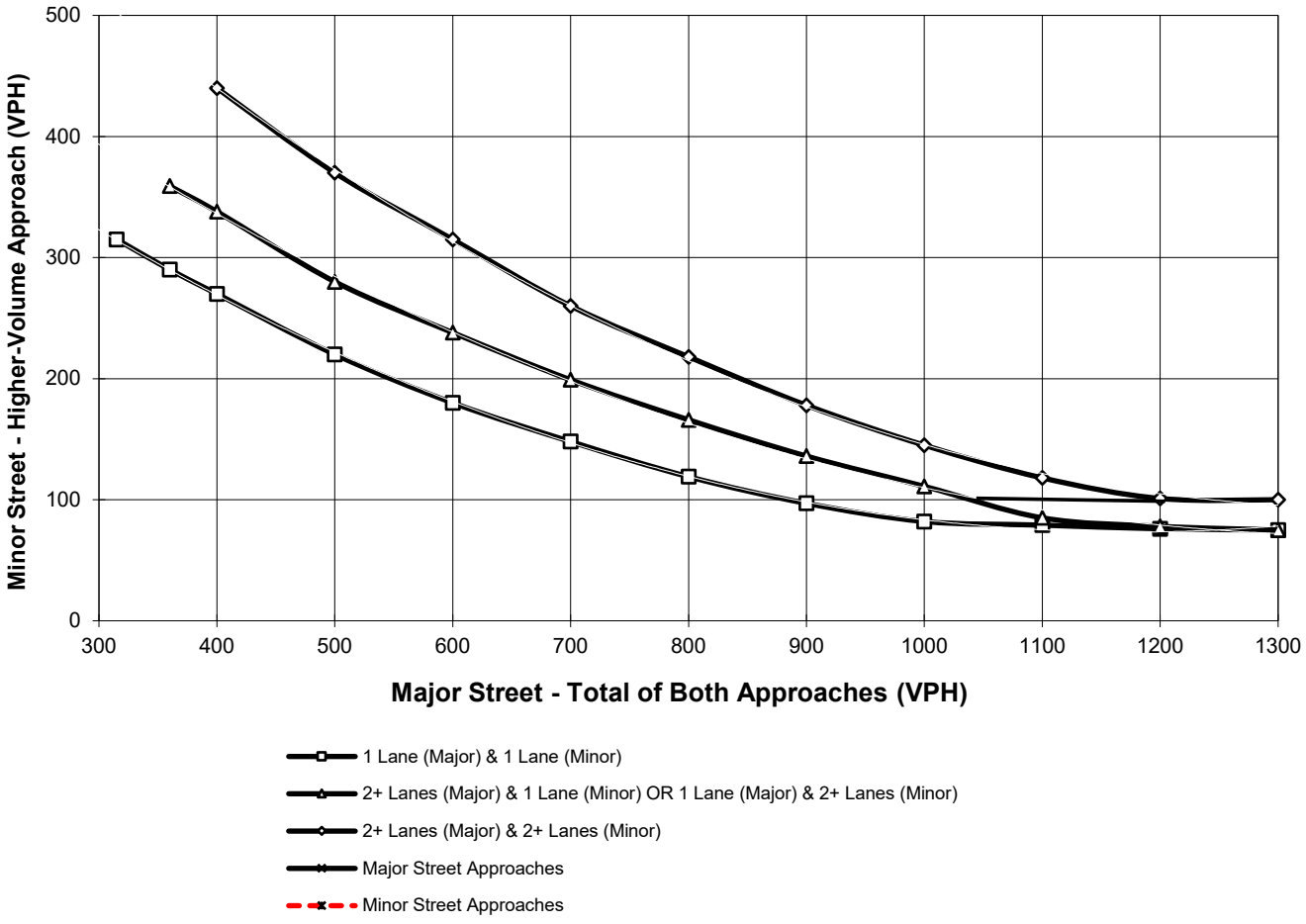
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year (2050) With Project Conditions - Weekday AM Peak Hour**

Major Street Name = **8th St.**
Total of Both Approaches (VPH) = **175**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Congress St.**
High Volume Approach (VPH) = **141**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

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

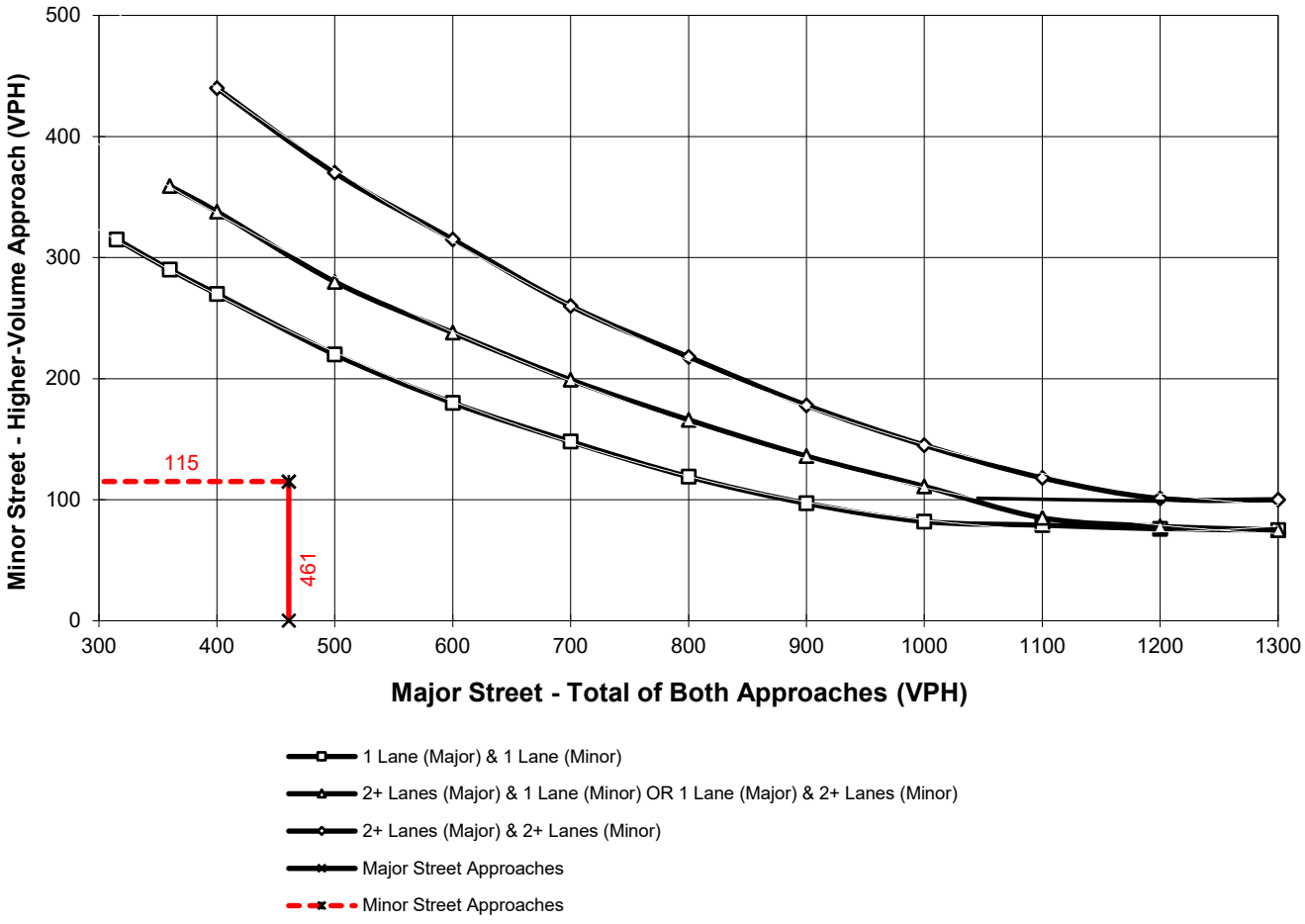
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year (2050) With Project Conditions - Weekday AM Peak Hour**

Major Street Name = **M St.**
Total of Both Approaches (VPH) = **461**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Fogg St.**
High Volume Approach (VPH) = **115**
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

APPENDIX 4.7:

HY (2050) WITH PROJECT INTERSECTION ANALYSIS WITH IMPROVEMENTS

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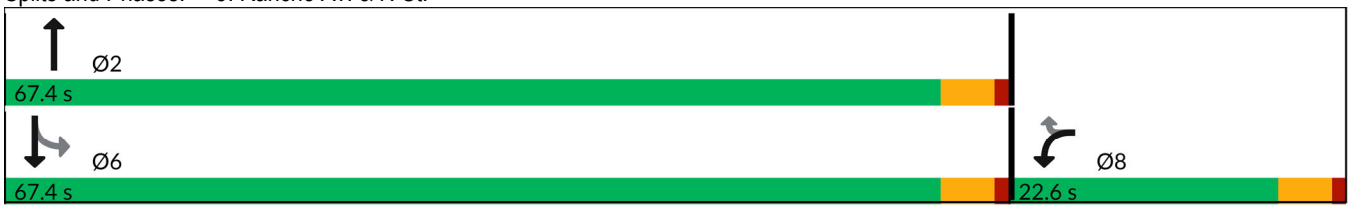
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	121	70	655	69	1333
Future Volume (vph)	121	70	655	69	1333
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	8		2		6
Permitted Phases		8		6	
Detector Phase	8	8	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.6	22.6	22.6	22.6	22.6
Total Split (s)	22.6	22.6	67.4	67.4	67.4
Total Split (%)	25.1%	25.1%	74.9%	74.9%	74.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	None	None	None
Act Effct Green (s)	12.0	12.0	62.9	62.9	62.9
Actuated g/C Ratio	0.14	0.14	0.75	0.75	0.75
v/c Ratio	0.56	0.26	0.28	0.16	1.05
Control Delay (s/veh)	42.5	10.3	4.0	4.7	53.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.5	10.3	4.0	4.7	53.6
LOS	D	B	A	A	D
Approach Delay (s/veh)	30.7		4.0		51.1
Approach LOS	C		A		D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 84.2	
Natural Cycle: 130	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay (s/veh): 35.5	Intersection LOS: D
Intersection Capacity Utilization 84.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 3: Rancho Av. & N St.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	121	70	655	11	69	1333
Future Volume (veh/h)	121	70	655	11	69	1333
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1772	1870	1870	1870	1772	1870
Adj Flow Rate, veh/h	133	77	720	12	76	1465
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	178	167	2790	46	614	1459
Arrive On Green	0.11	0.11	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1688	1585	3670	60	724	1870
Grp Volume(v), veh/h	133	77	358	374	76	1465
Grp Sat Flow(s),veh/h/ln	1688	1585	1777	1860	724	1870
Q Serve(g_s), s	6.2	3.7	4.5	4.5	2.6	62.8
Cycle Q Clear(g_c), s	6.2	3.7	4.5	4.5	7.1	62.8
Prop In Lane	1.00	1.00		0.03	1.00	
Lane Grp Cap(c), veh/h	178	167	1386	1451	614	1459
V/C Ratio(X)	0.75	0.46	0.26	0.26	0.12	1.00
Avail Cap(c_a), veh/h	377	354	1386	1451	614	1459
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	35.0	33.8	2.4	2.4	3.4	8.9
Incr Delay (d2), s/veh	6.1	2.0	0.0	0.0	0.0	24.6
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	1.5	0.9	1.0	0.3	23.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	41.0	35.8	2.5	2.5	3.4	33.4
LnGrp LOS	D	D	A	A	A	F
Approach Vol, veh/h	210		732			1541
Approach Delay, s/veh	39.1		2.5			31.9
Approach LOS	D		A			C

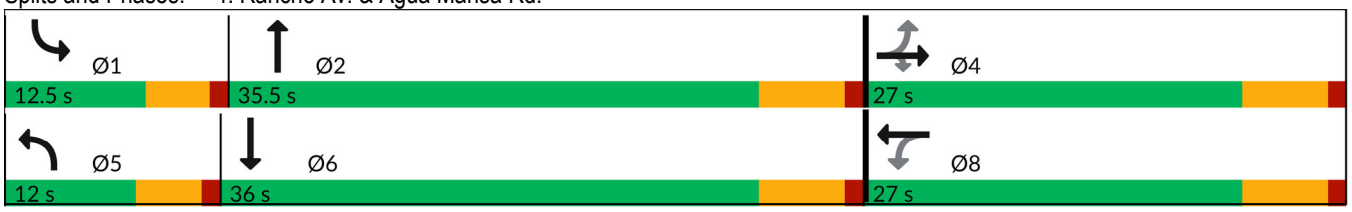
Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	67.4				67.4	13.1
Change Period (Y+Rc), s	4.6				4.6	4.6
Max Green Setting (Gmax), s	62.8				62.8	18.0
Max Q Clear Time (g_c+I1), s	6.5				64.8	8.2
Green Ext Time (p_c), s	3.2				0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	23.9
HCM 7th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	340	27	122	12	55	148	376	38	947
Future Volume (vph)	340	27	122	12	55	148	376	38	947
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4			8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	4	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.8	23.8	23.8	23.8	23.8	9.6	27.8	9.6	23.8
Total Split (s)	27.0	27.0	27.0	27.0	27.0	12.0	35.5	12.5	36.0
Total Split (%)	36.0%	36.0%	36.0%	36.0%	36.0%	16.0%	47.3%	16.7%	48.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.8	4.6	5.8
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	21.2	21.2	21.2		19.0	7.4	35.1	6.4	30.2
Actuated g/C Ratio	0.28	0.28	0.28		0.25	0.10	0.47	0.09	0.40
v/c Ratio	1.09	0.06	0.26		0.28	1.03	0.27	0.31	1.13
Control Delay (s/veh)	102.0	20.1	5.5		23.3	116.1	13.8	37.5	91.0
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	102.0	20.1	5.5		23.3	116.1	13.8	37.5	91.0
LOS	F	C	A		C	F	B	D	F
Approach Delay (s/veh)		73.4			23.3		41.7		89.6
Approach LOS		E			C		D		F

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 75	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay (s/veh): 73.8	Intersection LOS: E
Intersection Capacity Utilization 89.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: Rancho Av. & Agua Mansa Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	340	27	122	12	55	40	148	376	18	38	947	466
Future Volume (veh/h)	340	27	122	12	55	40	148	376	18	38	947	466
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	391	31	117	14	63	35	170	432	19	44	1089	387
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	482	529	448	84	306	153	167	1600	70	68	1040	364
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.10	0.46	0.46	0.04	0.40	0.40
Sat Flow, veh/h	1297	1870	1585	105	1083	540	1688	3468	152	1688	2582	903
Grp Volume(v), veh/h	391	31	117	112	0	0	170	221	230	44	744	732
Grp Sat Flow(s),veh/h/ln	1297	1870	1585	1728	0	0	1688	1777	1843	1688	1777	1708
Q Serve(g_s), s	17.6	0.9	4.3	0.0	0.0	0.0	7.4	5.7	5.8	1.9	30.2	30.2
Cycle Q Clear(g_c), s	21.2	0.9	4.3	3.6	0.0	0.0	7.4	5.7	5.8	1.9	30.2	30.2
Prop In Lane	1.00		1.00	0.12		0.31	1.00		0.08	1.00		0.53
Lane Grp Cap(c), veh/h	482	529	448	542	0	0	167	820	850	68	715	688
V/C Ratio(X)	0.81	0.06	0.26	0.21	0.00	0.00	1.02	0.27	0.27	0.65	1.04	1.06
Avail Cap(c_a), veh/h	482	529	448	542	0	0	167	820	850	178	715	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	19.6	20.8	20.6	0.0	0.0	33.8	12.4	12.4	35.5	22.4	22.4
Incr Delay (d2), s/veh	10.2	0.0	0.3	0.2	0.0	0.0	75.4	0.2	0.2	3.9	44.4	52.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	0.4	1.5	1.4	0.0	0.0	6.3	2.0	2.1	0.8	19.5	20.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.8	19.7	21.1	20.8	0.0	0.0	109.2	12.6	12.6	39.4	66.8	75.2
LnGrp LOS	D	B	C	C			F	B	B	D	F	F
Approach Vol, veh/h		539			112			621			1520	
Approach Delay, s/veh		32.4			20.8			39.0			70.0	
Approach LOS		C			C			D			E	

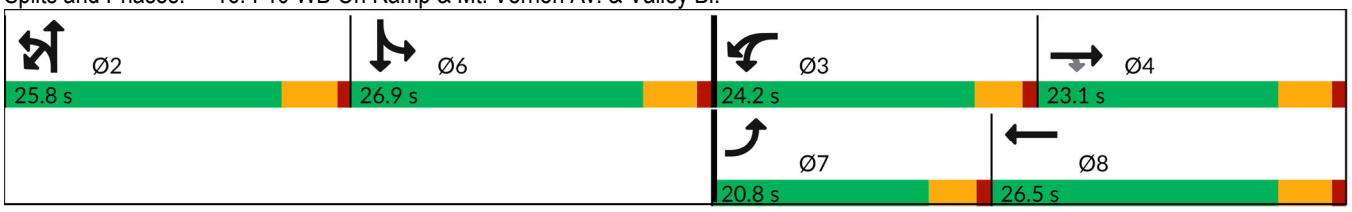
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	40.4		27.0	12.0	36.0		27.0				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		5.8				
Max Green Setting (Gmax), s	7.9	29.7		21.2	7.4	30.2		21.2				
Max Q Clear Time (g_c+I1), s	3.9	7.8		23.2	9.4	32.2		5.6				
Green Ext Time (p_c), s	0.0	2.3		0.0	0.0	0.0		0.4				

Intersection Summary			
HCM 7th Control Delay, s/veh		53.9	
HCM 7th LOS		D	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	129	100	141	41	130	277	5	322
Future Volume (vph)	129	100	141	41	130	277	5	322
Turn Type	Prot	NA	Perm	Prot	NA	NA	Split	NA
Protected Phases	7	4		3	8	2	6	6
Permitted Phases			4					
Detector Phase	7	4	4	3	8	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	23.1	23.1	9.6	25.1	23.1	23.1	23.1
Total Split (s)	20.8	23.1	23.1	24.2	26.5	25.8	26.9	26.9
Total Split (%)	20.8%	23.1%	23.1%	24.2%	26.5%	25.8%	26.9%	26.9%
Yellow Time (s)	3.6	4.1	4.1	3.6	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	4.6	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	11.8	11.9	11.9	19.1	19.2	20.4	21.8	21.8
Actuated g/C Ratio	0.13	0.13	0.13	0.21	0.21	0.22	0.23	0.23
v/c Ratio	0.66	0.46	0.52	0.89	0.44	0.89	0.01	0.90
Control Delay (s/veh)	54.0	44.4	17.2	65.6	35.8	50.6	29.2	51.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.0	44.4	17.2	65.6	35.8	50.6	29.2	51.0
LOS	D	D	B	E	D	D	C	D
Approach Delay (s/veh)		36.9			55.1	50.6		50.9
Approach LOS		D			E	D		D

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 93.1	
Natural Cycle: 95	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay (s/veh): 49.1	Intersection LOS: D
Intersection Capacity Utilization 79.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 16: I-10 WB On Ramp & Mt. Vernon Av. & Valley Bl.



Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	129	100	141	9	240	41	130	23	237	76	277	24
Future Volume (vph)	129	100	141	9	240	41	130	23	237	76	277	24
Ideal Flow (vphpl)	1800	1900	1900	1900	1800	1800	1900	1900	1800	1800	1900	1900
Total Lost time (s)	4.6	5.1	5.1			4.6	5.1				5.1	
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00				0.95	
Frt	1.00	1.00	0.85			1.00	0.98				0.99	
Flt Protected	0.95	1.00	1.00			0.95	1.00				0.98	
Satd. Flow (prot)	1676	1863	1583			1676	1821				3431	
Flt Permitted	0.95	1.00	1.00			0.95	1.00				0.98	
Satd. Flow (perm)	1676	1863	1583			1676	1821				3431	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	140	109	153	10	261	45	141	25	258	83	301	26
RTOR Reduction (vph)	0	0	113	0	0	0	6	0	0	0	3	0
Lane Group Flow (vph)	140	109	50	0	0	306	160	0	0	0	665	0
Turn Type	Prot	NA	Perm		Prot	Prot	NA		Split	Split	NA	
Protected Phases	7	4			3	3	8		2	2	2	
Permitted Phases			4									
Actuated Green, G (s)	11.8	11.9	11.9			19.1	19.2				20.4	
Effective Green, g (s)	11.8	11.9	11.9			19.1	19.2				20.4	
Actuated g/C Ratio	0.13	0.13	0.13			0.21	0.21				0.22	
Clearance Time (s)	4.6	5.1	5.1			4.6	5.1				5.1	
Vehicle Extension (s)	2.0	3.0	3.0			2.0	3.0				3.0	
Lane Grp Cap (vph)	212	238	202			343	375				751	
v/s Ratio Prot	0.08	0.06				c0.18	c0.09				c0.19	
v/s Ratio Perm			0.03									
v/c Ratio	0.66	0.46	0.25			0.89	0.43				0.89	
Uniform Delay, d1	38.7	37.6	36.6			36.0	32.2				35.2	
Progression Factor	1.00	1.00	1.00			1.00	1.00				1.00	
Incremental Delay, d2	5.9	1.4	0.7			23.5	0.8				12.1	
Delay (s)	44.6	39.0	37.2			59.5	32.9				47.3	
Level of Service	D	D	D			E	C				D	
Approach Delay (s/veh)		40.2					50.1				47.3	
Approach LOS		D					D				D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	46.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	93.1	Sum of lost time (s)	19.9
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

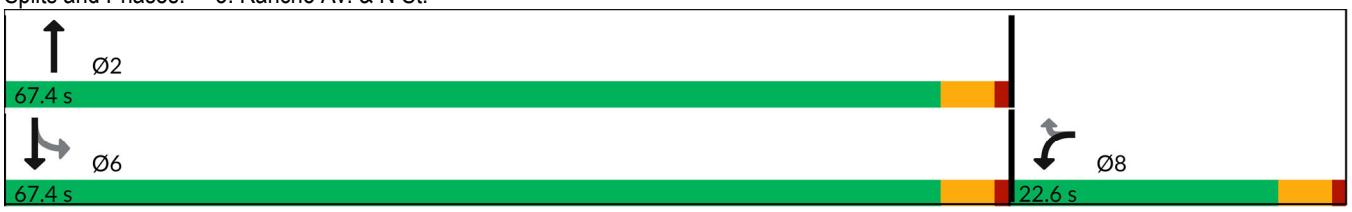
Movement	SBL	SBT	SBR	SBR2
Lane Configurations				
Traffic Volume (vph)	5	322	244	79
Future Volume (vph)	5	322	244	79
Ideal Flow (vphpl)	1800	1900	1900	1900
Total Lost time (s)	5.1	5.1		
Lane Util. Factor	1.00	0.95		
Frt	1.00	0.92		
Flt Protected	0.95	1.00		
Satd. Flow (prot)	1676	3273		
Flt Permitted	0.95	1.00		
Satd. Flow (perm)	1676	3273		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	350	265	86
RTOR Reduction (vph)	0	11	0	0
Lane Group Flow (vph)	5	690	0	0
Turn Type	Split	NA		
Protected Phases	6	6		
Permitted Phases				
Actuated Green, G (s)	21.8	21.8		
Effective Green, g (s)	21.8	21.8		
Actuated g/C Ratio	0.23	0.23		
Clearance Time (s)	5.1	5.1		
Vehicle Extension (s)	3.0	3.0		
Lane Grp Cap (vph)	392	766		
v/s Ratio Prot	0.00	c0.21		
v/s Ratio Perm				
v/c Ratio	0.01	0.90		
Uniform Delay, d1	27.4	34.6		
Progression Factor	1.00	1.00		
Incremental Delay, d2	0.0	13.7		
Delay (s)	27.4	48.4		
Level of Service	C	D		
Approach Delay (s/veh)		48.2		
Approach LOS		D		

Intersection Summary

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	30	65	1086	147	1196
Future Volume (vph)	30	65	1086	147	1196
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	8		2		6
Permitted Phases		8		6	
Detector Phase	8	8	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	22.6	22.6	22.6	22.6	22.6
Total Split (s)	22.6	22.6	67.4	67.4	67.4
Total Split (%)	25.1%	25.1%	74.9%	74.9%	74.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	None	None	None
Act Effct Green (s)	9.1	9.1	52.9	52.9	52.9
Actuated g/C Ratio	0.14	0.14	0.80	0.80	0.80
v/c Ratio	0.13	0.24	0.41	0.46	0.82
Control Delay (s/veh)	32.2	11.1	3.8	10.4	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.2	11.1	3.8	10.4	13.5
LOS	C	B	A	B	B
Approach Delay (s/veh)	17.8		3.8		13.1
Approach LOS	B		A		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 66	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay (s/veh): 9.2	Intersection LOS: A
Intersection Capacity Utilization 74.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 3: Rancho Av. & N St.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	65	1086	43	147	1196
Future Volume (veh/h)	30	65	1086	43	147	1196
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1772	1870	1870	1870	1772	1870
Adj Flow Rate, veh/h	31	66	1108	44	150	1220
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	123	115	2612	104	448	1402
Arrive On Green	0.07	0.07	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1688	1585	3577	138	488	1870
Grp Volume(v), veh/h	31	66	565	587	150	1220
Grp Sat Flow(s),veh/h/ln	1688	1585	1777	1845	488	1870
Q Serve(g_s), s	0.9	2.1	6.0	6.0	8.4	24.3
Cycle Q Clear(g_c), s	0.9	2.1	6.0	6.0	14.5	24.3
Prop In Lane	1.00	1.00		0.07	1.00	
Lane Grp Cap(c), veh/h	123	115	1332	1384	448	1402
V/C Ratio(X)	0.25	0.57	0.42	0.42	0.33	0.87
Avail Cap(c_a), veh/h	586	551	2154	2237	673	2267
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	22.7	23.2	2.4	2.4	5.0	4.7
Incr Delay (d2), s/veh	1.1	4.4	0.1	0.1	0.2	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.9	0.6	0.6	0.5	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	23.8	27.7	2.5	2.5	5.2	5.9
LnGrp LOS	C	C	A	A	A	A
Approach Vol, veh/h	97		1152			1370
Approach Delay, s/veh	26.4		2.5			5.8
Approach LOS	C		A			A

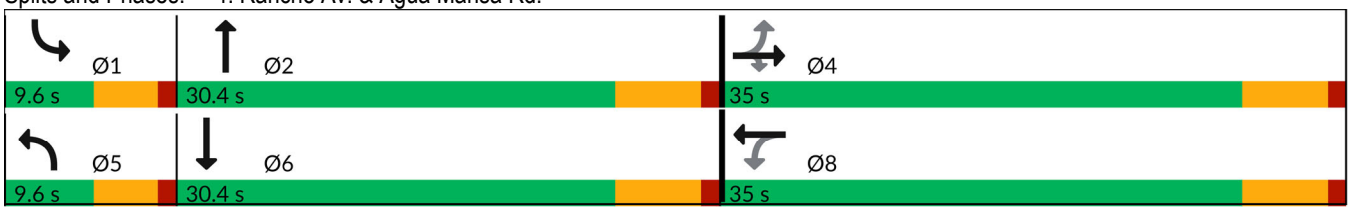
Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	43.4				43.4	8.4
Change Period (Y+Rc), s	4.6				4.6	4.6
Max Green Setting (Gmax), s	62.8				62.8	18.0
Max Q Clear Time (g_c+I1), s	8.0				26.3	4.1
Green Ext Time (p_c), s	6.0				12.5	0.2

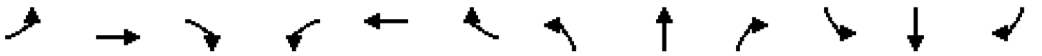
Intersection Summary	
HCM 7th Control Delay, s/veh	5.1
HCM 7th LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	594	56	314	5	49	105	545	5	973
Future Volume (vph)	594	56	314	5	49	105	545	5	973
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4			8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	4	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	23.8	23.8	23.8	23.8	23.8	9.6	27.8	9.6	23.8
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	30.4	9.6	30.4
Total Split (%)	46.7%	46.7%	46.7%	46.7%	46.7%	12.8%	40.5%	12.8%	40.5%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.8	4.6	5.8
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	29.2	29.2	29.2		25.4	5.0	32.3	5.0	24.6
Actuated g/C Ratio	0.39	0.39	0.39		0.34	0.07	0.43	0.07	0.33
v/c Ratio	1.26	0.08	0.43		0.14	0.96	0.37	0.05	1.09
Control Delay (s/veh)	156.7	14.9	8.5		15.6	116.6	16.1	33.8	79.9
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	156.7	14.9	8.5		15.6	116.6	16.1	33.8	79.9
LOS	F	B	A		B	F	B	C	E
Approach Delay (s/veh)		100.2			15.6		32.2		79.8
Approach LOS		F			B		C		E

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 75	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.26	
Intersection Signal Delay (s/veh): 74.1	Intersection LOS: E
Intersection Capacity Utilization 96.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4: Rancho Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	594	56	314	5	49	28	105	545	5	5	973	260
Future Volume (veh/h)	594	56	314	5	49	28	105	545	5	5	973	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	606	57	276	5	50	18	107	556	4	5	993	163
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	624	728	617	70	498	169	113	1403	10	11	1002	164
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.07	0.39	0.39	0.01	0.33	0.33
Sat Flow, veh/h	1333	1870	1585	47	1279	434	1688	3617	26	1688	3056	501
Grp Volume(v), veh/h	606	57	276	73	0	0	107	273	287	5	577	579
Grp Sat Flow(s),veh/h/ln	1333	1870	1585	1760	0	0	1688	1777	1866	1688	1777	1780
Q Serve(g_s), s	27.3	1.4	9.7	0.0	0.0	0.0	4.7	8.3	8.3	0.2	24.2	24.3
Cycle Q Clear(g_c), s	29.2	1.4	9.7	1.9	0.0	0.0	4.7	8.3	8.3	0.2	24.2	24.3
Prop In Lane	1.00		1.00	0.07		0.25	1.00		0.01	1.00		0.28
Lane Grp Cap(c), veh/h	624	728	617	736	0	0	113	690	724	11	583	584
V/C Ratio(X)	0.97	0.08	0.45	0.10	0.00	0.00	0.95	0.40	0.40	0.45	0.99	0.99
Avail Cap(c_a), veh/h	624	728	617	736	0	0	113	690	724	113	583	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	14.4	16.9	14.6	0.0	0.0	34.9	16.6	16.6	37.1	25.1	25.1
Incr Delay (d2), s/veh	28.7	0.0	0.5	0.1	0.0	0.0	68.7	0.4	0.4	10.2	34.6	35.0
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	15.0	0.5	3.1	0.7	0.0	0.0	4.0	3.0	3.2	0.1	14.5	14.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.3	14.5	17.4	14.6	0.0	0.0	103.6	17.0	16.9	47.3	59.7	60.1
LnGrp LOS	D	B	B	B			F	B	B	D	E	E
Approach Vol, veh/h		939			73			667			1161	
Approach Delay, s/veh		40.4			14.6			30.8			59.9	
Approach LOS		D			B			C			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	34.9		35.0	9.6	30.4		35.0				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		5.8				
Max Green Setting (Gmax), s	5.0	24.6		29.2	5.0	24.6		29.2				
Max Q Clear Time (g_c+I1), s	2.2	10.3		31.2	6.7	26.3		3.9				
Green Ext Time (p_c), s	0.0	2.6		0.0	0.0	0.0		0.3				

Intersection Summary		
HCM 7th Control Delay, s/veh	45.4	
HCM 7th LOS	D	

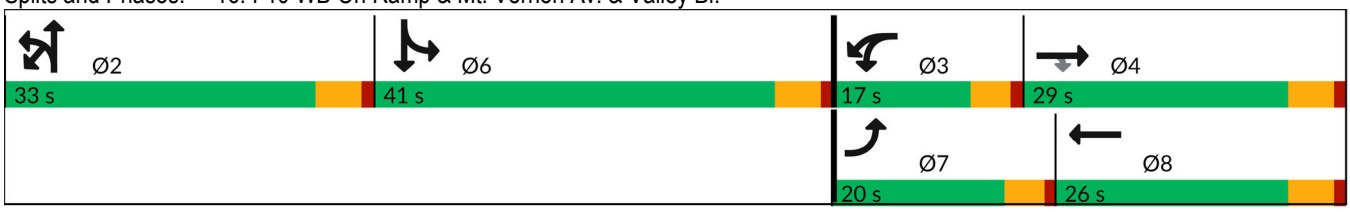
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	325	201	207	55	203	445	12	402
Future Volume (vph)	325	201	207	55	203	445	12	402
Turn Type	Prot	NA	Perm	Prot	NA	NA	Split	NA
Protected Phases	7	4		3	8	2	6	6
Permitted Phases			4					
Detector Phase	7	4	4	3	8	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	23.1	23.1	9.6	25.1	23.1	23.1	23.1
Total Split (s)	20.0	29.0	29.0	17.0	26.0	33.0	41.0	41.0
Total Split (%)	16.7%	24.2%	24.2%	14.2%	21.7%	27.5%	34.2%	34.2%
Yellow Time (s)	3.6	4.1	4.1	3.6	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	4.6	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	15.5	21.2	21.2	12.5	18.2	28.0	32.6	32.6
Actuated g/C Ratio	0.14	0.19	0.19	0.11	0.16	0.24	0.29	0.29
v/c Ratio	1.52	0.62	0.81	1.50	0.80	1.10	0.03	0.87
Control Delay (s/veh)	293.1	51.8	66.7	286.3	66.2	102.5	30.0	48.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	293.1	51.8	66.7	286.3	66.2	102.5	30.0	48.6
LOS	F	D	E	F	E	F	C	D
Approach Delay (s/veh)		160.9			184.5	102.5		48.3
Approach LOS		F			F	F		D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 114.3	
Natural Cycle: 125	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.52	
Intersection Signal Delay (s/veh): 116.4	Intersection LOS: F
Intersection Capacity Utilization 95.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 16: I-10 WB On Ramp & Mt. Vernon Av. & Valley Bl.



Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	325	201	207	17	201	55	203	18	279	102	445	47
Future Volume (vph)	325	201	207	17	201	55	203	18	279	102	445	47
Ideal Flow (vphpl)	1800	1900	1900	1900	1800	1800	1900	1900	1800	1800	1900	1900
Total Lost time (s)	4.6	5.1	5.1			4.6	5.1				5.1	
Lane Util. Factor	1.00	1.00	1.00			1.00	1.00				0.95	
Frt	1.00	1.00	0.85			1.00	0.99				0.99	
Flt Protected	0.95	1.00	1.00			0.95	1.00				0.98	
Satd. Flow (prot)	1676	1863	1583			1676	1840				3436	
Flt Permitted	0.95	1.00	1.00			0.95	1.00				0.98	
Satd. Flow (perm)	1676	1863	1583			1676	1840				3436	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	346	214	220	18	214	59	216	19	297	109	473	50
RTOR Reduction (vph)	0	0	0	0	0	0	3	0	0	0	3	0
Lane Group Flow (vph)	346	214	238	0	0	273	232	0	0	0	926	0
Turn Type	Prot	NA	Perm		Prot	Prot	NA		Split	Split	NA	
Protected Phases	7	4			3	3	8		2	2	2	
Permitted Phases			4									
Actuated Green, G (s)	15.5	21.2	21.2			12.5	18.2				28.0	
Effective Green, g (s)	15.5	21.2	21.2			12.5	18.2				28.0	
Actuated g/C Ratio	0.14	0.19	0.19			0.11	0.16				0.25	
Clearance Time (s)	4.6	5.1	5.1			4.6	5.1				5.1	
Vehicle Extension (s)	2.0	3.0	3.0			2.0	3.0				3.0	
Lane Grp Cap (vph)	227	345	293			183	293				842	
v/s Ratio Prot	c0.21	0.11				0.16	0.13				c0.27	
v/s Ratio Perm			c0.15									
v/c Ratio	1.52	0.62	0.81			1.49	0.79				1.10	
Uniform Delay, d1	49.3	42.8	44.6			50.9	46.2				43.1	
Progression Factor	1.00	1.00	1.00			1.00	1.00				1.00	
Incremental Delay, d2	257.1	3.4	15.6			247.9	13.7				62.0	
Delay (s)	306.4	46.2	60.2			298.8	59.9				105.1	
Level of Service	F	D	E			F	E				F	
Approach Delay (s/veh)		163.2					188.3				105.1	
Approach LOS		F					F				F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	118.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	114.2	Sum of lost time (s)	19.9
Intersection Capacity Utilization	95.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2
Lane Configurations				
Traffic Volume (vph)	12	402	226	150
Future Volume (vph)	12	402	226	150
Ideal Flow (vphpl)	1800	1900	1900	1900
Total Lost time (s)	5.1	5.1		
Lane Util. Factor	1.00	0.95		
Frt	1.00	0.93		
Flt Protected	0.95	1.00		
Satd. Flow (prot)	1676	3283		
Flt Permitted	0.95	1.00		
Satd. Flow (perm)	1676	3283		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94
Adj. Flow (vph)	13	428	240	160
RTOR Reduction (vph)	0	18	0	0
Lane Group Flow (vph)	13	810	0	0
Turn Type	Split	NA		
Protected Phases	6	6		
Permitted Phases				
Actuated Green, G (s)	32.6	32.6		
Effective Green, g (s)	32.6	32.6		
Actuated g/C Ratio	0.29	0.29		
Clearance Time (s)	5.1	5.1		
Vehicle Extension (s)	3.0	3.0		
Lane Grp Cap (vph)	478	937		
v/s Ratio Prot	0.01	c0.25		
v/s Ratio Perm				
v/c Ratio	0.03	0.86		
Uniform Delay, d1	29.4	38.7		
Progression Factor	1.00	1.00		
Incremental Delay, d2	0.0	8.4		
Delay (s)	29.4	47.1		
Level of Service	C	D		
Approach Delay (s/veh)		46.8		
Approach LOS		D		

Intersection Summary

COLTON HOUSING ELEMENT

TRAFFIC ANALYSIS

Prepared By:

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Isabella Anaya | ianaya@urbanxroads.com

Reference Number
16031-05 TA Report

Agency
City of Colton

Date
May 15, 2025

TABLE OF CONTENTS

APPENDICES

LIST OF EXHIBITS

LIST OF TABLES

LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CAMUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CMP	Congestion Management Program
DIF	Development Impact Fee
GPA	General Plan Amendment
HCCSP	Hub City Centre Specific Plan
HCM	Highway Capacity Manual
HY	Horizon Year
ITE	Institute of Transportation Engineers
LOS	Level of Service
NP	No (Without) Project
PHF	Peak Hour Factor
Project	Colton Housing Element
RHNA	Regional Housing Needs Assessment
SBCTA	San Bernardino County Transportation Authority
SBTAM	San Bernardino Transportation Analysis Model
TA	Traffic Analysis
V/C	Volume-to-Capacity Ratio
vphgpl	Vehicles per Hour Green per Lane
WP	With Project

1 SUMMARY OF FINDINGS

1.1 INTRODUCTION

The Colton Housing Element Traffic Analysis (TA) analyzes and identifies potential traffic-related deficiencies resulting from the revised General Plan Land Use Map and Zoning Map to increase its capacity for housing units in accordance with the City's Regional Housing Needs Assessment (RHNA) allocation of 5,434 dwelling units. As shown in Exhibit 1-1, the Colton Housing Element Project (**Project**) would rezone 89.66 acres across multiple sites in the City of Colton.

The purpose of this TA is to evaluate the potential circulation system deficiencies that may result from the Project and where circulation system (intersection and/or roadway) improvements are needed to maintain acceptable levels of service consistent with the City's General Plan level of service goals and policies, as described in the City of Colton's VMT (Vehicle Miles Traveled) Guidelines (**City Guidelines**, dated June 2, 2020). (1)

1.2 PROJECT OVERVIEW

Pursuant to Housing Element law, a housing element must identify potential sites suitable for redesignation and/or rezoning to accommodate housing needs for all segments of the community. The potential sites for rezoning were developed consistent with provisions of Government Code Section 65583.1, which states, in part, that:

> *The Department of Housing and Community Development, in evaluating a proposed or adopted housing element for substantial compliance with this article, may allow a city or county to identify adequate sites, as required pursuant to Section 65583, by a variety of methods, including, but not limited to, redesignation of property to a more intense land use category and increasing the density allowed within one or more categories.*

Program 10/11 of the Housing Element Update provides that to accommodate for a shortfall of sites and provide for adequate sites, the City will also up-zone its Mixed-Use/Downtown (M-U/D) zoning designations to allow up to 40 dwelling units per acre (du/acre) and its R3/R4 zone to allow up to 30 du/acre. Furthermore, the Hub City Centre Specific Plan (HCCSP) will be amended to allow up to 40 units per acre in the specific plan area on retail parcels identified for rezoning in the site's inventory. The Mixed-Use/Downtown zoning standards will also be updated to allow 100 percent residential use and require at least 50 percent of the total floor area to be occupied by a residential use. The City will rezone 89.66 total acres as part of the rezoning program to meet its RHNA shortfall.

Specifically, the rezone is as follows:

- Thirty-four parcels (161.9 acres) in the HCCSP and Industrial Park (I-P) zone, to be rezoned as M-U/D zone;
- Six parcels (2.59 acres), consisting of two Low Density Residential (R-1) and four General Commercial (C-2) parcels, to be rezoned as M-U/D zone;
- A residential overlay on seven parcels (2.5 acres) in the C-2 zone; and
- One parcel (2.76 acres) to be rezoned as Multiple Family Residential (R-3/R-4) zone.

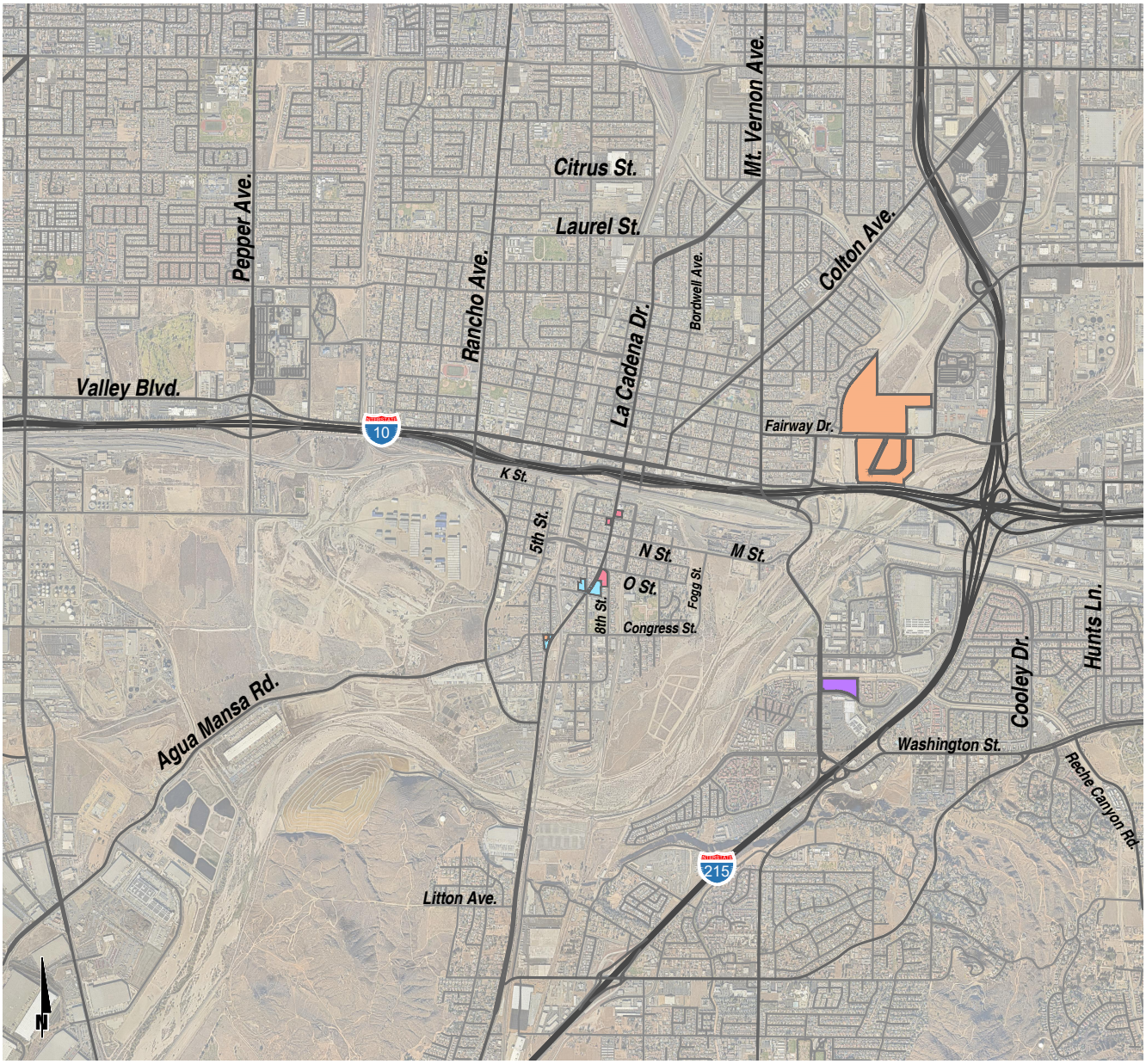
The site inventory analysis has been conservative in identifying M-U/D properties to accommodate a portion of the City's RHNA allocation for lower-income housing, and only those parcels with the greatest potential for residential development have been included in the site inventory. If developers choose not to pursue projects at these particular sites, ample additional affordable housing development opportunities are available on other properties within the M-U/D zoning district and on other vacant and underutilized parcels that have been identified by the City as candidates for rezoning. The City is committed to maintaining no net loss of capacity to accommodate the entire RHNA.

The properties proposed for rezoning and for amendment of their general plan land use designation are described as part of the five areas in the City that relate to Program 10/11 of the 2021-2029 General Plan Housing Element Update. Under Program 10/11, rezoned sites would comply with the requirements of Government Code Sec. 65583.2(h), which states that cities must have a program to facilitate by-right approval for projects that include at least 20 percent of the units for lower-income housing on rezoned low-income sites.

In total, 89.66 acres would be rezoned. Two areas are also proposed for rezoning and General Plan Amendment (GPA) to implement the South Colton Livable Corridor Plan. Rezoned sites shall comply with the following:

- Permit owner-occupied and rental multi-family uses by-right for developments in which 20 percent or more of the units are affordable to lower-income households;
- Accommodate a minimum of 16 units per site;
- Require a minimum density of 20 units per acre; or
- At least 50 percent of the lower-income housing need must be accommodated on sites designated for residential use only or on sites zoned for mixed uses that accommodate all of the very low and low-income housing need, if those sites allow 100 percent residential use and require residential use to occupy 50 percent of the total floor area of a mixed-use project.

EXHIBIT 1-1 : LOCATION MAP



LEGEND:

- = C-2 / R-O
- = MU
- = MU-D
- = Res Overlay

1.3 ANALYSIS SCENARIOS

For the purposes of this TA, peak hour intersection operations have been evaluated for each of the following traffic conditions:

- Existing (2024) Conditions
- Horizon Year (2050) Without Project Conditions
- Horizon Year (2050) With Project Conditions

1.3.1 Existing (2024) Conditions

Traffic counts were conducted on November 21, 2024 (Thursday) when local schools were in session and operating under normal bell schedules. No volume adjustments have been made to the existing baseline aside from adjustments needed for volume balancing.

1.3.2 Horizon Year (2050) Conditions

Traffic projections for Horizon Year (2050) conditions were derived from the San Bernardino Transportation Analysis Model (SBTAM) using accepted procedures for model forecast refinement and smoothing. The Horizon Year conditions analysis will be utilized to determine if improvements funded through regional transportation mitigation fee programs can accommodate the long-range cumulative traffic at the target Level of Service (LOS) identified in the City of Colton (lead agency) General Plan. For the purposes of this TA, the "Without Project" scenario represents the traffic forecasts associated with the SBTAM based on the current City of Colton General Plan. The "With Project" scenario represents the traffic forecast associated with the SBTAM based on population changes related to the Project.

1.4 STUDY AREA

The 18 study area intersections shown in Exhibit 1-2 and listed in Table 1-1 were selected for evaluation in this TA based on consultation with City of Colton staff. The study area roadway segments selected for evaluation are listed in Table 1-2 and shown in Exhibit 1-3. At a minimum, the study area includes intersections where the Project is anticipated to contribute 50 or more peak hour trips per the City Guidelines. (1) The "50 peak hour trip" criterion represents a minimum number of trips at which a typical intersection would have the potential to be affected by a given development proposal. The 50 peak hour trip criterion is a traffic engineering rule of thumb that is accepted and widely used within San Bernardino County (including the City of Colton) for estimating a potential area of influence (i.e., study area).

The intent of a Congestion Management Program (CMP) is to link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The County of San Bernardino CMP became effective with the passage of Proposition 111 in 1990 and most recently updated in 2016 with an updated Nexus study completed in 2023. (2)

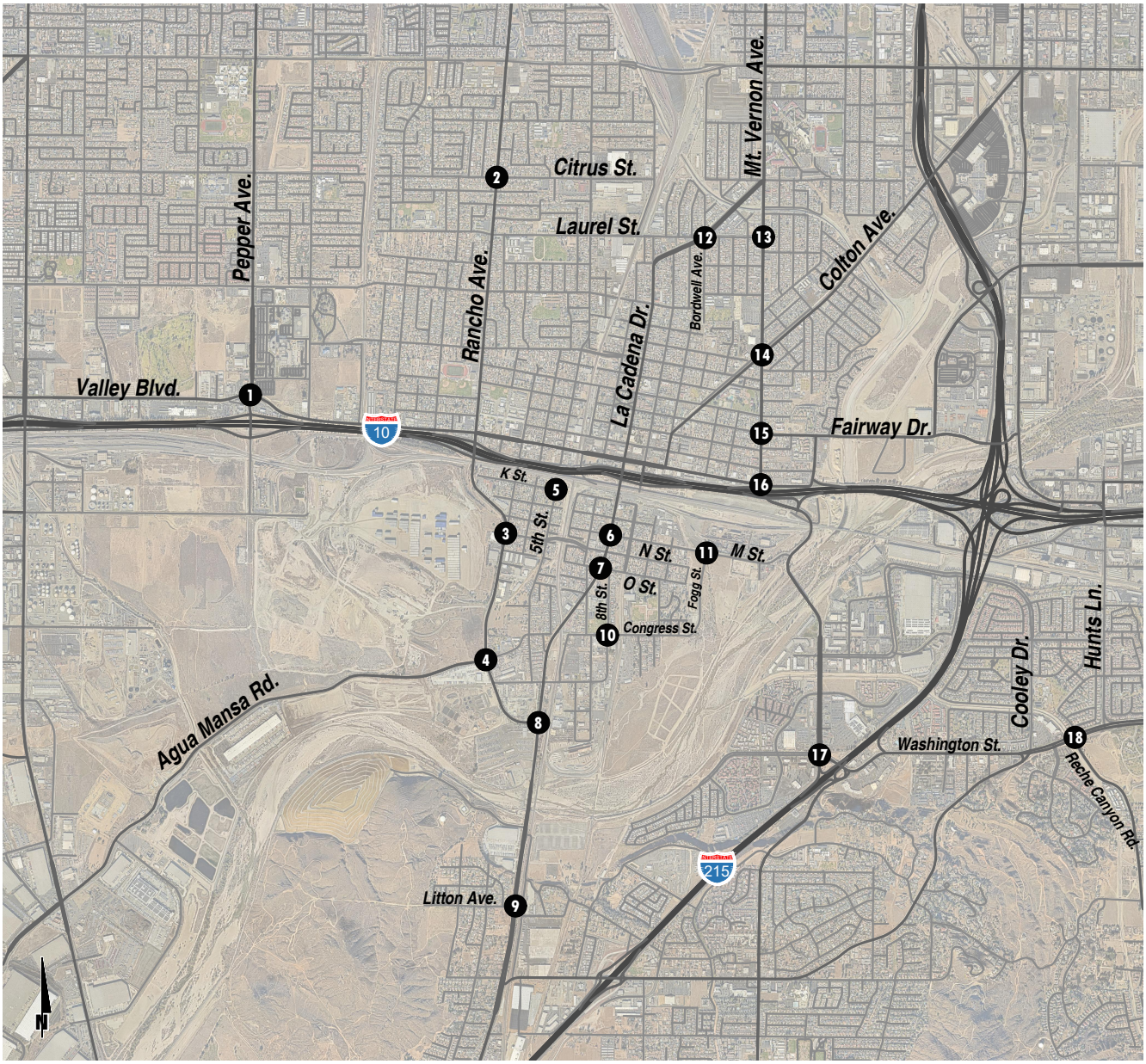
TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

#	Intersection	Jurisdiction
1	Pepper Av. & Valley Bl.	City of Colton
2	Rancho Av. & Citrus St.	City of Colton
3	Rancho Av. & N St.	City of Colton
4	Rancho Av. & Agua Mansa Rd.	City of Colton
5	5th St & K St.	City of Colton
6	La Cadena Dr. & M St.	City of Colton
7	La Cadena Dr. & O St.	City of Colton
8	La Cadena Dr. & Rancho Av.	City of Colton
9	La Cadena Dr. & Litton Av.	City of Colton
10	8th St. & Congress St.	City of Colton
11	Fogg St. & M St.	City of Colton
12	Bordwell Av. & La Cadena Dr./Laurel St.	City of Colton
13	Mt. Vernon Av. & Laurel St.	City of Colton
14	Mt. Vernon Av. & Colton Av.	City of Colton
15	Mt. Vernon Av. & Fairway Dr.	City of Colton
16	Mt. Vernon Av. & Valley Bl.	City of Colton
17	Mt. Vernon Av. & Washington St.	City of Colton
18	Reche Canyon Rd. & Washington St.	City of Colton

TABLE 1-2: ROADWAY SEGMENT ANALYSIS LOCATIONS

#	Roadway	Segment Limits	Jurisdiction
1	Valley Blvd.	Eucalyptus Av. to Pepper Av.	City of Colton
2	Rancho Av.	Citrus St. to Laurel St.	City of Colton
3	Rancho Av.	Agua Mansa Rd. to Fogg St.	City of Colton
4	La Cadena Dr.	Rancho Av. to Litton Av.	City of Colton
5	La Cadena Dr.	M St. to O St.	City of Colton
6	Colton Av.	10th St. to Mt. Vernon Av.	City of Colton
7	Mt. Vernon Av.	Laurel St. to Colton Av.	City of Colton
8	Mt. Vernon Av.	Fairway Dr. to Valley Blvd.	City of Colton
9	Washington St.	Cooley Dr. to Reche Canyon Rd.	City of Colton

EXHIBIT 1-2 : STUDY AREA INTERSECTIONS



LEGEND:

0 = *Existing Intersection Analysis Location*

EXHIBIT 1-3 : STUDY AREA ROADWAY SEGMENTS

LEGEND:

0 = *Existing Intersection Analysis Location*

1.5 DEFICIENCIES

This section provides a summary of deficiencies by analysis scenario. Section 2 *Methodologies* provides information on the methodologies used in the analysis, and Section 3 *Area Conditions* and Section 4 *Horizon Year (2050) Traffic Conditions* include the detailed analysis. A summary of the study area intersection LOS results for all analysis scenarios is presented in Table 1-3.

1.5.1 Existing (2024) Conditions

The following study area intersections are currently operating at an unacceptable LOS during the weekday AM and PM peak hours under Existing (2024) traffic conditions:

- Rancho Avenue & Agua Mansa Road (#4) – LOS F PM peak hour only
- Mt. Vernon Avenue & Valley Boulevard (#16) – LOS E PM peak hour only

No roadway segments are currently operating at an unacceptable LOS during the weekday AM and PM peak hours under Existing (2024) traffic conditions.

1.5.2 Horizon Year (2050) Conditions

The following study area intersections are anticipated to operate at an unacceptable LOS during the weekday AM and PM peak hours under both Horizon Year (2050) Without Project and Horizon Year (2050) With Project traffic conditions:

- Rancho Avenue & N Street (#3) – LOS F AM peak hour, LOS E PM peak hour
- Rancho Avenue & Agua Mansa Road (#4) – LOS F AM and PM peak hours
- Mt. Vernon Avenue & Valley Boulevard (#16) – LOS E AM peak hour, LOS F PM peak hour

The following roadway segments are anticipated to operate at an unacceptable LOS during the weekday AM and PM peak hours under Horizon Year (2050) traffic conditions:

- Valley Boulevard, Eucalyptus Avenue to Pepper Avenue (#1) – LOS F
- La Cadena Drive, Rancho Avenue to Litton Avenue (#4) – LOS F

1.6 RECOMMENDATIONS

The improvements needed to address the cumulative deficiencies identified under each analysis scenario are summarized in Table 1-4. A summary of the roadway segment improvements is provided in Table 1-5.

TABLE 1-3 : SUMMARY OF LOS

		Existing (2024)	Horizon Year (2050) Without Project	Horizon Year (2050) With Project
1	Pepper Av. & Valley Bl.	A-D	A-D	A-D
2	Rancho Av. & Citrus St.	A-D	A-D	A-D
3	Rancho Av. & N St.	A-D	E / F	E / F
4	Rancho Av. & Agua Mansa Rd.	A-D / F	F	F
5	5th St. & K St.	A-D	A-D	A-D
6	La Cadena Dr. & M St.	A-D	A-D	A-D
7	La Cadena Dr. & O St.	A-D	A-D	A-D
8	La Cadena Dr. & Rancho Av.	A-D	A-D	A-D
9	La Cadena Dr. & Litton Av.	A-D	A-D	A-D
10	8th St. & Congress St.	A-D	A-D	A-D
11	Fogg St. & M St.	A-D	A-D	A-D
12	Bordwell Av. & La Cadena Dr. / Laurel St.	A-D	A-D	A-D
13	Mt. Vernon Av. & Laurel St.	A-D	A-D	A-D
14	Mt. Vernon Av. & Colton Av.	A-D	A-D	A-D
15	Mt. Vernon Av. & Fairway Dr.	A-D	A-D	A-D
16	Mt. Vernon Av. & Valley Dr.	E / A-D	E / F	E / F
17	Mt. Vernon Av. & Washington St.	A-D	A-D	A-D
18	Reche Canyon Rd. & Washington St.	A-D	A-D	A-D

LEGEND:

- ◖ = *AM Peak Hour*
- ◗ = *PM Peak Hour*
- ● = *A-D*
- ● = *E*
- ● = *F*

TABLE 1-4: SUMMARY OF INTERSECTION OPERATIONS IMPROVEMENTS

#	Intersection Location	Jurisdiction	Analysis Scenario		Improvements included in Fee Program?[1]
			Existing (2024)	2050 With Project	
3	Rancho Av. & N St.	Colton	None	Install a Traffic Signal	No
4	Rancho Av. & Agua Mansa Rd.	Colton	Restripe the EB shared through-left lane to accommodate one EB through lane and one dedicated EB left turn lane	Same	No
16	Mt. Vernon Av. & Valley Bl.	Colton	Restripe the EB shared through-right lane to accommodate one EB through lane and one dedicated EB right turn lane	Same	No

[1] Improvements included in the City of Colton DIF program.

TABLE 1-5: SUMMARY OF ROADWAY SEGMENT IMPROVEMENTS

#	Roadway	Segment Limits	Analysis Scenario	
			Existing (2024)	2050 With Project
1	Valley Blvd.	Eucalyptus Av. to Pepper Av.	None	Widen roadway segment to six lanes[1]
4	La Cadena Dr.	Rancho Av. to Litton Av.	None	Widen roadway segment to six lanes[1]

[1] Roadway segment widening needed to achieve LOS requirement, but consistent with the City's General Plan.

2 METHODOLOGIES

This section of the report presents the methodologies used to perform this TA. The methodologies described are consistent with City of Colton Guidelines. (1)

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors, such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing a breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The 7th Edition Highway Capacity Manual (HCM) methodology expresses LOS at an intersection in terms of delay time for the various intersection approaches. (4) The HCM uses different procedures depending on the type of intersection control.

2.2.1 Signalized Intersections

The City of Colton requires signalized intersection operations analysis based on the methodology described in the HCM. (4) Intersection LOS operations are based on an intersection's average control delay. Control delays include initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections, LOS is related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 2-1. The saturation flow rates utilized are consistent with those identified in the San Bernardino County's CMP, as directed by the City's traffic study guidelines.

The traffic modeling and signal timing optimization software package Synchro (Version 12) has been utilized to analyze signalized intersections. Synchro is a macroscopic traffic software program based on the signalized intersection capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service V/C ≤ 1.0[1]
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E
Operations with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up	F

Source: HCM, 7th Edition
[1] If V/C is greater than 1.0, then LOS is F per HCM

Consistent with Appendix B of the San Bernardino County CMP, the following saturation flow rates, in vehicles per hour green per lane (vphgpl), will be utilized in the traffic analysis for signalized intersections:

Existing Traffic Conditions:

- Exclusive through: 1800 vphgpl
- Exclusive left: 1700 vphgpl
- Exclusive right: 1800 vphgpl
- Exclusive dual left: 1600 vphgpl
- Exclusive triple left: 1500 vphgpl

Horizon Year (2050) Traffic Conditions:

- Exclusive through: 1900 vphgpl
- Exclusive left: 1800 vphgpl
- Exclusive dual left: 1700 vphgpl
- Exclusive right: 1900 vphgpl
- Exclusive triple left: 1600 vphgpl or less

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Customary practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g., PHF = [Hourly Volume] / [4 x Peak 15-

minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (4)

2.2.2 Unsignalized Intersections

The City of Colton requires the operations of unsignalized intersections to be evaluated using the methodology described in the HCM. (4) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2). 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. Delay for the intersection is reported for the worst individual movement at a two-way stop-controlled intersection. For all-way stop-controlled intersections, LOS is computed for the intersection as a whole (average delay).

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service V/C ≤ 1.0[1]
Little or no delays.	0 to 10.00	A
Short traffic delays.	10.01 to 15.00	B
Average traffic delays.	15.01 to 25.00	C
Long traffic delays.	25.01 to 35.00	D
Very long traffic delays.	35.01 to 50.00	E
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F

Source: HCM, 7th Edition
[1] If V/C is greater than 1.0, then LOS is F per HCM

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or determine the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD). (5)

The signal warrant criteria for Existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (5) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions and for all Horizon analysis scenarios for existing unsignalized intersections. Warrant 3 is appropriate to use for this TA because it provides specialized warrant criteria for intersections with rural characteristics. For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection. Rural warrants have been used

where posted speed limits on the major roadways with unsignalized intersections are over 40 miles per hour while urban warrants have been used where speeds are 40 miles per hour or below.

Horizon intersections that do not currently exist have been assessed regarding the potential need for new traffic signals based on Horizon average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets. Similarly, the speed limit has been used as the basis for determining the use of Urban and Rural warrants. Traffic signal warrant analyses were performed for the study area intersections shown in Table 2-3.

TABLE 2-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

#	Intersection
3	Rancho Av. & N St.
5	5th St & K St.
7	La Cadena Dr. & O St.
10	8th St. & Congress St.
11	Fogg St. & M St.
13	Mt. Vernon Av. & Laurel St.

The traffic signal warrant analyses are presented in Section 3 *Area Conditions* and Section 5 *Horizon Year (2050) Traffic Conditions*. It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.4 ROADWAY SEGMENT CAPACITY ANALYSIS

Roadway segment operations have been evaluated using the County of San Bernardino's Capacity Thresholds for the Valley region as provided in the County of San Bernardino's General Plan (5) and presented here at Table 2-4. These roadway capacities are "rule of thumb" estimates for planning purposes and are affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic), and pedestrian bicycle traffic. In other words, while using ADT for planning purposes is suitable with regards to evaluating potential volume to capacity with Horizon forecasts, it is not suitable for operational analysis because it does not account for the factors listed previously. As such, where the ADT based roadway segment analysis indicates a deficiency (unacceptable LOS), a review of the more detailed peak hour intersection analysis and progression analysis are undertaken. The more detailed peak hour intersection analysis explicitly accounts for factors that affect roadway capacity.

TABLE 2-4: COUNTY OF SAN BERNARDINO'S CAPACITY THRESHOLDS

Number of Lanes	Valley	Mountain	Desert
2	14,600	13,600	7,000
4	31,100	29,300	16,400
6	46,800	44,100	25,700

Source: County of San Bernardino General Plan, 2007[1]

[1] The County of San Bernardino General Plan, 2020 does not include a Roadway Capacity Threshold table.

2.5 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

Minimum acceptable LOS and associated definitions of intersection deficiencies have been obtained from the City of Colton's General Plan: Intersection LOS shall be maintained at LOS D or better. Therefore, for the purposes of this TA, LOS D has also been considered the acceptable threshold for all study area intersections.

2.6 DEFICIENCY CRITERIA

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies. Per the City's traffic study guidelines, a v/c ratio of 0.90 (LOS D) shall be the lowest acceptable LOS at intersections and roadway segments. Therefore, a deficiency is defined where the intersection LOS falls below an acceptable LOS.

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3 AREA CONDITIONS

This section provides a summary of the existing circulation network and the City of Colton General Plan Circulation Network, and a review of existing peak hour intersection operations, traffic signal warrant, and roadway segment analyses.

3.1 EXISTING CIRCULATION NETWORK

The study area includes a total of 18 intersections and 9 roadway segments, as shown previously in Exhibits 1-2 and 1-3, respectively. Exhibit 3-1 illustrates the study area intersections located near the proposed sites and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 CITY OF COLTON GENERAL PLAN CIRCULATION ELEMENT

As noted previously, the Project is located within the City of Colton. The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on the City of Colton General Plan Circulation Element, are described subsequently and shown in Exhibit 3-2.

Major Arterials are designed to accommodate four to six travel lanes with a 12-15-foot raised median, within a 96-114-foot right of way. The following study area roadways are classified as Major Arterials:

- Pepper Avenue
- Rancho Avenue
- La Cadena Drive
- Mt. Vernon Avenue
- Colton Avenue (east of Mt. Vernon Avenue)
- Valley Boulevard
- Washington Street

Secondary Arterials are designed to accommodate four travel lanes with either a raised or painted median, within an 88-foot right of way. The following study area roadways are classified as Major Arterials:

- Colton Avenue (west of Mt. Vernon Avenue)
- Fairway Street

EXHIBIT 3-1 : EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS

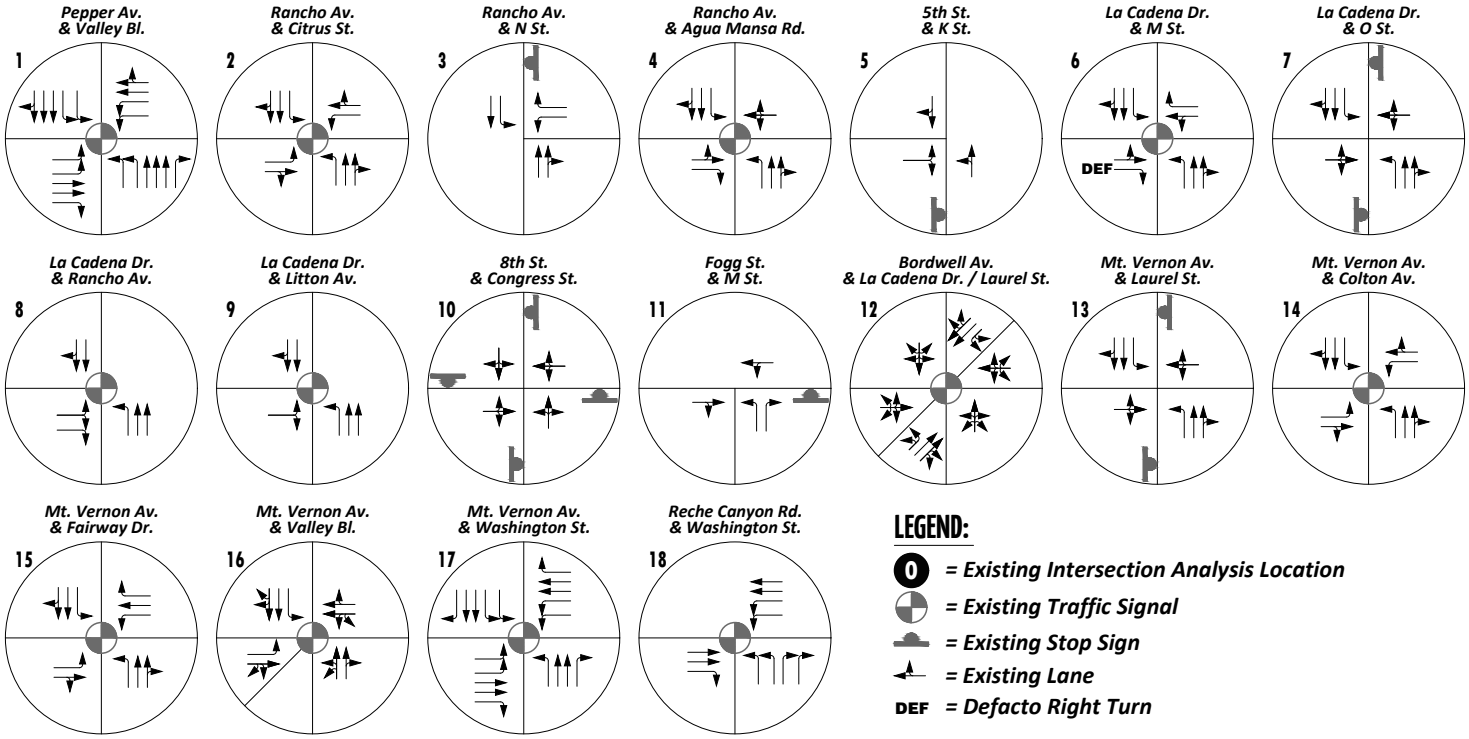
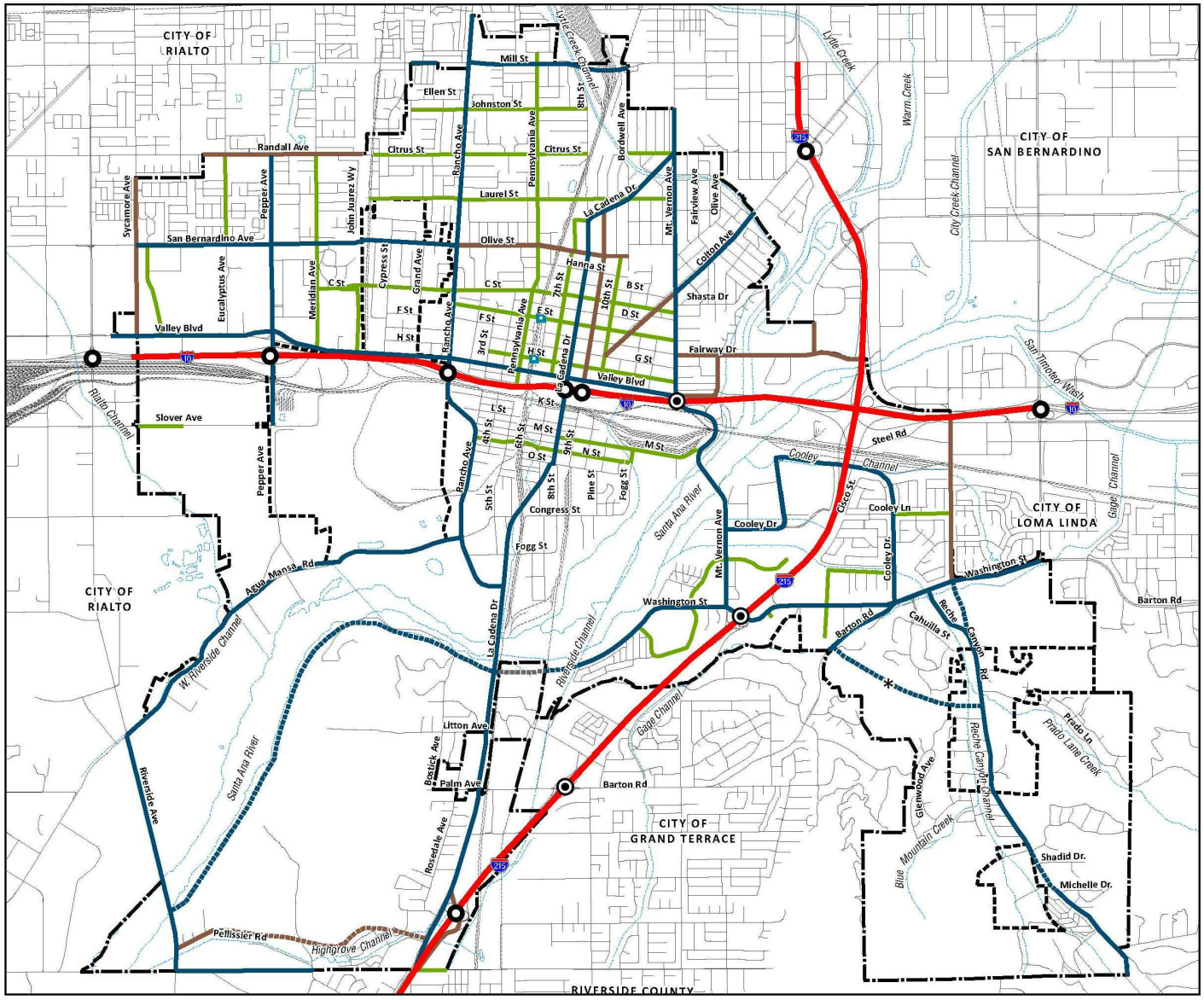


EXHIBIT 3-2: CITY OF COLTON GENERAL PLAN CIRCULATION ELEMENT



3.3 PEDESTRIAN FACILITIES

As shown in Exhibit 3-3, pedestrian facilities in close proximity to the Project have been identified.

3.4 TRANSIT SERVICE

As shown in Exhibit 3-4, Omnitrans Routes 1, 2, 15, and 19 would potentially serve the Project study area. Transit service is reviewed and updated by Omnitrans periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

3.5 EXISTING (2024) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in November 2024. The following peak hours were selected for analysis:

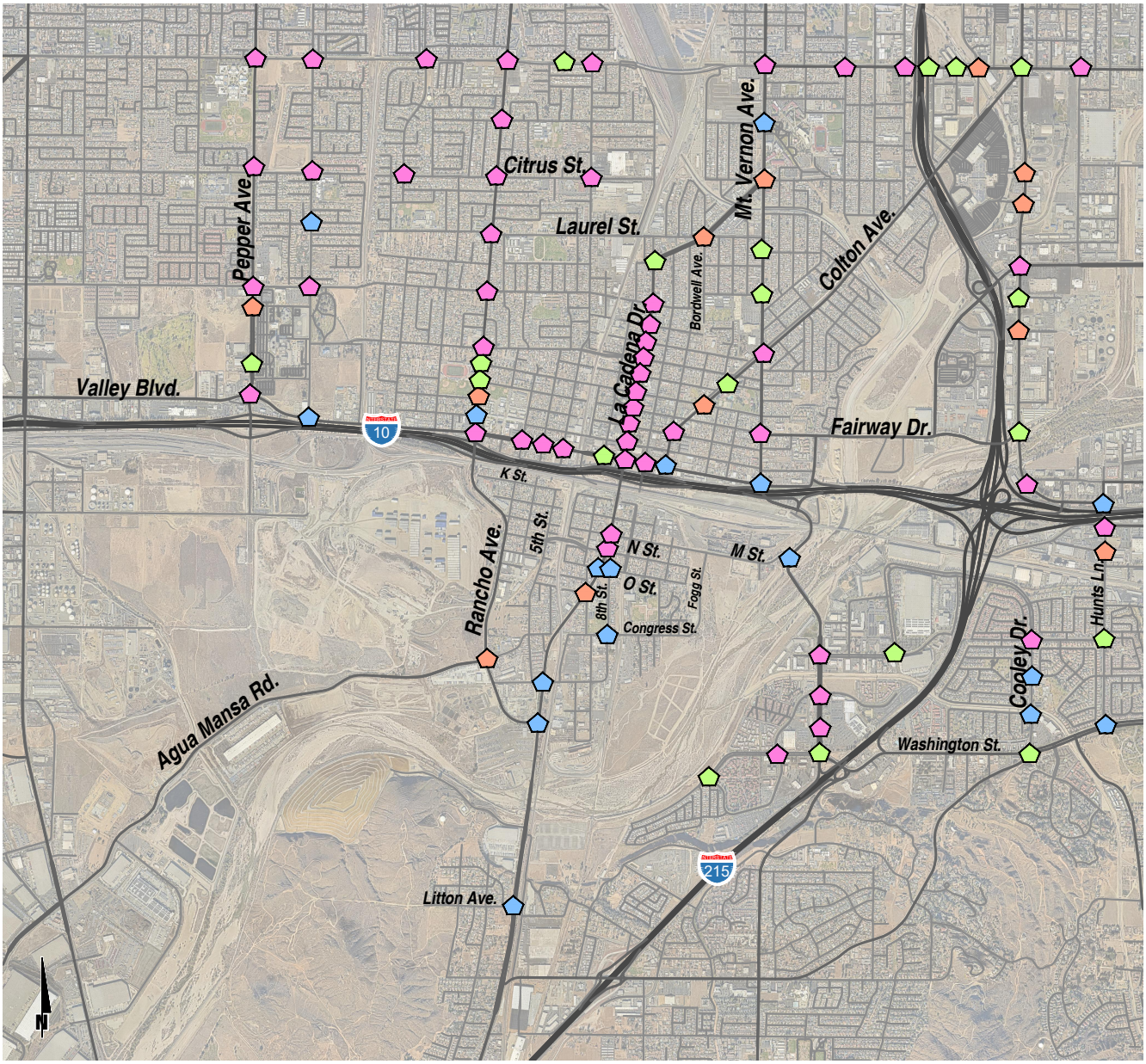
- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

The 2024 weekday AM and weekday PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and near-by schools were in session and operating on normal schedules. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1. Existing weekday ADT volumes are shown in Exhibit 3-5. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 8.874 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 11.27 percent. As such, the above equation, utilizing a factor of 8.874, estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of 11.27 percent (i.e., 1/0.0874 = 11.27) and was assumed to sufficiently estimate ADT volumes for planning-level analyses. Existing weekday AM and weekday PM peak hour intersection volumes, in actual vehicles, are also shown in Exhibit 3-5.

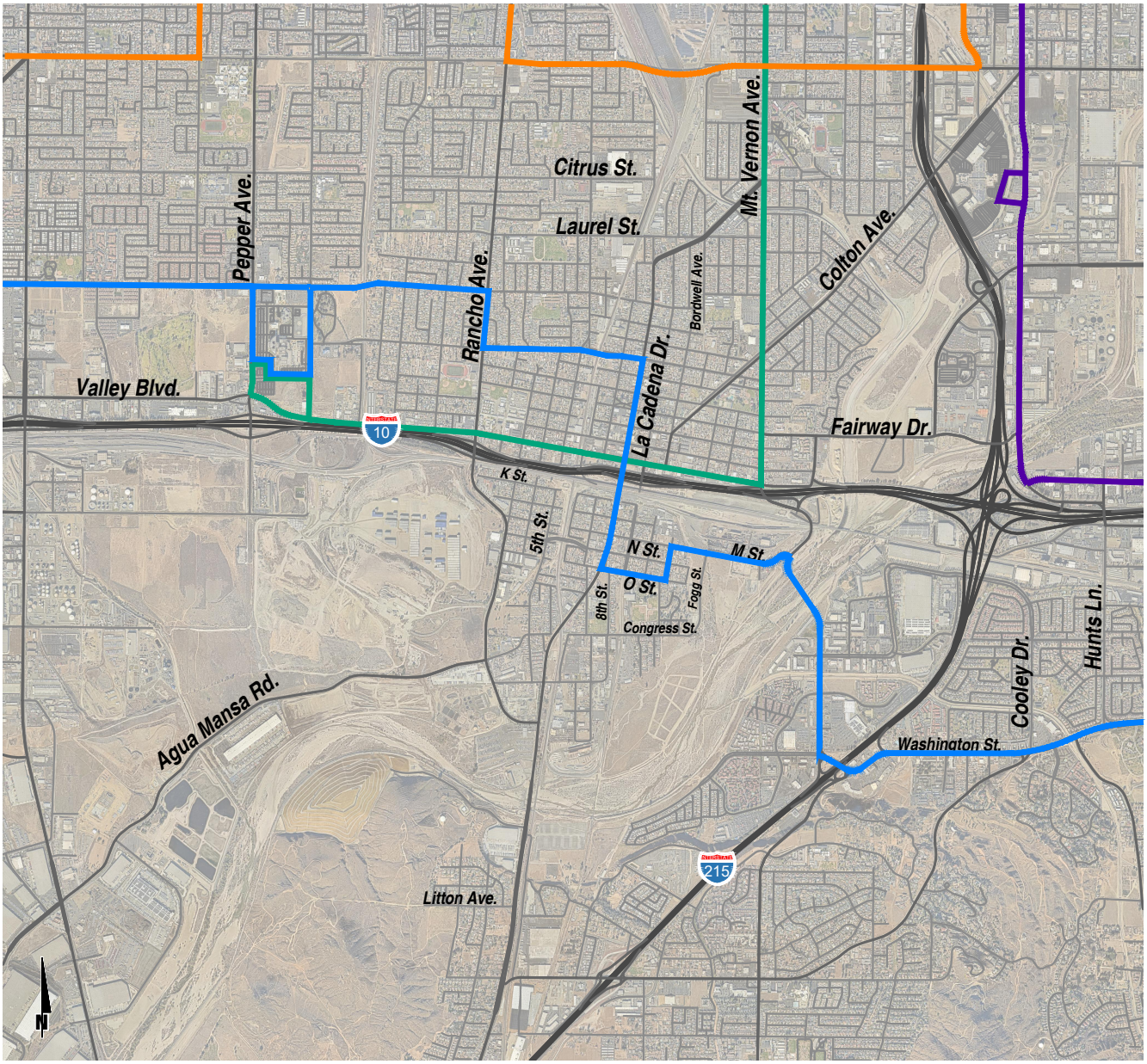
EXHIBIT 3-3 : CITY OF COLTON PEDESTRIAN FACILITIES



LEGEND:

- = 1 Approach
- = 2 Approaches
- = 3 Approaches
- = All Approaches

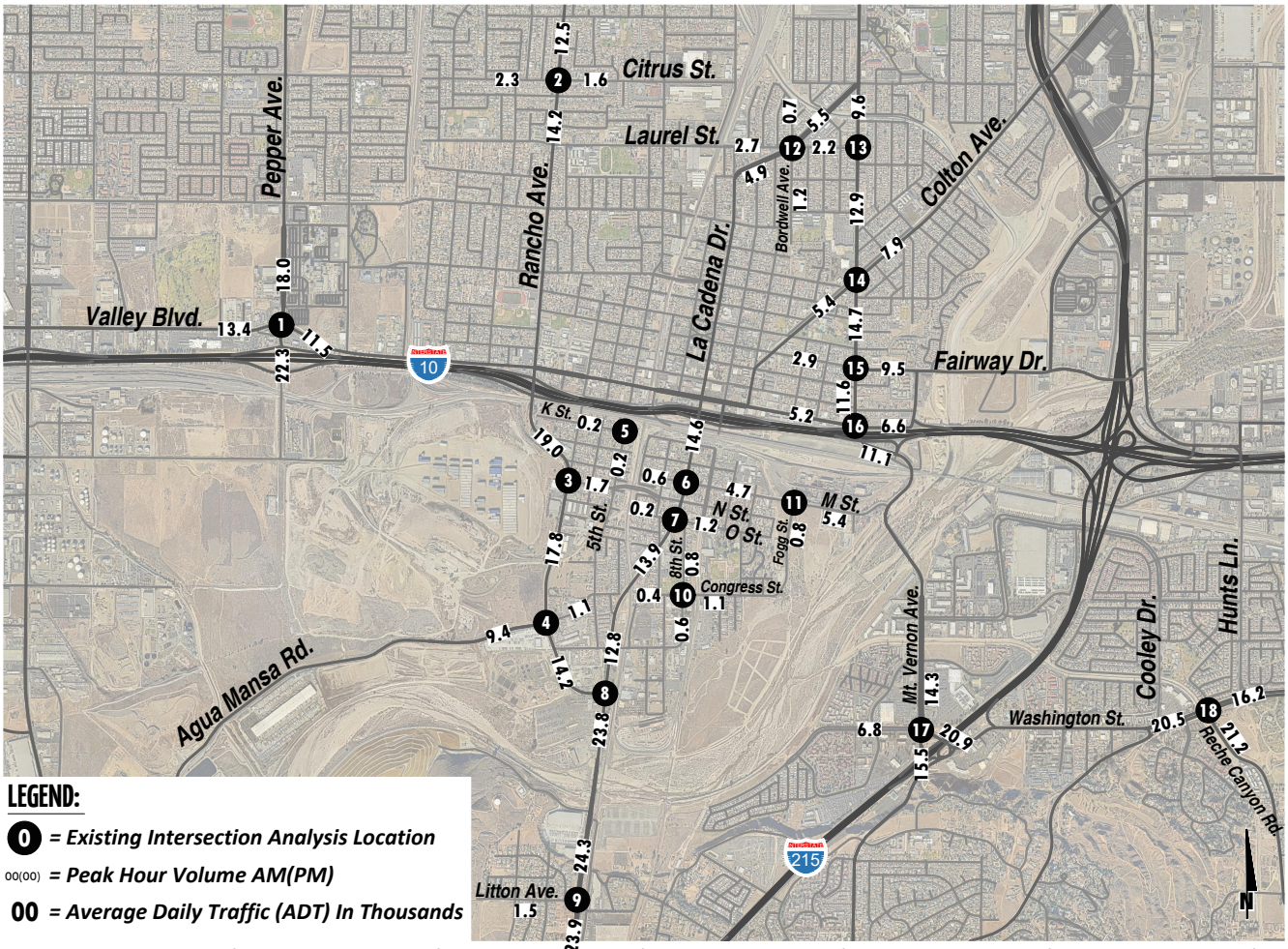
EXHIBIT 3-4 : CITY OF COLTON TRANSIT ROUTES



LEGEND:

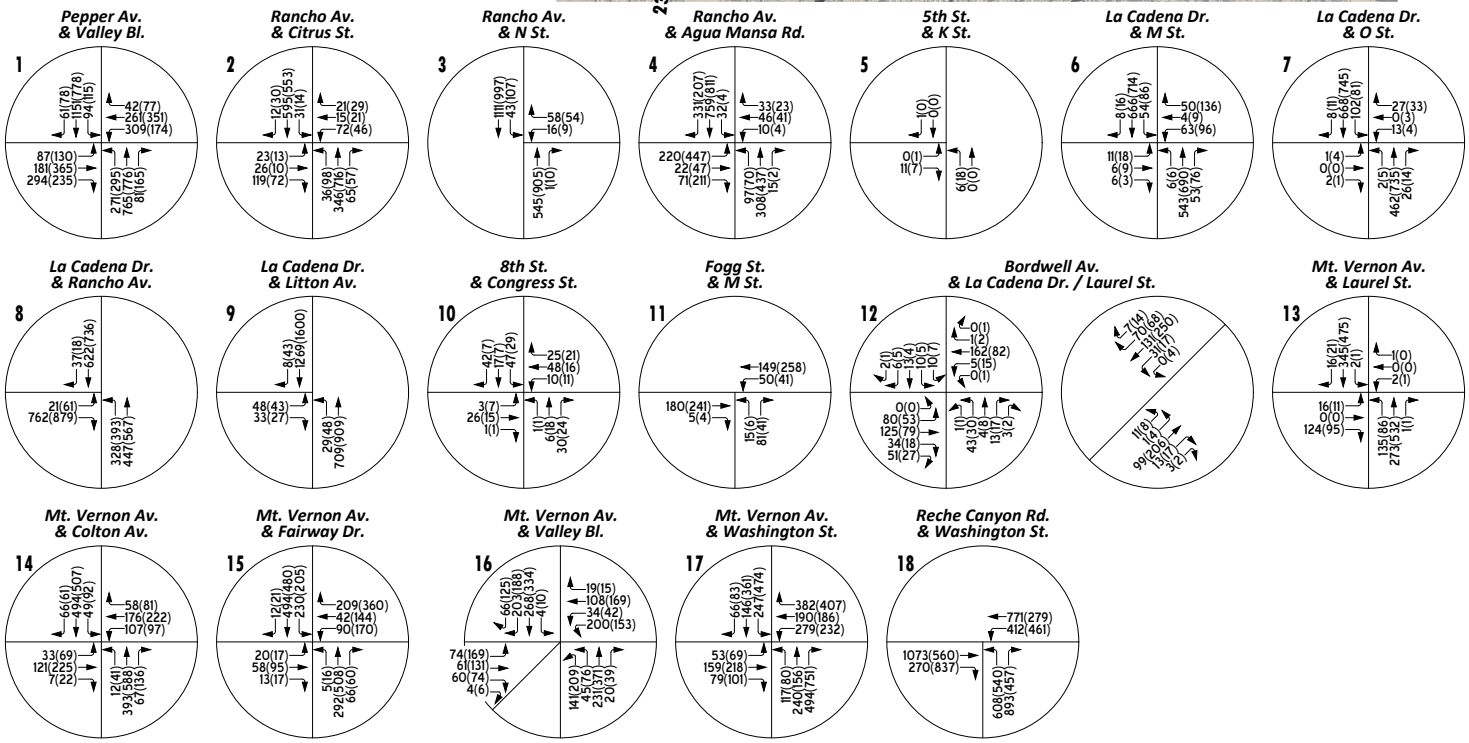
- = OmniTrans Route 1
- = OmniTrans Route 2
- = OmniTrans Route 15
- = OmniTrans Route 19

EXHIBIT 3-5 : EXISTING (2024) TRAFFIC VOLUMES



LEGEND:

- **0** = *Existing Intersection Analysis Location*
- 00(00) = *Peak Hour Volume AM(PM)*
- **00** = *Average Daily Traffic (ADT) In Thousands*



3.6 INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis.* The intersection operations analysis results are summarized in Table 3-1, which indicates that the following study area intersections are currently operating at an unacceptable LOS during the peak hours:

- Rancho Avenue & Agua Mansa Road (#4) – LOS F PM peak hour only
- Mt. Vernon Avenue & Valley Boulevard (#16) – LOS E PM peak hour only

The intersection operations analysis worksheets are included in Appendix 3.2.

3.7 TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. There are no unsignalized study area intersections that currently warrant a traffic signal for Existing traffic conditions. Existing conditions traffic signal warrant analysis worksheets are provided in Appendix 3.3.

3.8 ROADWAY SEGMENT ANALYSIS

The roadway capacities utilized for the study area roadway segment analysis are obtained from the County of San Bernardino General Plan. These roadway segment capacities are approximate figures only and are used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet traffic demand. Table 3-2 provides a summary of the Existing (2024) conditions roadway segment capacity analysis. As shown in Table 3-2, none of the study area roadway segments are currently operating at an unacceptable LOS based on the daily roadway capacity thresholds and minimum LOS criteria.

TABLE 3-1: EXISTING (2024) INTERSECTION ANALYSIS

#	Intersection	Traffic Control[2]	Delay[1] (secs.)		Level of Service	
			AM	PM	AM	PM
1	Pepper Av. & Valley Bl.	TS	30.1	23.9	C	C
2	Rancho Av. & Citrus St.	TS	15.5	12.9	B	B
3	Rancho Av. & N St.	CSS	23.8	25.5	C	D
4	Rancho Av. & Agua Mansa Rd.	TS	51.0	**176.2**	D	**F**
5	5th St & K St.	CSS	8.4	8.4	A	A
6	La Cadena Dr. & M St.	TS	11.2	19.3	B	B
7	La Cadena Dr. & O St.	CSS	15.9	24.9	C	C
8	La Cadena Dr. & Rancho Av.	TS	20.5	34.9	C	C
9	La Cadena Dr. & Litton Av.	TS	7.7	15.7	A	B
10	8th St. & Congress St.	AWS	7.9	7.2	A	A
11	Fogg St. & M St.	CSS	11.4	11.8	B	B
12	Bordwell Av. & La Cadena Dr./Laurel St.[3]	TS	18.8	14.6	B	B
13	Mt. Vernon Av. & Laurel St.	CSS	14.1	17.0	B	C
14	Mt. Vernon Av. & Colton Av.	TS	12.8	17.5	B	B
15	Mt. Vernon Av. & Fairway Dr.	TS	7.8	9.9	A	A
16	Mt. Vernon Av. & Valley Bl.[3]	TS	38.9	**59.5**	D	**E**
17	Mt. Vernon Av. & Washington St.	TS	20.7	21.4	C	C
18	Reche Canyon Rd. & Washington St.	TS	29.8	18.2	C	B

1 Per the Highway Capacity Manual (7th Edition), overall average intersection Delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

2 TS = Traffic Signal; CSS = Cross-street Stop

3 Due to the limitations of the Synchro software, HCM2000 report has been utilized for this intersection, as Synchro does not evaluate HCM2010 or HCM7 analysis of intersections with more than 4 approaches.

TABLE 3-2: EXISTING (2024) ROADWAY SEGMENT ANALYSIS

#	Roadway	Segment Limits	Jurisdiction	Roadway Section	LOS Capacity[1]	Existing (2024)		
						2024	V/C[2]	LOS[3]
1	Valley Blvd.	Eucalyptus Av. to Pepper Av.	Colton	4D	31,100	13,424	0.432	A
2	Rancho Av.	Citrus St. to Laurel St.	Colton	4U	31,100	14,236	0.458	A
3	Rancho Av.	Agua Mansa Rd. to Fogg St.	Colton	4D	31,100	14,172	0.456	A
4	La Cadena Dr.	Rancho Av. to Litton Av.	Colton	4D	31,100	24,318	0.782	C
5	La Cadena Dr.	M St. to O St.	Colton	4D	31,100	14,855	0.478	A
6	Colton Av.	10th St. to Mt. Vernon Av.	Colton	2U	14,600	5,393	0.369	A
7	Mt. Vernon Av.	Laurel St. to Colton Av.	Colton	4D	31,100	12,907	0.415	A
8	Mt. Vernon Av.	Fairway Dr. to Valley Blvd.	Colton	4D	31,100	11,550	0.371	A
9	Washington St.	Cooley Dr. to Reche Canyon Rd.	Colton	4D	31,100	20,459	0.658	B

[1] These maximum roadway capacities are based on the applicable agency's thresholds.

[2] V/C = Volume to Capacity Ratio

[3] LOS = Level of Service

3.9 PROJECT DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

3.9.1 Improvements To Address Deficiencies At Intersections

Improvement strategies have been recommended at intersections that have been identified as deficient under Existing (2024) traffic conditions in an effort to achieve an acceptable LOS. The effectiveness of the recommended improvement strategies to address Existing (2024) traffic deficiencies are presented in Table 3-3. Worksheets for Existing (2024) conditions, with improvements, HCM calculation worksheets are provided in Appendix 3.4.

3.9.2 Improvements To Address Deficiencies At Roadway Segments

No study roadway segments have been identified as deficient under Existing (2024) traffic conditions.

TABLE 3-3: EXISTING (2024) INTERSECTION ANALYSIS WITH IMPROVEMENTS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2]		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
4	Rancho Av. & Agua Mansa Rd.																	
	- Without Improvements	TS	1	2	0	1	2	0	0	1	1	0	1	0	51.0	**176.2**	D	**F**
	- With Improvements	TS	1	2	0	1	2	0	**1**	1	1	0	1	0	24.5	29.7	C	C
16	Mt. Vernon Av. & Valley Bl.																	
	- Without Improvements	TS	0	2	0	1	1	0	1	1	0	1	1	0	38.9	**59.5**	D	**E**
	- With Improvements	TS	0	2	0	1	1	0	1	1	**1**	1	1	0	34.0	54.1	C	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; **1** = Improvement

[2] Per the Highway Capacity Manual (7th Edition), overall average intersection Delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

[3] TS = Traffic Signal; CSS = Cross-Street Stop

4 HORIZON YEAR (2050) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Horizon Year (2050) conditions and the resulting intersection operations, traffic signal warrant, and roadway segment operations analyses.

4.1 VOLUME DEVELOPMENT FOR HORIZON YEAR

Traffic projections for Horizon Year (2050) Without Project and With Project conditions were derived from the SBTAM Version 3.2 maintained by the San Bernardino County Transportation Authority (SBCTA). To develop Horizon traffic forecast volumes in the vicinity of the 89.66 acres proposed to be rezoned as a part of the rezoning program to meet the RHNA shortfall, changes in population related to each proposed site were added to the SBTAM models and rerun to forecast the "With Project" scenario. To identify trips generated for use in the SBTAM, residential units do not require a conversion rate as they translate directly to dwelling units. Additional variables are used to further define the characteristics of the residential component, such as population per household, median income, etc. Residential based trips are calculated based on the trip rate for each dwelling unit and associated data. Based on the citywide land use data and the regional socioeconomic growth projections, Horizon trip activity is estimated and assigned to the roadway circulation system. Model output is post-processed based on established postprocessing methodologies. The post-processor applies the model's projected growth to each turning movement for both Horizon Year (2050) Without and With Project scenarios, forecasting a value that reflects Horizon growth.

The traffic forecasts reflect the area-wide growth anticipated between Existing (2024) conditions and Horizon Year (2050) traffic conditions. In most instances, the traffic model zone structure is not designed to provide accurate turning movements along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the Horizon Year (2050) peak hour forecasts were refined using the model derived long range forecasts, base (validation) year model forecasts, along with existing peak hour traffic count data collected at each analysis location in November 2024. The SBTAM has a base (validation) year of 2019 and a horizon (Horizon forecast) year of 2050. The difference in model volumes (2019-2050) defines the growth in traffic over the 31-year period.

The refined Horizon peak hour approach and departure volumes obtained from the model output data are then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program (NCHRP Report 765), along with initial estimates of turning movement proportions. A linear programming algorithm is used to calculate individual turning movements which match the known directional roadway segment forecast volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

The SBTAM uses an AM peak period-to-peak hour factor of 0.33 and a PM peak period-to-peak hour factor of 0.25. These factors represent the relationship of the highest single AM peak hour to the modeled 3-hour AM peak period, and the highest single PM peak hour to the modeled 4-hour PM peak period.

Typically, the model growth is prorated and is subsequently added to the existing (base validation) traffic volumes to represent Horizon Year traffic conditions. In an effort to conduct a conservative analysis, reductions to traffic forecasts from either Existing traffic conditions were not assumed as part of this analysis. As such, in conjunction with the addition of cumulative projects that are not

consistent with the General Plan, additional growth has also been applied on a movement-by-movement basis, where applicable, to estimate reasonable Horizon Year (2050) forecasts. Horizon estimated peak hour traffic data was used for intersections with an anticipated change in travel patterns to further refine the Horizon Year (2050) peak hour forecasts.

The Horizon Year (2050) Without Project and With Project peak hour turning movements were then reviewed by Urban Crossroads, Inc. for reasonableness, and in some cases, were adjusted to achieve flow conservation, reasonable growth, and reasonable diversion between parallel routes. Flow conservation checks ensure that traffic flow between two closely spaced intersections, such as two adjacent driveway locations, is verified in order to make certain that vehicles leaving one intersection are entering the adjacent intersection and that there is no unexplained loss of vehicles. The result of this traffic forecasting procedure is a series of traffic volumes which are suitable for traffic operations analysis. Post processing has been performed for the weekday AM and PM peak hours only as these are the only time periods where traffic model data was readily available. The post processed volumes for Horizon Year (2050) Without and With Project traffic conditions are provided in Appendices 4.1 and 4.2, respectively.

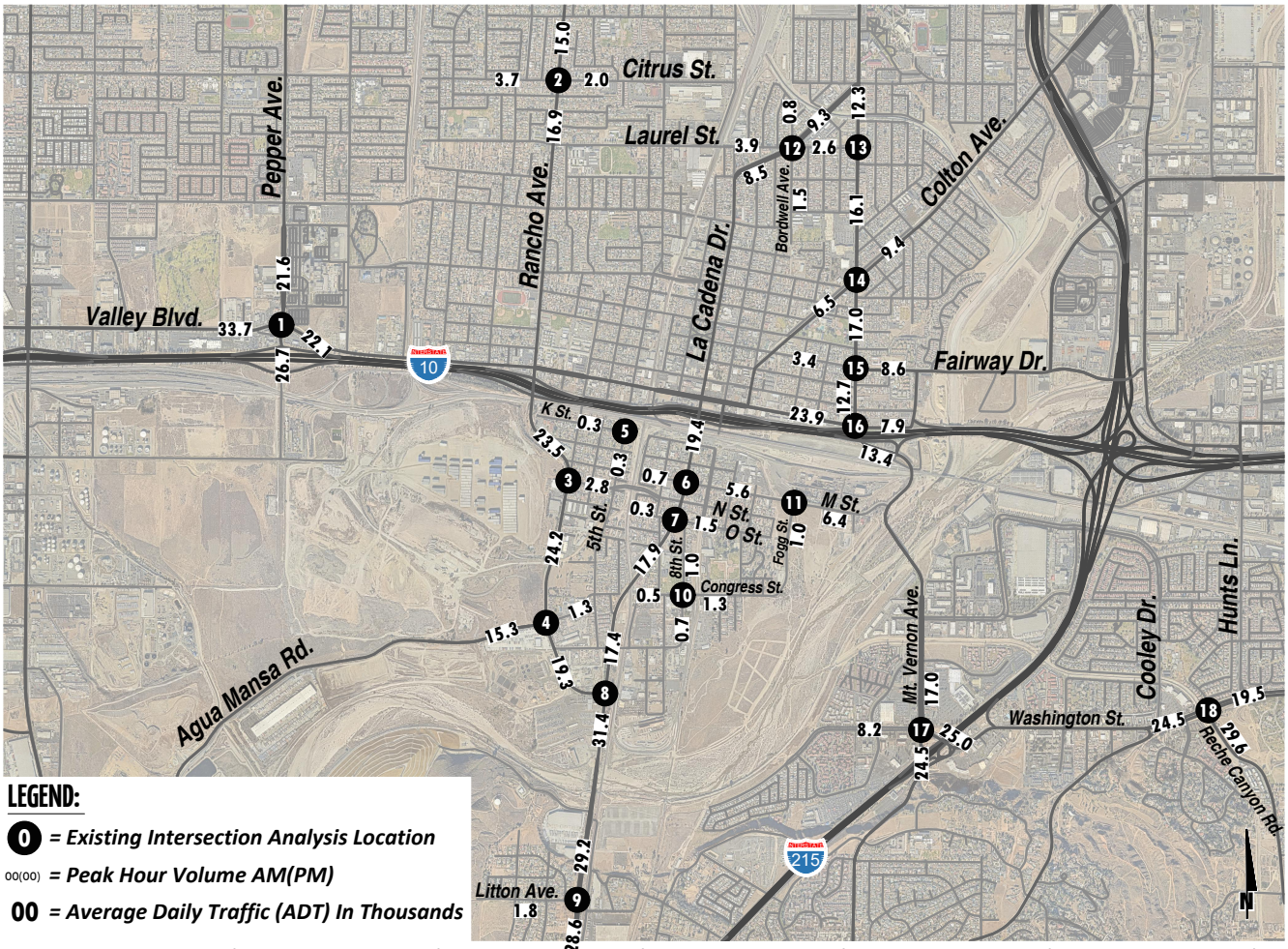
4.2 Without Project Growth Traffic Volume Forecasts

This scenario includes the refined post-process volumes obtained from the SBTAM (included in Appendix 4.1) and assumes the City's Currently Adopted General Plan land uses. The weekday ADT and AM/PM peak hour volumes which can be expected for Horizon Year (2050) Without Project traffic conditions are shown in Exhibit 4-1.

4.3 With Project Traffic Volume Forecasts

This scenario includes the refined post-process volumes obtained from the SBTAM, with changes to reflect the proposed Project (updated Housing Element sites) (included in Appendix 4.2). The weekday ADT and AM/PM peak hour volumes which can be expected for Horizon Year (2050) With Project traffic conditions are shown in Exhibit 4-2.

EXHIBIT 4-1 : HORIZON YEAR (2050) WITHOUT PROJECT TRAFFIC VOLUMES



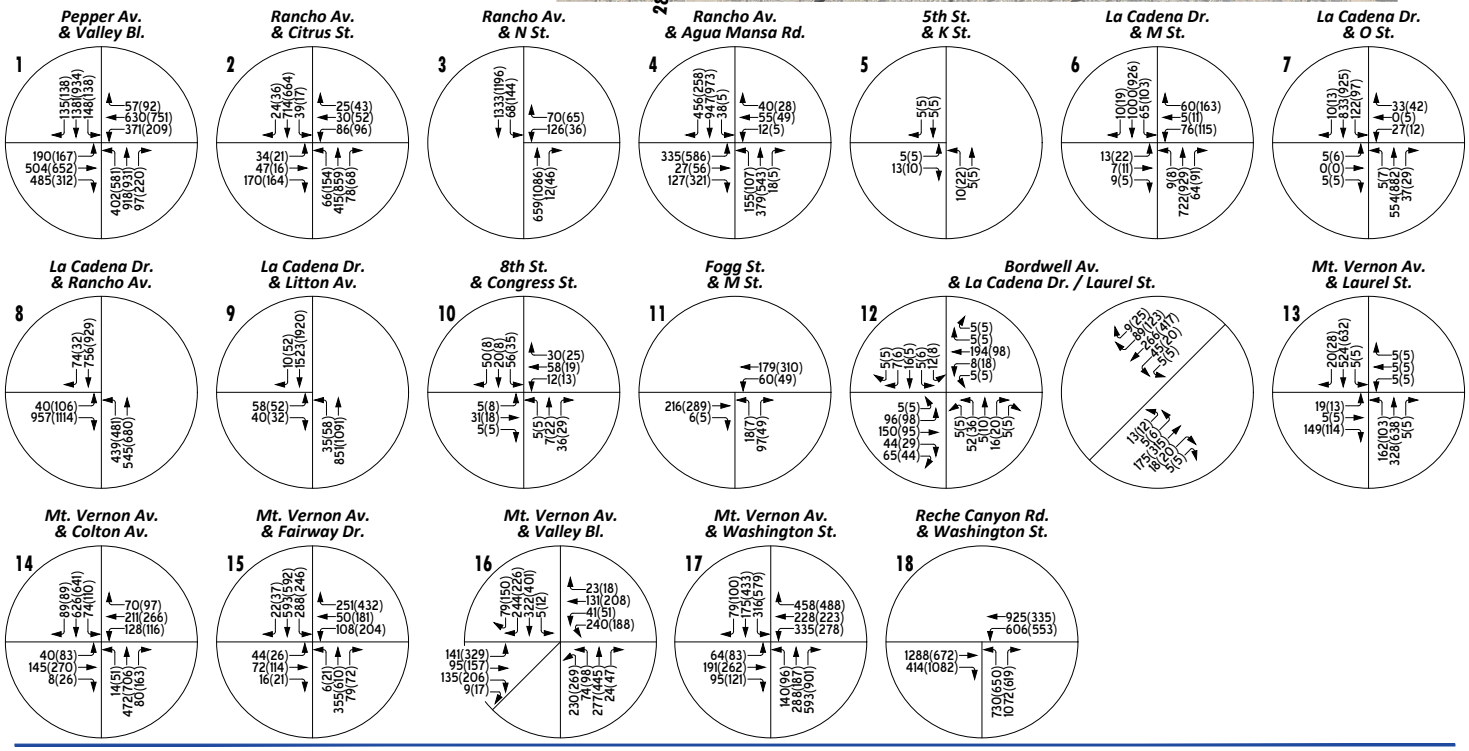
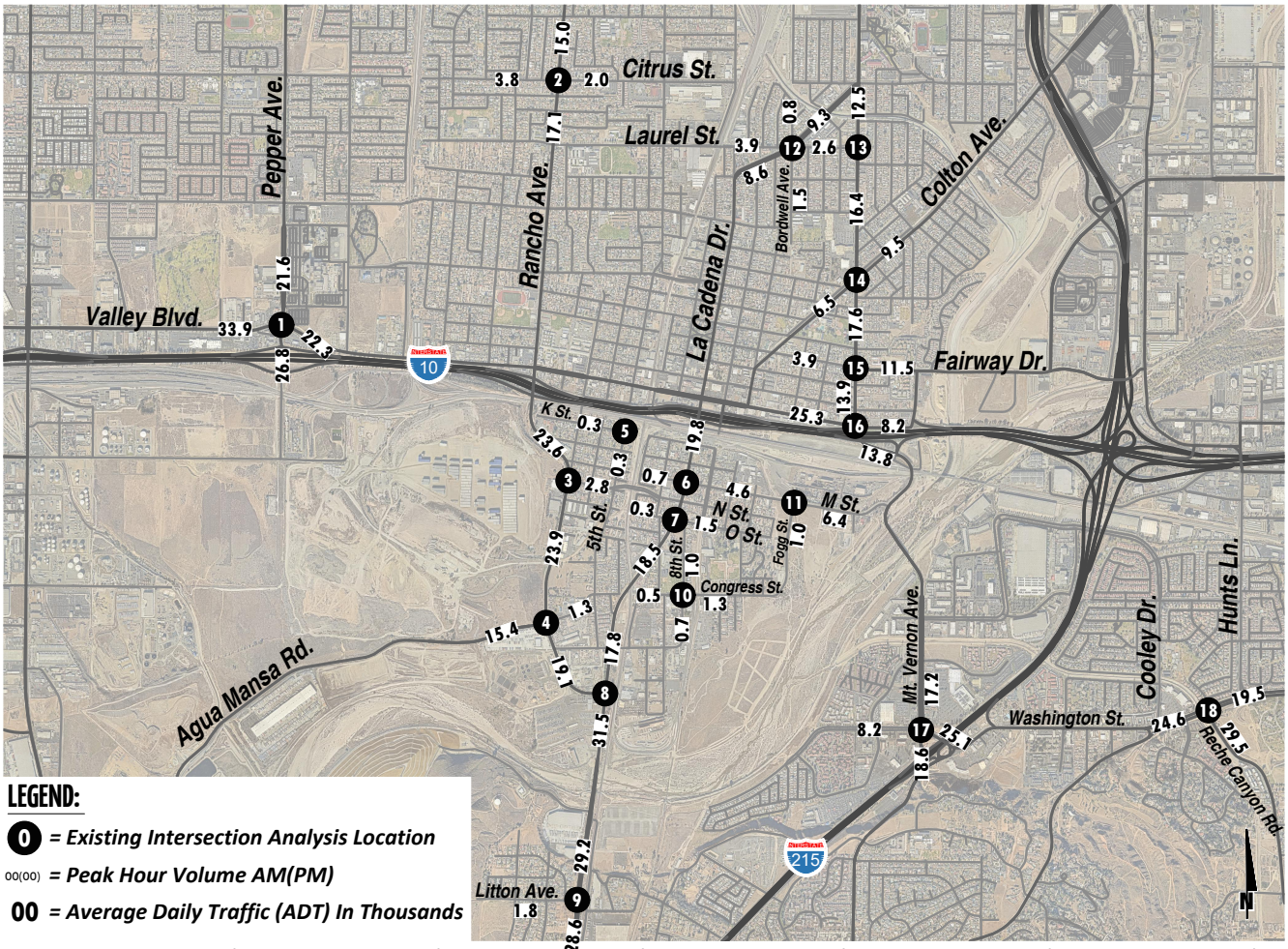
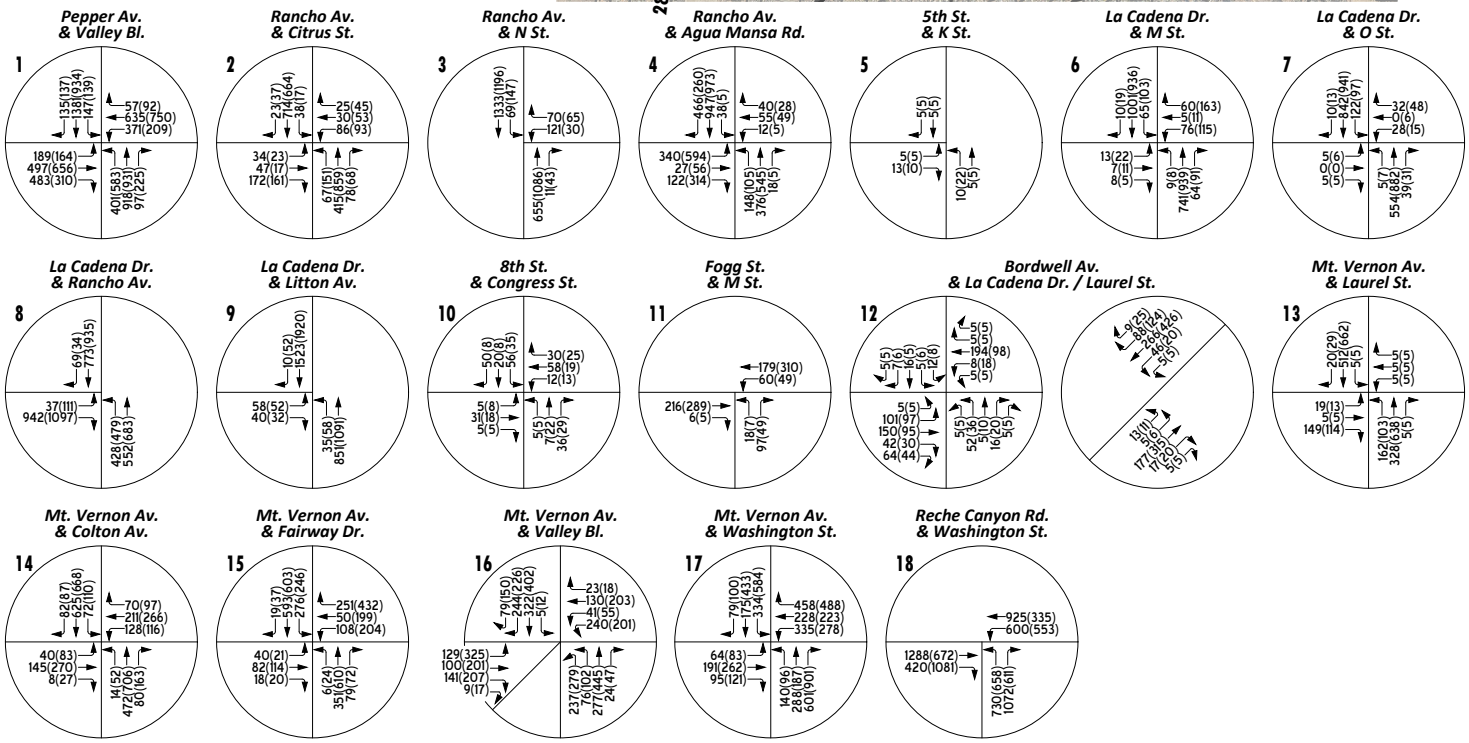


EXHIBIT 4-2 : HORIZON YEAR (2050) WITH PROJECT TRAFFIC VOLUMES





4.4 INTERSECTION OPERATIONS ANALYSIS

Horizon Year (2050) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies*. The intersection analysis results are summarized in Table 4-1 for Horizon Year (2050) traffic conditions.

4.4.1 Horizon Year (2050) Without Project Traffic Conditions

As shown in Table 4-1, the following study area intersections are anticipated to operate at an unacceptable LOS under Horizon Year (2050) Without Project traffic conditions:

- Rancho Avenue & N Street (#3) – LOS F AM peak hour, LOS E PM peak hour
- Rancho Avenue & Agua Mansa Road (#4) – LOS F AM and PM peak hours
- Mt. Vernon Avenue & Valley Boulevard (#16) – LOS E AM peak hour, LOS F PM peak hour

The intersection operations analysis worksheets for Horizon Year (2050) Without Project traffic conditions are included in Appendix 4.3.

4.4.2 Horizon Year (2050) With Project Traffic Conditions

The following intersections are anticipated to continue operating at an unacceptable LOS with the addition of Project traffic:

- Rancho Avenue & N Street (#3) – LOS F AM peak hour, LOS E PM peak hour
- Rancho Avenue & Agua Mansa Road (#4) – LOS F AM and PM peak hours
- Mt. Vernon Avenue & Valley Boulevard (#16) – LOS E AM peak hour, LOS F PM peak hour

The intersection operations analysis worksheets for Horizon Year (2050) With Project traffic conditions are included in Appendix 4.4.

4.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

4.5.1 Horizon Year (2050) Without Project Traffic Conditions

The traffic signal warrant analysis for Horizon Year (2050) traffic conditions are based on the peak hour volumes or planning level ADT volume-based traffic signal warrants. The following study area intersection is anticipated to meet a traffic signal warrant under Horizon Year (2050) Without Project traffic conditions (see Appendix 4.5):

- Rancho Avenue & N Street (#3)

4.5.2 Horizon Year (2050) With Project Traffic Conditions

With the addition of Project traffic, the following intersection is anticipated to meet a traffic signal warrant under Horizon Year (2050) With Project traffic conditions (see Appendix 4.6):

- La Cadena Drive & O Street (#7)

TABLE 4-1: HORIZON YEAR (2050) INTERSECTION ANALYSIS

#	Intersection	Traffic Control[2]	2050 Without Project				2050 With Project			
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Pepper Av. & Valley Bl.	TS	52.1	45.8	D	D	51.8	45.7	D	D
2	Rancho Av. & Citrus St.	TS	18.2	18.7	B	B	18.2	18.7	B	B
3	Rancho Av. & N St.	CSS	**>100**	**46.1**	**F**	**E**	**>100**	**44.0**	**F**	**E**
4	Rancho Av. & Agua Mansa Rd.	TS	**128.7**	**>200**	**F**	**F**	**128.0**	**>200**	**F**	**F**
5	5th St & K St.	CSS	8.6	8.7	A	A	8.6	8.7	A	A
6	La Cadena Dr. & M St.	TS	13.2	25.7	B	C	13.3	25.9	B	C
7	La Cadena Dr. & O St.	CSS	24.8	28.7	C	D	25.0	29.4	D	D
8	La Cadena Dr. & Rancho Av.	TS	43.7	54.5	D	D	41.5	53.7	D	D
9	La Cadena Dr. & Litton Av.	TS	9.5	33.8	A	C	9.5	35.0	A	C
10	8th St. & Congress St.	AWS	8.2	7.3	A	A	8.2	7.3	A	A
11	Fogg St. & M St.	CSS	12.1	12.6	B	B	12.1	12.6	B	B
12	Bordwell Av. & La Cadena Dr./Laurel St.[3]	TS	24.1	19.2	C	B	24.5	19.2	C	B
13	Mt. Vernon Av. & Laurel St.	CSS	18.2	18.1	C	C	18.0	18.3	C	C
14	Mt. Vernon Av. & Colton Av.	TS	14.1	20.5	B	C	14.0	20.5	B	C
15	Mt. Vernon Av. & Fairway Dr.	TS	8.5	12.0	A	B	8.5	12.0	A	B
16	Mt. Vernon Av. & Valley Bl.[3]	TS	**57.8**	**115.5**	**E**	**F**	**59.8**	**148.5**	**E**	**F**
17	Mt. Vernon Av. & Washington St.	TS	21.9	22.7	C	C	22.1	22.7	C	C
18	Reche Canyon Rd. & Washington St.	TS	44.1	27.1	D	C	43.6	27.2	D	C

1 Per the Highway Capacity Manual (7th Edition), overall average intersection Delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

2 TS = Traffic Signal; CSS = Cross-street Stop; **CSS** = Improvement

3 Due to the limitations of the Synchro software, HCM2000 report has been utilized for this intersection, as Synchro does not evaluate HCM2010 or HCM7 analysis of intersections with more than 4 approaches.

4.6 ROADWAY SEGMENT ANALYSIS

The roadway capacities utilized for the study area roadway segment analysis are obtained from the County of San Bernardino General Plan. (5) These roadway segment capacities are approximate figures only and are used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet traffic demand. Table 4-2 provides a summary of the Horizon Year (2050) conditions roadway segment capacity analysis. As shown in Table 4-2, the following study area roadway segments are anticipated to operate at an unacceptable LOS based on the daily roadway capacity thresholds and minimum LOS criteria under Horizon Year (2050) Without and With Project traffic conditions:

- Valley Boulevard, Eucalyptus Avenue to Pepper Avenue (#1) – LOS F
- La Cadena Drive, Rancho Avenue to Litton Avenue (#4) – LOS F

TABLE 4-2: HORIZON YEAR (2050) ROADWAY SEGMENT ANALYSIS

#	Roadway	Segment Limits	Jurisdiction	Roadway Section	LOS Capacity[1]	No Project			With Project			Change in V/C
						2050	V/C[2]	LOS[3]	2050	V/C[2]	LOS[3]	
1	Valley Blvd.	Eucalyptus Av. to Pepper Av.	Colton	4D	31,100	33,702	1.084	**F**	33,937	1.091	**F**	0.008
2	Rancho Av.	Citrus St. to Laurel St.	Colton	4U	31,100	16,942	0.545	A	17,083	0.549	A	0.005
3	Rancho Av.	Agua Mansa Rd. to Fogg St.	Colton	4D	31,100	19,092	0.614	B	19,271	0.620	B	0.006
4	La Cadena Dr.	Rancho Av. to Litton Av.	Colton	4D	31,100	31,375	1.009	**F**	31,511	1.013	**F**	0.004
5	La Cadena Dr.	M St. to O St.	Colton	4D	31,100	19,312	0.621	B	19,755	0.635	B	0.014
6	Colton Av.	10th St. to Mt. Vernon Av.	Colton	2U	14,600	6,458	0.442	A	6,471	0.443	A	0.001
7	Mt. Vernon Av.	Laurel St. to Colton Av.	Colton	4D	31,100	16,107	0.518	A	16,416	0.528	A	0.010
8	Mt. Vernon Av.	Fairway Dr. to Valley Blvd.	Colton	4D	31,100	12,739	0.410	A	13,859	0.446	A	0.036
9	Washington St.	Cooley Dr. to Reche Canyon Rd.	Colton	4D	31,100	24,542	0.789	C	24,550	0.789	C	0.000

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] These maximum roadway capacities are based on the applicable agency's thresholds.

[2] V/C = Volume to Capacity Ratio

[3] LOS = Level of Service

4.7 PROJECT DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

4.7.1 Recommended Improvements to Address Deficiencies at Intersections

The effectiveness of the recommended improvement strategies to address Horizon Year (2050) traffic deficiencies are presented in Table 4-3 to achieve an acceptable LOS. However, no further physical improvements can be recommended at Mt. Vernon Avenue & Valley Boulevard (#16) due to existing buildings and roadways built along the intersection. Worksheets for Horizon Year (2050) With Project conditions, with improvements, HCM calculation worksheets are provided in Appendix 4.7.

4.7.2 Recommended Improvements to Address Deficiencies at Roadway Segments

Consistent with the City of Colton General Plan, roadway segment widening has been recommended at deficient roadway segments. The roadway segment improvements are summarized in Table 4-4 for Horizon Year (2050) traffic conditions to achieve an acceptable LOS. It should be noted that under the City of Colton General Plan, major arterials can accommodate six travel lanes if no street parking is allowed.

TABLE 4-3: HORIZON YEAR (2050) INTERSECTION ANALYSIS WITH IMPROVEMENTS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2]		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
3	Rancho Av. & N St.																	
	- With Project, Without Improvements	CSS	0	2	0	1	1	0	0	0	0	1	0	1	**>100**	**44.0**	**F**	**E**
	-With Project, With Improvements	**TS**	0	2	0	1	1	0	0	0	0	1	0	1	23.9	5.1	C	A
4	Rancho Av. & Agua Mansa Rd.																	
	- With Project, Without Improvements	TS	1	2	0	1	2	0	0	1	1	0	1	0	**128.0**	**>200**	**F**	**F**
	-With Project, With Improvements	TS	1	2	0	1	2	0	**1**	1	1	0	1	0	53.9	45.4	D	D
16	Mt. Vernon Av. & Valley Bl.																	
	- With Project, Without Improvements	TS	0	2	0	1	1	0	1	1	0	1	1	0	**59.8**	**148.5**	**E**	**F**
	-With Project, With Improvements[4]	TS	0	2	0	1	1	0	1	1	**1**	1	1	0	46.9	**118.0**	D	**F**

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; **1** = Improvement

[2] Per the Highway Capacity Manual (7th Edition), overall average intersection Delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

[3] TS = Traffic Signal; CSS = Cross-Street Stop; **TS** = Improvement

[4] No further physical improvements can be recommended due to existing roadways and buildings along the intersection.

TABLE 4-4: HORIZON YEAR (2050) ROADWAY SEGMENT ANALYSIS WITH IMPROVEMENTS

#	Roadway	Segment Limits	Jurisdiction	Roadway Section	LOS Capacity[1]	No Project			With Project			Change in V/C
						2050	V/C[2]	LOS[3]	2050	V/C[2]	LOS[3]	
1	Valley Blvd.	Eucalyptus Av. to Pepper Av.	Colton	6D[4]	46,800	33,702	0.720	C	33,937	0.725	C	0.005
4	La Cadena Dr.	Rancho Av. to Litton Av.	Colton	6D[4]	46,800	31,375	0.670	B	31,511	0.673	B	0.003

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] These maximum roadway capacities are based on the applicable agency's thresholds.

[2] V/C = Volume to Capacity Ratio

[3] LOS = Level of Service

[4] Roadway segment widening needed to achieve LOS requirement, but consistent with the City's General Plan.

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5 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements within the City of Colton are funded through a combination of improvements constructed by the City, those constructed by private development, and those funded through local and regional development impact fee programs. Fee programs applicable to the Project are described below.

5.1 CITY OF COLTON DEVELOPMENT IMPACT FEE (DIF) PROGRAM

The City of Colton adopted the latest update to their DIF program in February 2020. (7) Fees from new residential, commercial, and industrial development are collected to fund compliant regional facilities as well as local facilities. Under the City's DIF program, the City may grant developers a credit against specific components of fees when those developers construct certain facilities and landscaped medians identified in the list of improvements funded by the DIF program.

After the City's DIF are collected, they are placed in a separate restricted use account pursuant to the requirements of Government Code sections 66000 et seq. The timing to use the DIF is established through periodic capital improvement programs which are overseen by the City's Public Works Department.

5.2 MEASURE "I" FUNDS

In 2004, the voters of San Bernardino County approved the 30-year extension of Measure "I", a one-half of one percent sales tax on retail transactions, through the year 2040, for transportation projects including, but not limited to, infrastructure improvements, commuter rail, public transit, and other identified improvements. The Measure "I" extension requires that a regional traffic impact fee be created to ensure development is paying its fair share. A regional Nexus study was prepared by the San Bernardino County Transportation Authority (SBCTA) and concluded that each jurisdiction should include a regional fee component in their local programs in order to meet the Measure "I" requirement. The regional component assigns specific facilities and cost sharing formulas to each jurisdiction and was most recently updated in March 2019. Revenues collected through these programs are used in tandem with the City's DIF funds to deliver projects identified in the Nexus Study. While Measure "I" is a self-executing sales tax administered by SBCTA, it bears discussion here because the funds raised through Measure "I" have funded in the past and will continue to fund new transportation facilities in San Bernardino County.

5.3 FAIR SHARE CONTRIBUTION

Improvements constructed by implementing projects may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward Horizon Year improvements or a combination of these approaches. Improvements constructed by future development (an implementing project) may be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the City's discretion).

When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements.

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6 VEHICLE MILES TRAVELED

The Vehicle Miles Traveled (VMT) report has been prepared under a separate cover.

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7 REFERENCES

1. *VMT (Vehicles Miles Traveled) Guidelines.* **City of Colton.** June 2, 2020.
2. **San Bernardino Associated Governments.** *Congestion Management Program for County of San Bernardino.* County of San Bernardino : s.n., Updated June 2023.
3. **Transportation Research Board.** *Highway Capacity Manual (HCM).* 7th Edition. s.l. : National Academy of Sciences, 2022.
4. **California Department of Transportation.** California Manual on Uniform Traffic Control Devices (CA MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CA MUTCD).* 2014, Updated Janaury 11, 2024 (Revision 8).
5. *Countywide Plan.* **San Bernardino County.** October, 2020.
6. *Impact Fee Summary.* **City of Colton.** February 2020.

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8 CERTIFICATION

The contents of this Traffic Analysis represent an accurate depiction of the transportation environment and deficiencies associated with the proposed Colton Housing Element Project. The information contained in this Traffic Analysis is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 861-0177.

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