



MEMORANDUM

To: Tony Rozzi
Principal Planner
City of South San Francisco/Planning Division

From: Ben Huie, P.E.
Kimley-Horn and Associates, Inc.

Date: October 10, 2019

Subject: El Camino Real / Chestnut Plan Area 2019 Update Traffic Study

The South San Francisco PUC (SFPUC) Site is a proposed mixed-use development within the El Camino Real / Chestnut Specific Plan Area in South San Francisco, California. Kimley-Horn conducted a traffic study for the El Camino Real / Chestnut 2016 Area Plan (2016 Specific Plan) dated April 2017. This Plan was reviewed to determine if the proposed SFPUC update would result in any new impacts. This memorandum summarizes the methodology and results of the study.

BACKGROUND

El Camino Real / Chestnut Area Plan

The El Camino Real / Chestnut Area Plan is located west of the downtown area in South San Francisco. In 2011, the City certified the Environmental Impact Report (EIR), which analyzed and identified any potential traffic impacts from implementing the Area Plan. In 2017, the City made amendments to the Area Plan to incorporate a Community Civic Center. The impacts of the amendments were analyzed in a supplemental EIR (SEIR).

SFPUC Site

The SFPUC site is a mixed-use development which consists of 800 residential units, 12,992 square feet of commercial space, and 8,307 square feet of child care facility. The SFPUC would replace the residential and retail uses on Blocks A, B, and C of the Area Plan. The project will signalize the intersection of Mission Road and Oak Avenue and coordinate it with the intersection of Oak Avenue and Antoinette Lane. The project will also restripe the intersection of El Camino Real and McLellan Drive on the eastbound approach to be one left turn lane and one shared through-right turn lane and the westbound approach to be one left turn lane, one shared through-right turn lane, and one right turn lane, as well as modify the eastbound and westbound approaches from split phasing to protected left turn phasing and optimize the signal timing. The site plan for the project, provided by BAR Architects, is shown in **Attachment A**.

Study Area

The traffic analysis determined potential impacts of the project based on standards and methodology set forth by the City of South San Francisco and City/County Association of Governments of San Mateo

(C/CAG). The study area for the traffic study is the same as the previous studies which consisted of the following 12 intersections:

1. El Camino Real/Hickey Boulevard
2. El Camino Real/McLellan Boulevard
3. El Camino Real/Arroyo Drive
4. El Camino Real/Chestnut Avenue
5. El Camino Real/Orange Avenue
6. Mission Road/Grand Avenue
7. Chestnut Avenue/Grand Avenue
8. Mission Road/Oak Avenue
9. Mission Road/Chestnut Avenue
10. Junipero Serra Boulevard/Arroyo Drive
11. Westborough Boulevard/I-280 SB Off Ramp
12. Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard

In addition, the following freeway segments along I-280 were analyzed:

1. Northbound I-280 from Avalon Drive to Westborough Boulevard
2. Northbound I-280 from Westborough Boulevard to Hickey Boulevard
3. Southbound I-280 from Hickey Boulevard to Westborough Boulevard
4. Southbound I-280 from Westborough Boulevard to Avalon Drive

The study area is shown in **Attachment B**.

Analysis Scenarios

The traffic study analyzed the study area intersections and freeway segments for the AM and PM peak hours under the following scenarios:

- **Existing 2019 Specific Plan SFPUC Update:** Assumed Existing traffic volumes from the 2016 Specific Plan and an update to incorporate the SFPUC site to replace blocks A, B, and C. The project will signalize the intersection of Mission Road and Oak Avenue as part of the project. The project will also restripe the intersection of El Camino Real and McLellan Drive on the eastbound approach to be one left turn lane and one shared through-right turn lane and the westbound approach to be one left turn lane, one shared through-right turn lane, and one right turn lane, as well as modify the eastbound and westbound approaches from split phasing to protected left turn phasing, and optimize the signal timing as part of the project.
- **Cumulative 2019 Specific Plan SFPUC Update:** Assumed Cumulative traffic volumes from the 2016 Specific Plan with an update to incorporate the SFPUC site to replace blocks A, B, and C. Cumulative traffic volumes were redistributed to assume that the Oak Avenue extension would not be fully constructed, but would only extend to Antoinette Lane and would provide access to Blocks B and C.

Methodology and Significant Criteria

Consistent with the 2016 Specific Plan, potential project impacts at the study intersections were identified based on the level of service (LOS) methodology defined in the *Highway Capacity Manual 2000* (HCM 2000) within *Traffix* software. Impacts at freeway segments were identified based on the LOS methodology defined in HCM 2000.

The City of South San Francisco requires that LOS D be maintained for intersections during the AM and PM peak periods. A project would be considered to have a significant impact if the trips generated by the project would cause the intersection to operate at a level of service that does not meet the City standard. If the existing intersection currently meets the City LOS standard, a project would also be considered to have a significant impact if the cumulative scenario showed that the combination of the project traffic and future cumulative traffic would result in the intersection not meeting the City LOS standard and the proposed project traffic increased the average control delay for the intersection by four seconds or more. If the existing intersection operations do not meet the current City LOS standard, the project is considered to have an impact if the trips generated by the project would add any additional traffic to that intersection.

The San Mateo County Congestion Management Program (CMP) sets the LOS standards for the freeways within the County, including the segments analyzed as part of this study. The CMP states that the LOS standard for I-280 within the study is LOS D. For freeway segments, a project is considered to have a significant impact if the trips generated by the project would cause a freeway segment to operate at a level of service that does not meet the CMP standard. If the freeway segment does not currently meet the CMP standard, the project is considered to have a significant impact if the trips generated by the project add one percent or more of the freeway capacity or the volume to capacity ratio increases by one percent. The project will also cause an impact if the future cumulative analysis shows that the addition of background traffic and project traffic would result in the freeway segment not meeting the CMP standard and the project traffic increases demand on the freeway by one percent or the volume to capacity ratio increases by one percent.

None of the study area intersections are listed in the San Mateo County (CMP). However, the freeway segments analyzed along I-280 as part of the study are included in the CMP.

PREVIOUS 2016 SPECIFIC PLAN UPDATE SUMMARY

As mentioned above, the 2016 Specific Plan was analyzed to update the Specific Plan and incorporate the Community Civic Center. A summary of the significant impacts and mitigations for the Existing and Cumulative Scenario with the 2016 Specific Plan Update is summarized in **Table 1**. A detailed analysis can be found in the traffic study for the El Camino Real / Chestnut Area Plan Update dated April 2017.

Table 1: 2016 Specific Plan Intersection Impact and Mitigation Summary

Int #	Intersection	Peak Hour	Impact?	Mitigation
Existing				
1	El Camino Real/Hickey Boulevard	AM	Yes	Add EBR Overlap
		PM		
4	El Camino Real/Chestnut Avenue	AM	Yes	Optimize Signal Timing
		PM		
12	Westborough Boulevard/I-280 NB On-ramp/Junipero Serra Boulevard	AM	Yes	Optimize Signal Timing; Change SB to be left, shared left-thru, thru, and right; Add EBL lane; Add WBL Lane
		PM		
Cumulative				
1	El Camino Real/Hickey Boulevard	AM	Yes	Add EBR overlap
		PM	Yes	
2	El Camino Real / McLellan Boulevard	AM	Yes	Restripe EB to be left and shared thru right; Restripe WB to be left, shared thru-right and right; Remove Split Phasing
4	El Camino Real/Chestnut Avenue	AM	Yes	Add EBL lane; Add EBR overlap; Optimize Cycle Length
		PM	Yes	
5	El Camino Real / Orange Avenue	AM	Yes	Add a SBL lane
		PM	Yes	
8	Mission Road / Oak Avenue	AM	Yes	Restripe EB to be left and shared thru-right; Restripe WB to be left and shared thru-right; Add TWLTL
12	Westborough Boulevard/I-280 NB On-ramp/Junipero Serra Boulevard	AM	Yes	Optimize Signal Timing; Change SB to be left, shared left-thru, thru, and right; Add EBL lane; Add WBL Lane
		PM	Yes	

2019 SPECIFIC PLAN SFPUC UPDATE

The 2019 Specific Plan SFPUC Update will replace the 556 residential units and 11,500 SF of retail in Blocks A, B, and C of the 2016 Specific Plan with the following:

- 800 residential units
- 12,992 SF of commercial space
- 8,307 SF of child care facility

As part of the 2019 Plan Update, the Oak Avenue extension will be partially built to provide vehicular access to the residential units and the commercial space in Blocks B and C. However, the Oak Avenue extension will not connect to El Camino Real. The project will signalize the intersection of Mission Road and Oak Avenue and coordinate it with the intersection of Oak Avenue and Antoinette Lane. The project will also restripe the intersection of El Camino Real and McLellan Drive on the eastbound approach to be one left turn lane and one shared through-right turn lane and the westbound approach to be one left turn lane, one shared through-right turn lane, and one right turn lane, as well as modify the eastbound and westbound approaches from split phasing to protected left turn phasing, and optimize the signal timing.

Trip Generation

The Institute of Transportation Engineer's (ITE) Trip Generation Manual, 10th Edition¹, was used to estimate daily and peak hour trip generation that can be attributed to the proposed SFPUC development. It should be noted that the previous traffic study used the ITE Trip Generation, 9th Edition, which had slightly different trip rates for some of the land uses.

Trips generated by the residential units were based on the average rate for ITE Land Use 221 (Multifamily Housing (Mid-Rise)). Trips generated by the child care facility and commercial space were based on the average rate for ITE Land Use 565 (Day Care Center) and ITE Land Use 820 (Shopping Center), respectively.

Trip Reductions

Internal capture reductions were considered for each of the SFPUC sites on Blocks A, B, and C and were calculated based on the ITE's *Trip Generation Handbook*, 3rd Edition². Similar to the previous 2016 Specific Plan Update, a 15 percent transit trip reduction for residential land uses and a 5 percent transit reduction for retail uses were taken due to the close proximity of the South San Francisco BART station. Based on the City's Municipal Code requirement, new developments are required to implement a transportation demand (TDM) program to ensure that a minimum of 28 percent of the trips are made by transit, bicycling, or walking. Therefore, each development within the SFPUC site was reduced by a total of 28 percent to account for TDM reductions and includes the transit reduction mentioned above. Pass-by trips were also considered for the commercial retail based on pass-by rates for the ITE Land Use 820 (Shopping Center) in the Trip Generation Handbook.

Land Use Allocation

The Specific Plan allows for a total of 1,231 residential units and the SFPUC site is proposing 800 residential units in Blocks A, B, and C, with a net increase of 244 units. Therefore, the residential units within the remaining blocks will need to be reduced to stay within the maximum allowable units. In addition, an additional 70 units are assumed to be built in Block I as part of the 988 El Camino Real Mixed-Use Development. Therefore, a total of 314 units will need to be removed from the remaining blocks. All 305 residential units were removed from the Outside Focus Area and nine (9) residential units were removed from Block H for a total of 314 units. The same approach was applied for the proposed retail and day care center. Since the SFPUC site is increasing the commercial land use in Blocks A, B, and C by 9,799 SF, this equivalent amount of retail was removed from the retail land use within the Outside Focus Area. It should be noted that the residential units and retail were removed from Block H and the Outside Focus Area for traffic modeling purposes to estimate the potential impacts of the new land use assumptions. The actual redistribution of the remaining allowable units will be determined and analyzed when future projects are proposed.

¹ *Trip Generation, 10th Edition*, Institute of Transportation Engineers, 2017.

² *Trip Generation Handbook, 3rd Edition*, Institute of Transportation Engineers, 2017.

The total trip generation for the 2019 Specific Plan SFPUC Update is shown in **Table 2**. The land use and trip comparison for each development block between the 2016 Specific Plan Update and 2019 Specific Plan SFPUC Update is shown in **Table 3**.

Table 2: Project Trip Generation by Development Block

Land Use Designation	# of Units	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
Block A								
Multifamily Housing	566 units	2218	38	109	147	108	71	179
Day Care Center	8,307 SF	285	34	32	66	31	35	66
Blocks B & C								
Retail	12,992 SF	354	5	4	9	12	10	22
Multifamily Housing	234 units	917	16	45	61	45	29	74
Blocks D & E								
Retail – Block E	-24,260 SF	-694	-9	-6	-15	-14	-16	-30
Office – Block E	44,500 SF	354	44	6	50	8	40	48
Blocks F & G								
Library – Block F	50,000 SF	2025	27	11	38	126	137	263
Rec Center – Block G	43,500 SF	2831	0	60	60	0	181	181
Blocks H, I, & J								
Retail – Block H	-8,530 SF	-348	-5	-3	-8	-8	-11	-19
Townhomes – Block H	29 Units	122	1	8	9	7	4	11
Apartments – Block H	185 Units	887	14	54	68	54	29	83
Apartments – Block I	172 Units	824	13	51	64	50	27	77
Apartments – Block J	36 Units	173	3	10	13	10	6	16
Townhomes – Block J	9 Units	39	1	2	3	2	1	3
Outside Focus Area								
Retail	51,901 SF	847	12	8	20	36	38	74
Rec Center	-31,120 SF	-1001	-40	-21	-61	-40	-41	-81
Office	-31,720 SF	-413	-50	-7	-57	-14	-71	-85
Total Trip Generation		9420	104	363	467	413	469	882

Table 3: 2016 Specific Plan and 2019 Specific Plan Project Trip Generation Comparison

Land Use Designation	2016 Specific Plan			2019 Specific Plan with SFPUC		
	# of Units	AM Trips	PM Trips	# of Units	AM Trips	PM Trips
Block A						
Townhomes	39 units	12	14	566 units	147	179
Apartments	380 units	140	170			
Day Care Center	-	-	-	8,307 SF	66	66
Blocks B & C						
Apartments – Block B	43 units	16	19	234 units	61	74
Townhomes – Block C	19 units	6	7			
Apartments – Block C	75 units	27	34			
Retail – Block C	11,500 SF	8	19	12,992 SF	9	22
Blocks D & E						
Retail – Block E	-24,260 SF	-15	-30	-24,260 SF	-15	-30
Office – Block E	44,500 SF	50	48	44,500 SF	50	48
Blocks F & G						
Library – Block F	50,000 SF	38	263	50,000 SF	38	263
Rec Center – Block G	43,500 SF	60	181	43,500 SF	60	181
Blocks H, I, & J						
Retail – Block H	-8,530 SF	-8	-19	-8,530 SF	-8	-19
Townhomes – Block H	29 units	9	11	29 Units	9	11
Apartments – Block H	194 units	71	86	185 Units	68	83
Apartments – Block I	102 units	37	45	172 Units	64	77
Apartments – Block J	36 units	13	16	36 Units	13	16
Townhomes – Block J	9 units	3	3	9 Units	3	3
Outside Focus Area						
Apartments	305 units	112	136	-	-	-
Retail	61,700 SF	24	101	51,901 SF	20	74
Rec Center	-31,120 SF	-61	-81	-31,120 SF	-61	-81
Office	-31,720 SF	-57	-85	-31,720 SF	-57	-85
Total Trip Generation	-	485	938	-	467	882

Trip Distribution and Assignment

Project trip distribution for all Blocks were based on trip distribution from 2016 SEIR which is shown in **Attachment C**. The net project trips were assigned to the study intersection as shown in **Attachment D**.

Existing Specific Plan 2019 SFPUC Update

Traffic operations were evaluated at the study intersections for the 2019 Specific Plan SFPUC Update under Existing Conditions. Turning movement volumes from the 2019 Specific Plan Existing Conditions are shown in **Attachment E**.

Results of the intersection level of service analysis are presented in **Table 4**, with Traffix outputs in **Attachment G**. All study intersections function within acceptable LOS standards under this analysis scenario, except the following intersections:

- Intersection #1 – El Camino Real / Hickey Boulevard (AM and PM Peak Hours)
 - **Significant Impact**, similar to 2016 SEIR
- Intersection #4 – El Camino Real / Chestnut Avenue (AM and PM Peak Hours)
 - **Significant Impact**, similar to 2016 SEIR
- Intersection #10 – Junipero Serra Boulevard / Arroyo Drive (AM and PM Peak Hours)
 - Not a significant impact, similar to 2016 SEIR
- Intersection #12 – Westborough Boulevard / I-280 NB On-Ramp/Junipero Serra Boulevard (AM and PM Peak Hour)
 - **Significant Impact**, similar to 2016 SEIR

Results of the freeway analysis are presented in **Table 5**. All study freeway segments function within acceptable LOS standards under this analysis scenario, except the following freeway segments:

- Northbound I-280 from Avalon Drive to Westborough Boulevard (PM Peak Hour)
 - Not a significant Impact, similar to 2016 SEIR
- Northbound I-280 from Westborough Boulevard to Hickey Boulevard (PM Peak Hour)
 - Not a significant Impact, similar to 2016 SEIR
- Southbound I-280 from Hickey Boulevard to Westborough Boulevard (PM Peak Hour)
 - Not a significant Impact, similar to 2016 SEIR
- Southbound I-280 from Westborough Boulevard to Avalon Drive (AM Peak Hour)
 - Not a significant Impact, similar to 2016 SEIR

Although each freeway segment operates at a deficient LOS in either the AM peak hour or the PM peak hour, the 2019 Specific Plan SFPUC Update adds less than one percent of the freeway capacity and the volume to capacity ratio increases by less than one percent. Therefore, the 2019 Specific Plan SFPUC Update does not significantly impact the freeway segments.

Table 4: Existing Condition Intersection Level of Service Summary

#	Intersection	LOS Criteria	Control	Existing (2016) + 2019 Specific Plan SFPUC					
				AM Peak			PM Peak		
				LOS	Delay	Var	LOS	Delay	Var
1	El Camino Real/Hickey Boulevard	D	Signal	E	58.2	4.8	F	84.0	25.1
2	El Camino Real/McLellan Boulevard	D	Signal	C	30.6	-1.2	C	27.5	-7.5
3	El Camino Real/Arroyo Drive/Oak Extension	D	Signal	C	24.9	-0.6	C	21.7	1.2
4	El Camino Real/Chestnut Avenue	D	Signal	E	60.8	4.1	E	58.0	5.6
5	El Camino Real/Orange Avenue	D	Signal	D	36.9	0.1	D	40.8	0.1
6	Mission Road/Grand Avenue	D	AWSC	B	14.7	1.8	C	15.2	2.2
7	Chestnut Avenue/Grand Avenue	D	Signal	C	32.3	0.1	C	31.4	0.2
8	Mission Road/Oak Avenue	D	Signal	B	10.2	7.9	A	6.7	5.7
9	Mission Road/Chestnut Avenue	D	Signal	C	30.3	3.6	C	30.2	3.8
10	Junipero Serra Boulevard/Arroyo Drive	D	SSSC	B	11.5	0.0	A	3.8	0.0
	<i>Worst Approach</i>			F	99.7	0.0	E	39.2	0.0
11	Westborough Boulevard/I-280 SB Off Ramp	D	Signal	A	5.5	0.2	B	10.5	0.7
12	Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard	D	Signal	F	95.9	10.3	E	64.8	9.9

Note: Intersections that are operating below acceptable levels are shown in **BOLD** and significant impacts are highlighted.

Table 5: Existing Condition Freeway Segment Level of Service Summary

Freeway Segment	Capacity per Lane	# of Lanes	Total Capacity	Speed Limit	Free Flow Speed	LOS Standard	Existing (2016) + 2019 Specific Plan SFPUC Update							
							AM Peak Hour				PM Peak Hour			
							Volume (veh/hr)	LOS	V/C	Δ	Volume (veh/hr)	LOS	V/C	Δ
I-280 NB from Avalon to Westborough	2,200	4	8,800	70	65	D	6,279	D	0.714	0.001	8,073	E	0.917	0.005
I-280 NB from Westborough to Hickey	2,200	4	8,800	70	65	D	7,611	D	0.865	0.004	8,774	E	0.997	0.005
I-280 SB from Hickey to Westborough	2,200	4	8,800	70	65	D	7,189	D	0.817	0.001	8,114	E	0.922	0.005
I-280 SB from Westborough to Avalon	2,200	4	8,800	70	65	D	7,912	E	0.899	0.004	7,381	D	0.839	0.005

Cumulative Specific Plan 2019 SFPUC Update

Traffic operations were evaluated at the study intersections for the 2019 Specific Plan SFPUC Update under Cumulative Conditions. Turning movement volumes for the 2019 Specific Plan SFPUC Cumulative Conditions are shown in **Attachment F**.

Results of the intersection level of service analysis are presented in **Table 6**, with Traffix outputs in **Attachment G**. All study intersections function within acceptable LOS standards under this analysis scenario, except the following intersections:

- Intersection #1 – El Camino Real / Hickey Boulevard (AM and PM Peak Hours)
 - o **Significant Impact**, similar to 2016 SEIR
- Intersection #4 – El Camino Real / Chestnut Avenue (AM and PM Peak Hours)
 - o **Significant Impact**, similar to 2016 SEIR
- Intersection #5 – El Camino Real / Orange Avenue (AM and PM Peak Hours)
 - o **Significant Impact**, similar to 2016 SEIR
- Intersection #10 – Junipero Serra Boulevard / Arroyo Drive (AM and PM Peak Hours)
 - o Not a significant impact
- Intersection #12 – Westborough Boulevard / I-280 NB On-Ramp/Junipero Serra Boulevard (AM and PM Peak Hours)
 - o **Significant Impact**, similar to 2016 SEIR

Results of the freeway analysis are presented in **Table 7**. All study freeway segments function within acceptable LOS standards under this analysis scenario.

The intersection of El Camino Real and McLellan Boulevard (Intersection #2) is no longer a significant impact and will operate at an acceptable LOS in the AM peak hour as compared to the 2016 Specific Plan Update since the project proposes to modify the lane geometry and signal timing at this intersection as part of the project.

Table 6: Cumulative Condition Intersection Level of Service Summary

#	Intersection	LOS Criteria	Control	Cumulative (2030) + 2019 Specific Plan SFPUC Update					
				AM Peak			PM Peak		
				LOS	Delay	Var	LOS	Delay	Var
1	El Camino Real/Hickey Boulevard	D	Signal	F	164.4	11.4	F	210.8	32.2
2	El Camino Real/McLellan Boulevard	D	Signal	D	52.9	-19.7	D	43.1	-2.1
3	El Camino Real/Arroyo Drive/Oak Extension	D	Signal	C	27.3	-0.4	C	24.5	2.1
4	El Camino Real/Chestnut Avenue	D	Signal	F	140.2	13.8	F	122.7	24.2
5	El Camino Real/Orange Avenue	D	Signal	E	72.3	3.3	F	109.6	4.1
6	Mission Road/Grand Avenue	D	AWSC	D	28.5	6.1	D	32.4	9.3
7	Chestnut Avenue/Grand Avenue	D	Signal	D	50.7	1.0	D	43.4	1.3
8	Mission Road/Oak Avenue	D	Signal	B	11.1	7.2	A	6.9	5.8
9	Mission Road/Chestnut Avenue	D	Signal	D	40.2	7.7	D	40.3	8.5
10	Junipero Serra Boulevard/Arroyo Drive	D	SSSC	F	76.5	0.0	D	28.9	0.0
	<i>Worst Approach</i>			F	674.1	0.0	F	322.7	0.0
11	Westborough Boulevard/I-280 SB Off Ramp	D	Signal	B	11.0	0.4	D	48.3	6.4
12	Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard	D	Signal	F	277.9	12.8	F	215.0	19.0

Note: Intersections that are operating below acceptable levels are shown in **BOLD** and significant impacts are highlighted.

It should be noted that calculations of delay at saturated conditions (i.e., LOS F) are less reliable than at LOS E or better. Therefore, delay in excess of 80 seconds is reported in the table to allow a relative comparison of without and with project conditions and should not be interpreted as an exact representation of actual delay.

Table 7: Cumulative Condition Freeway Segment Level of Service Summary

Freeway Segment	Capacity per Lane	# of Lanes	Total Capacity	Speed Limit	Free Flow Speed	LOS Standard	Cumulative (2030) + 2019 Specific Plan SFPUC Update							
							AM Peak Hour				PM Peak Hour			
							Volume (veh/hr)	LOS	V/C	Δ	Volume (veh/hr)	LOS	V/C	Δ
I-280 NB from Avalon to Westborough	2,200	5	11,000	70	65	D	6,612	C	0.601	0.001	8,525	D	0.775	0.004
I-280 NB from Westborough to Hickey	2,200	5	11,000	70	65	D	8,577	D	0.780	0.003	9,272	D	0.843	0.004
I-280 SB from Hickey to Westborough	2,200	5	11,000	70	65	D	7,857	D	0.714	0.001	9,475	D	0.861	0.004
I-280 SB from Westborough to Avalon	2,200	5	11,000	70	65	D	8,849	D	0.804	0.003	8,270	D	0.752	0.004

Impacts and Mitigations

Traffic generated by the 2019 Specific Plan SFPUC Update creates significant impacts at the following intersections under Existing Conditions:

- Intersection #1 – El Camino Real / Hickey Boulevard (AM and PM Peak Hours)
- Intersection #4 – El Camino Real / Chestnut Avenue (AM and PM Peak Hours)
- Intersection #12 – Westborough Boulevard / I-280 NB On-Ramp/Junipero Serra Boulevard (AM and PM Peak Hour)

These significant impacts were previously identified in the 2016 SEIR and mitigations were developed to alleviate impact of the Specific Plan by improving the intersection to an acceptable LOS or improving the operations of the intersection to better than without project conditions. The same mitigations as identified in the 2016 EIR are still applicable to the impacts identified in the 2019 Specific Plan SFPUC Update. Existing conditions with the 2019 Specific Plan SFPUC Update with and without mitigations are summarized in **Table 8**. **Table 9** shows the project impacts and mitigations for previous and current study. Traffic outputs for the mitigated intersections are provided in **Attachment H**.

Table 8: Existing Mitigated Condition Intersection Level of Service Summary

#	Intersection	LOS Criteria	Control	Existing (2016) + 2019 Specific Plan SFPUC Update						Existing (2016) + 2019 Specific Plan SFPUC Update (Mitigated)					
				AM Peak			PM Peak			AM Peak			PM Peak		
				LOS	Delay	Var	LOS	Delay	Var	LOS	Delay	Var	LOS	Delay	Var
1	El Camino Real/Hickey Boulevard	D	Signal	E	58.2	4.8	F	84.0	25.1	C	33.5	-19.9	C	30.2	-28.7
2	El Camino Real/McLellan Boulevard	D	Signal	C	30.6	-1.2	C	27.5	-7.5						
3	El Camino Real/Arroyo Drive/Oak Extension	D	Signal	C	24.9	-0.6	C	21.7	1.2						
4	El Camino Real/Chestnut Avenue	D	Signal	E	60.8	4.1	E	58.0	5.6	D	49.2	-7.5	D	41.8	-10.6
5	El Camino Real/Orange Avenue	D	Signal	D	36.9	0.1	D	40.8	0.1						
6	Mission Road/Grand Avenue	D	AWSC	B	14.7	1.8	C	15.2	2.2						
7	Chestnut Avenue/Grand Avenue	D	Signal	C	32.3	0.1	C	31.4	0.2						
8	Mission Road/Oak Avenue	D	Signal	B	10.2	7.9	A	6.7	5.7						
9	Mission Road/Chestnut Avenue	D	Signal	C	30.3	3.6	C	30.2	3.8						
10	Junipero Serra Boulevard/Arroyo Drive Worst Approach	D	SSSC	B	11.5	0.0	A	3.8	0.0						
				F	99.7	0.0	E	39.2	0.0						
11	Westborough Boulevard/I-280 SB Off Ramp	D	Signal	A	5.5	0.2	B	10.5	0.7						
12	Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard	D	Signal	F	95.9	10.3	E	64.8	9.9	E	77.8	-7.8	D	47.6	-7.3

Note: Intersections that are operating below acceptable levels are shown in **BOLD** and significant impacts are highlighted.

Table 9: Existing Specific Plan Intersection Impact Comparison

Int #	Intersection	2016 Analysis		2019 Analysis	
		Impact?	Mitigation	Impact?	Mitigation
1	El Camino Real/Hickey Boulevard	Yes	Add EBR Overlap	Yes	Same as 2016
4	El Camino Real/Chestnut Avenue	Yes	Optimize Signal Timing	Yes	Same as 2016
12	Westborough Boulevard/I-280 NB On-ramp/Junipero Serra Boulevard	Yes	Optimize Signal Timing; Change SB to be left, shared left-thru, thru, and right; Add EBL lane; Add WBL Lane	Yes	Same as 2016

Traffic generated by the 2019 Specific Plan SFPUC Update created significant impacts at the following intersections under Cumulative Conditions:

- Intersection #1 – El Camino Real / Hickey Boulevard (AM and PM Peak Hours)
- Intersection #4 – El Camino Real / Chestnut Avenue (AM and PM Peak Hours)
- Intersection #5 – El Camino Real / Orange Avenue (AM and PM Peak Hours)
- Intersection #12 – Westborough Boulevard / I-280 NB On-Ramp/Junipero Serra Boulevard (AM and PM Peak Hours)

All significant impacts were previously identified in the 2016 SEIR. Mitigations were developed in the 2016 SEIR to mitigate the impact of the Specific Plan by improving the intersections to an acceptable LOS or improving the operations of the intersection to better than without project conditions. The same mitigations identified in the 2016 EIR are still applicable to the impacts identified in the 2019 Specific Plan SFPUC Update

The Cumulative conditions with the 2019 Specific Plan SFPUC Update with and without mitigations are summarized in **Table 10**. **Table 11** shows the project impacts and mitigations for the previous and current study. As shown in **Table 11**, the significant impact at Intersection #2 (El Camino Real/McLellan Boulevard) goes away in the updated 2019 analysis because the project will implement the 2016 mitigation as part of its project by restriping the eastbound approach to be one left turn lane and one shared through-right turn lane and the westbound approach to be one left turn lane, one shared through-right turn lane, and one right turn lane, as well as modify the eastbound and westbound approaches from split phasing to protected left turn phasing and optimize the signal timing. The modifications will improve the LOS to an acceptable LOS D in both the AM and PM peak hour. The significant impact at Intersection #8 (Mission Road/Oak Avenue) also goes away in the updated 2019 analysis because the project is proposing to install a traffic signal at this intersection. The traffic signal improves the LOS to an acceptable LOS B in the AM peak hour and an acceptable LOS A in the PM peak hour.

Traffic outputs for the mitigated intersections are provided in **Attachment H**.

Table 10: Cumulative Mitigated Condition Intersection Level of Service Summary

#	Intersection	LOS Criteria	Control	Cumulative (2030) + 2019 Specific Plan SFPUC Update						Cumulative (2030) + 2019 Specific Plan SFPUC Update (Mitigated)					
				AM Peak			PM Peak			AM Peak			PM Peak		
				LOS	Delay	Var	LOS	Delay	Var	LOS	Delay	Var	LOS	Delay	Var
1	El Camino Real/Hickey Boulevard	D	Signal	F	164.4	11.4	F	210.8	32.2	E	57.6	-95.4	F	87.8	-90.8
2	El Camino Real/McLellan Boulevard	D	Signal	D	52.9	-19.7	D	43.1	-2.1						
3	El Camino Real/Arroyo Drive/Oak Extension	D	Signal	C	27.3	-0.4	C	24.5	2.1						
4	El Camino Real/Chestnut Avenue	D	Signal	F	140.2	13.8	F	122.7	24.2	F	91.5	-34.9	F	76.7	-21.8
5	El Camino Real/Orange Avenue	D	Signal	E	72.3	3.3	F	109.6	4.1	E	60.1	-8.9	F	84.8	-20.7
6	Mission Road/Grand Avenue	D	AWSC	D	28.5	6.1	D	32.4	9.3						
7	Chestnut Avenue/Grand Avenue	D	Signal	D	50.7	1.0	D	43.4	1.3						
8	Mission Road/Oak Avenue	D	Signal	B	11.1	7.2	A	6.9	5.8						
9	Mission Road/Chestnut Avenue	D	Signal	D	40.2	7.7	D	40.3	8.5						
10	Junipero Serra Boulevard/Arroyo Drive	D	SSSC	F	76.5	0.0	D	28.9	0.0						
	Worst Approach			F	674.1	0.0	F	322.7	0.0						
11	Westborough Boulevard/I-280 SB Off Ramp	D	Signal	B	11.0	0.4	D	48.3	6.4						
12	Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard	D	Signal	F	277.9	12.8	F	215.0	19.0	F	235.7	-29.4	F	165.0	-31.0

Note: Intersections that are operating below acceptable levels are shown in **BOLD** and significant impacts are highlighted.

It should be noted that calculations of delay at saturated conditions (i.e., LOS F) are less reliable than at LOS E or better. Therefore, delay in excess of 80 seconds is reported in the table to allow a relative comparison of without and with project conditions and should not be interpreted as an exact representation of actual delay.

Table 11: Cumulative Specific Plan Intersection Impact Comparison

Int #	Intersection	Peak Hour	2016 Analysis		2019 Analysis	
			Impact?	Mitigation	Impact?	Mitigation
1	El Camino Real/Hickey Boulevard	AM	Yes	Add EBR overlap	Yes	Same as 2016
		PM	Yes		Yes	
2	El Camino Real / McLellan Boulevard	AM	Yes	Restripe EB to be left and shared thru right; Restripe WB to be left, shared thru-right and right; Remove Split Phasing	No	Project will implement the 2016 mitigation.
		PM	No		No	
4	El Camino Real/Chestnut Avenue	AM	Yes	Add EBL lane; Add EBR overlap; Optimize Cycle Length	Yes	Same as 2016
		PM	Yes		Yes	
5	El Camino Real / Orange Avenue	AM	Yes	Add a SBL lane	Yes	Same as 2016
		PM	Yes		Yes	
8	Mission Road / Oak Avenue	AM	Yes	Restripe EB to be left and shared thru-right; Restripe WB to be left and shared thru-right; Add TWLTL	No	Project will install a traffic signal.
12	Westborough Boulevard/I-280 NB On-ramp/Junipero Serra Boulevard	AM	Yes	Optimize Signal Timing; Change SB to be left, shared left-thru, thru, and right; Add EBL lane; Add WBL Lane	Yes	Same as 2016
		PM	Yes		Yes	

Note: New impacts and mitigations identified in the 2019 SFPUC analysis are shown in **BOLD** and highlighted.

Access Analysis

Site Access

As shown in **Attachment A**, the SFPUC site will be accessible through three driveways along Mission Road, one of which is located at Intersection #8 (Mission Road/Oak Avenue) and the other two driveways are located to the south of Mission Road and Grand Avenue. A loading zone for drop-off at the child-care facility is located to the north of the driveway at Mission Road/Oak Avenue.

The driveway to the south of Mission Road and Grand Avenue provides access to the residential units within Block A. Visitors and guests are allowed access to the drop-off and loading zone within the drive aisle while residents are allowed further access to the parking garage to the north of the drive aisle.

The driveway to the north of the child care facility loading zone provides direct access to the south residential garage. Visitors and guests will not be able to enter the site through this driveway.

The driveway located at Mission Road/Oak Avenue (Intersection #8) is the partial Oak Avenue Extension that provides access to the residential and commercial uses within Blocks B and C, but does not extend to El Camino Real. Patrons and employees of the commercial uses can access the retail parking garage located just west of the retail building and residents are allowed access to the residential garage located north of the retail parking garage. Since the project is proposing to install a traffic signal at this intersection access, it is anticipated to operate at an acceptable LOS B or better in the AM and PM peak hours with the SFPUC Update.

Pedestrian Access and Circulation

There are existing sidewalks adjacent to Blocks B and C of the SFPUC Update where pedestrians can access the site from Mission Road through Oak Avenue and the shared entrance to the Centennial Way Trail. Based on the site plan, sidewalks will be constructed as part of the SFPUC Update along Mission Road between Grand Avenue and the entrance to Centennial Way Trail and will allow pedestrians direct access to the site through the driveway south of Mission Road and Grand Avenue and through the shared entrance to the Centennial Way Trail. Pedestrians also have direct access between Block A and Blocks B and C using the pedestrian pathway adjacent to the Centennial Way Trail that crosses Colma Creek.

CONCLUSION

A traffic analysis was conducted to evaluate the impacts of the SFPUC Update to the El Camino Real / Chestnut 2016 Area Plan. The SFPUC Update is proposing a net increase of 244 residential units and 9,799 SF of commercial use to Blocks A, B, and C. In addition, 70 units are also added to Block I as part of the 988 El Camino Real Mixed-Use Development. Residential units and retail were removed within Block H and the Outside Focus Area to stay within the allowable residential units and retail as well for traffic modeling purposes to estimate the potential impacts of the new land use assumptions. Therefore, the SFPUC Update does not result in an overall increase in land uses within the Specific Plan. Intersection #2 (El Camino Real and McLellan Boulevard) and Intersection #8 (Mission Road and Oak Avenue) no longer have significant impacts under Cumulative conditions with the 2019 Specific Plan SFPUC Update since the project will implement improvements to the intersections as part of its update. With the improvements, both intersections operate acceptably.

Attachments:

- Attachment A – Site Plan
- Attachment B – Study Area
- Attachment C – Project Trip Distribution
- Attachment D – Project Trip Assignment
- Attachment E – Existing 2019 Specific Plan SFPUC Update Turning Movement Volumes
- Attachment F – Cumulative 2019 Specific Plan SFPUC Update Turning Movement Volumes
- Attachment G – 2019 Specific Plan SFPUC Update Traffic Outputs
- Attachment H – 2019 Specific Plan SFPUC Update Traffic Mitigation Outputs

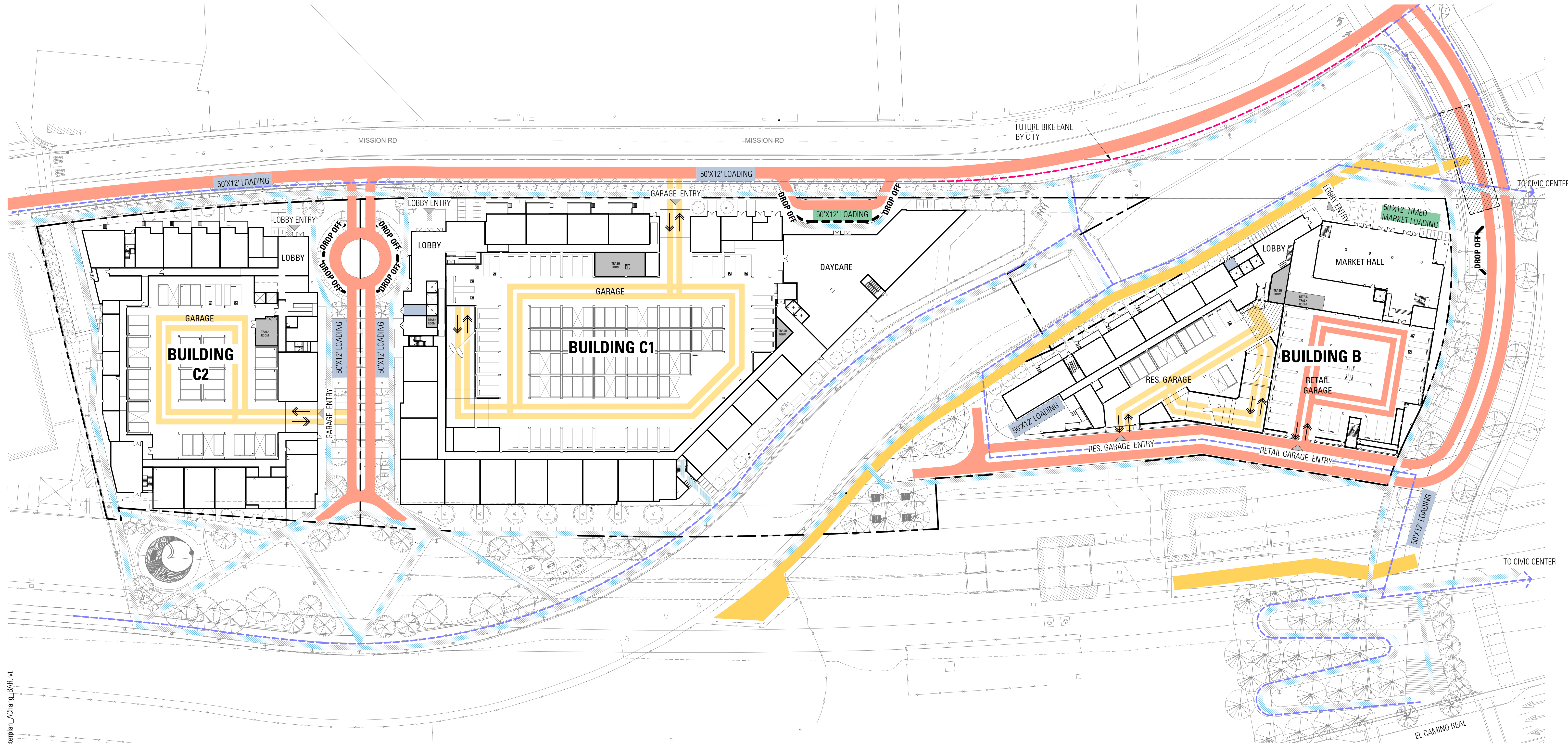
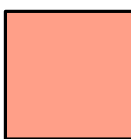
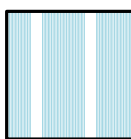
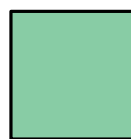
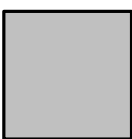
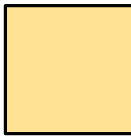
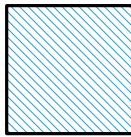
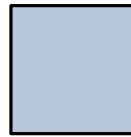
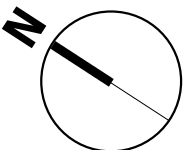
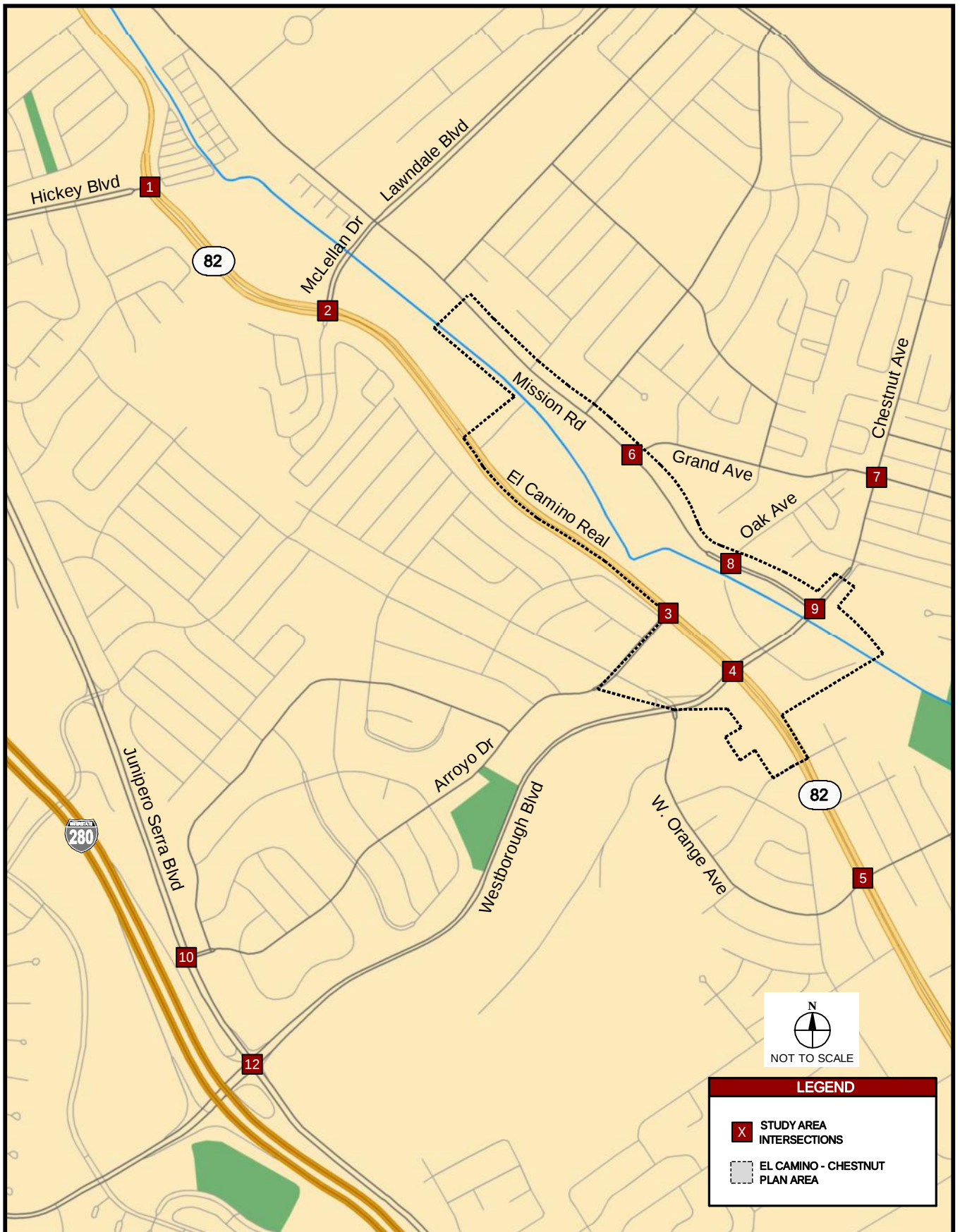


DIAGRAM - SITE CIRCULATION / ACTIVE USE
1" = 40'-0"

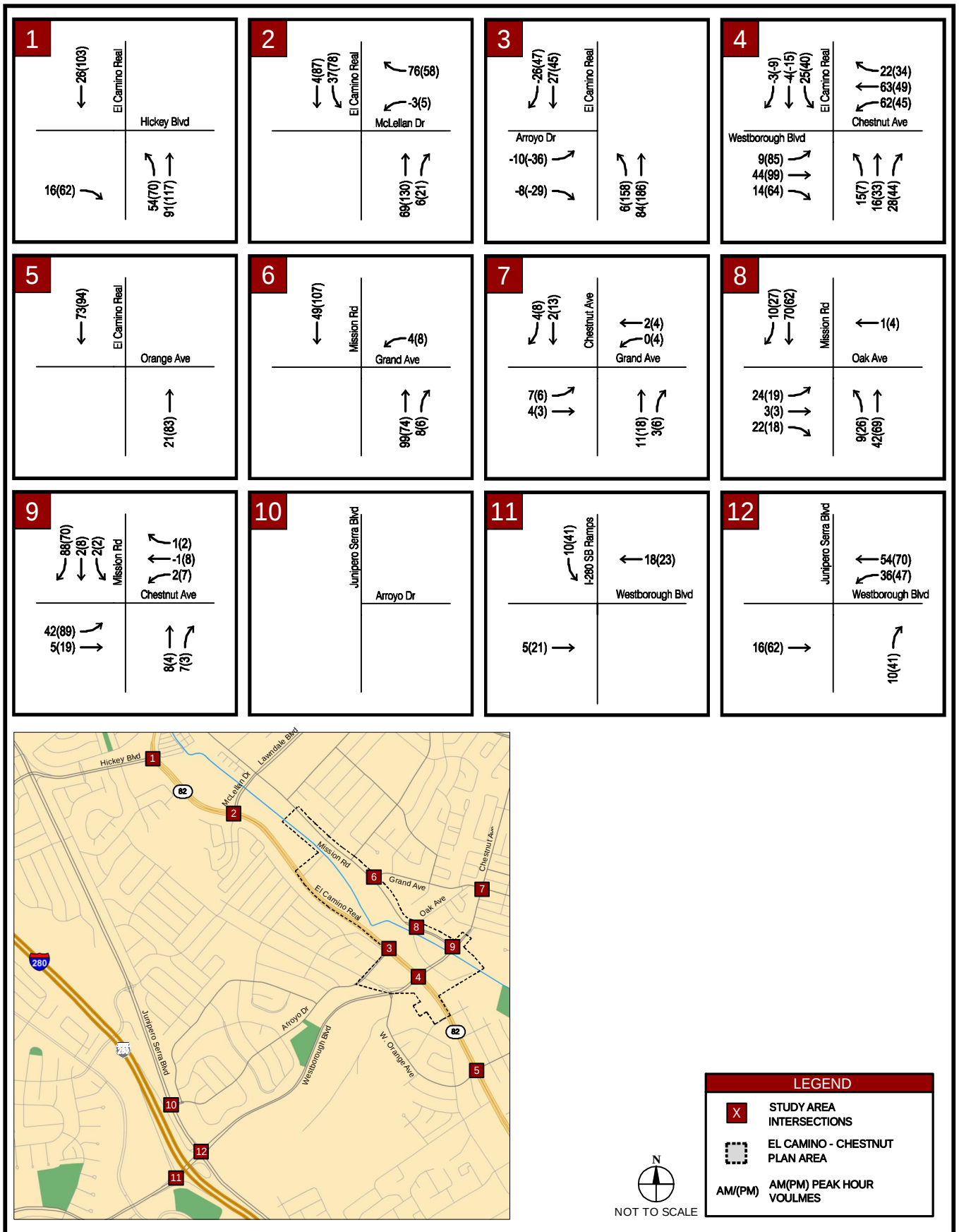
CIRCULATION PLAN LEGEND

- | | | | | | | | | | |
|---|--|---|----------------------------------|--|-------------------------------|---|--------------------------|---|------------|
|  | VEHICULAR CIRCULATION - COMMERCIAL AND GUEST |  | PEDESTRIAN CIRCULATION - PRIVATE |  | COMMERCIAL LOADING |  | MAINTENANCE ROAD |  | TRASH ROOM |
|  | VEHICULAR CIRCULATION - RESIDENT ONLY |  | PEDESTRIAN CIRCULATION - PUBLIC |  | RESIDENTIAL AND TRASH LOADING |  | DROP OFF |  | BIKE PATH |
| | | | | | |  | FUTURE BIKE PATH BY CITY | | |

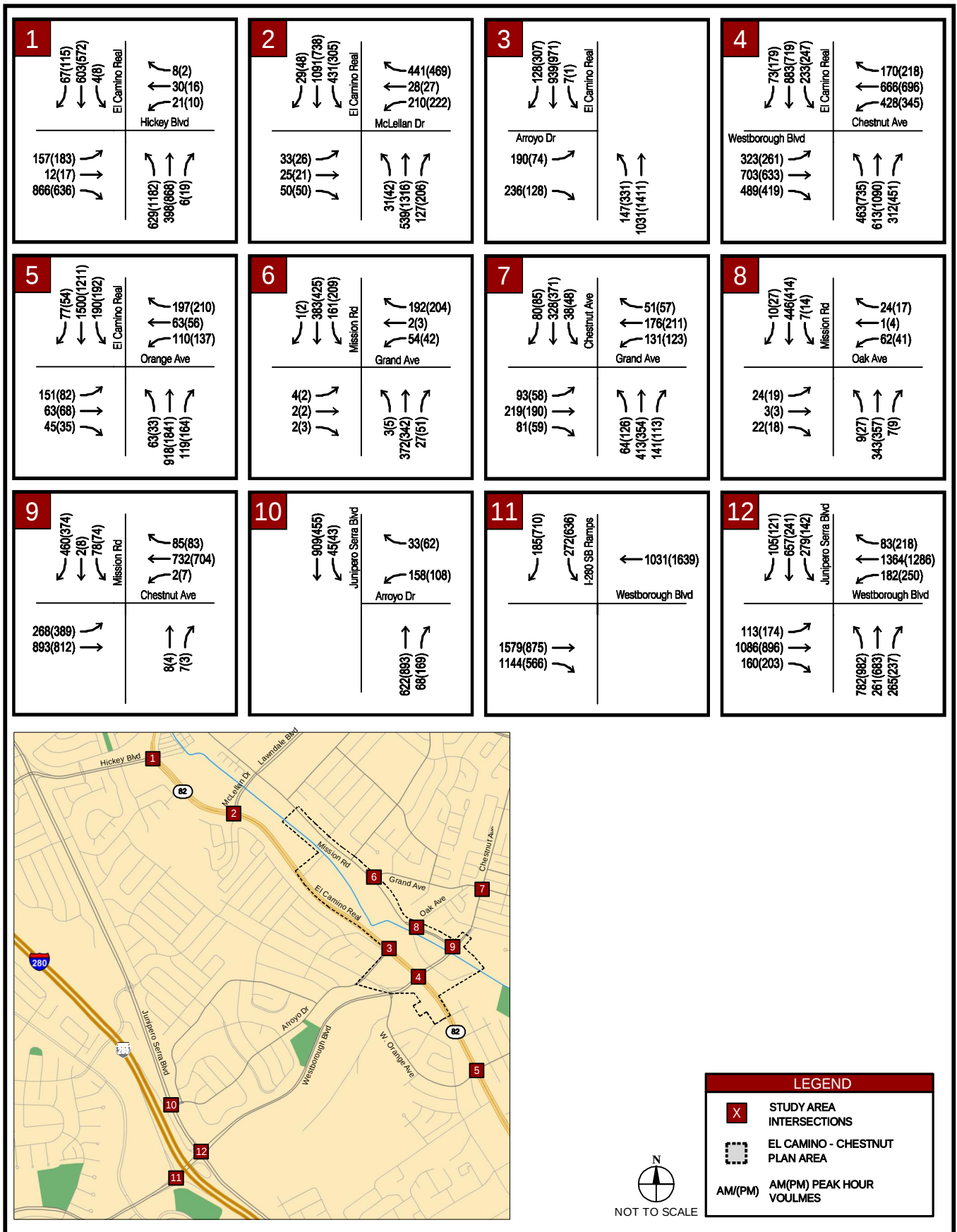




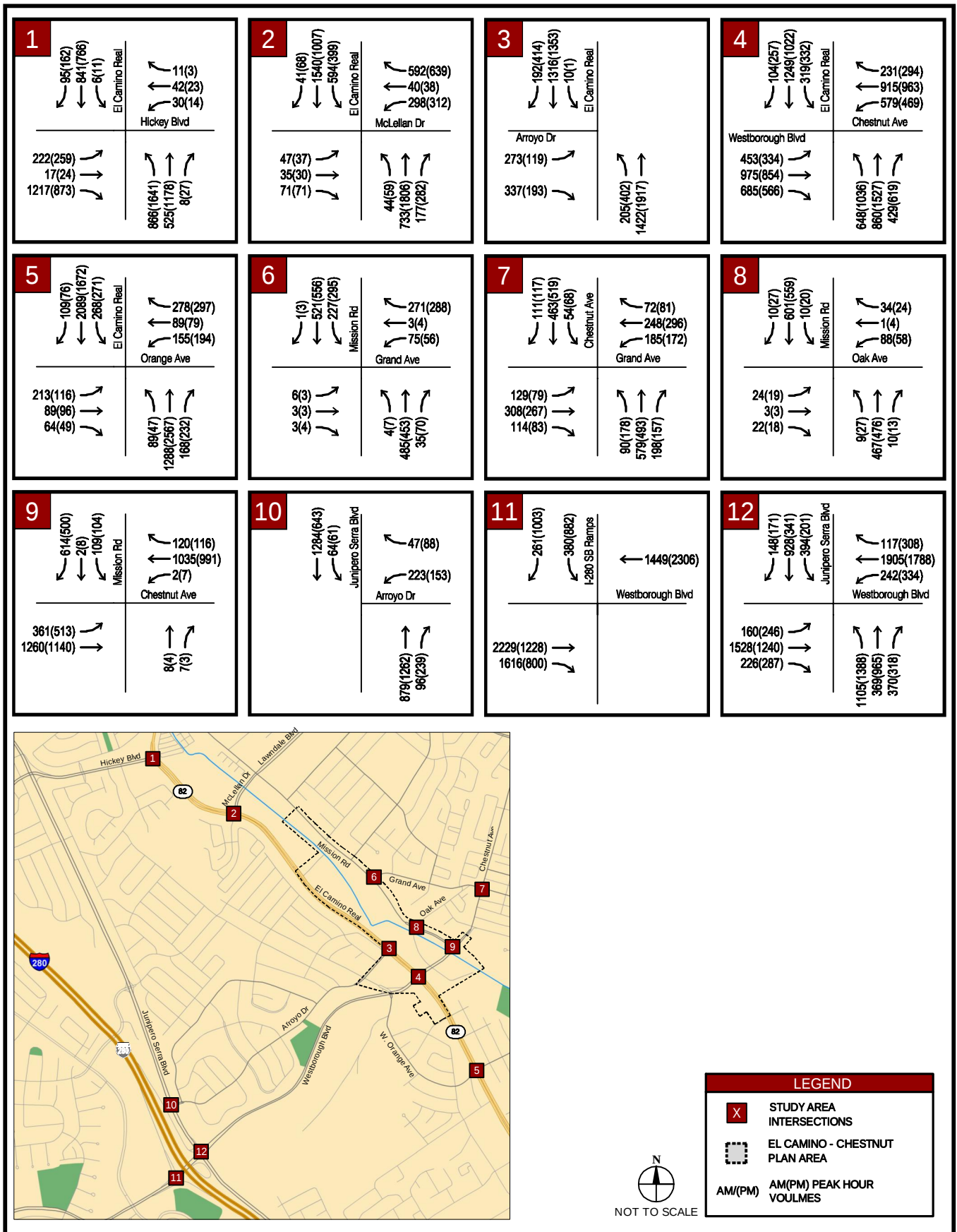




ATTACHMENT D



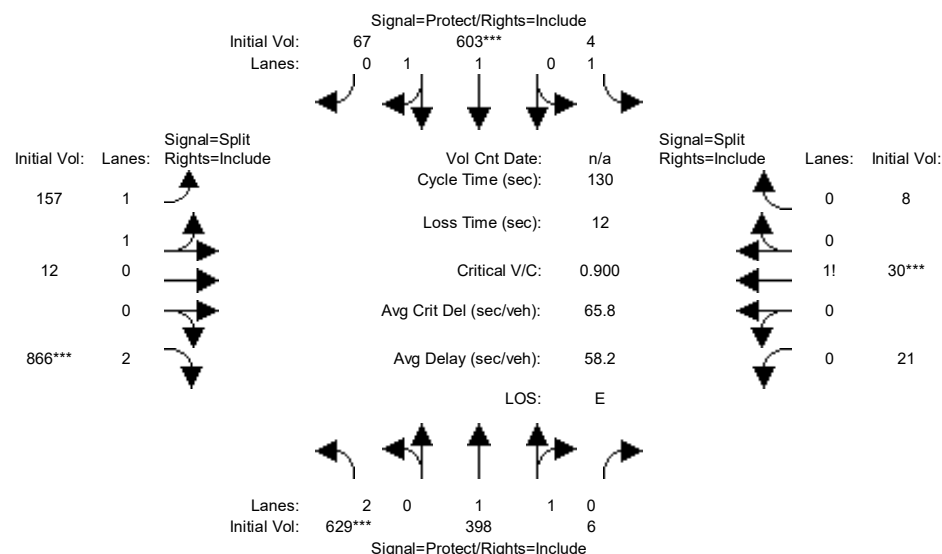
ATTACHMENT E



ATTACHMENT F

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project AM

Intersection #1: El Camino Real / Hickey Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6

Volume Module:

Base Vol:	575	307	6	4	577	67	157	12	850	21	30	8
Growth 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
Initial Bse:	575	307	6	4	577	67	157	12	850	21	30	8
Added Vol:	54	91	0	0	26	0	0	0	16	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	629	398	6	4	603	67	157	12	866	21	30	8
User 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
PHF Adj:	0.84	0.84	0.84	0.92	0.92	0.92	0.89	0.89	0.89	0.82	0.82	0.82
PHF Volume:	748	473	7	4	659	73	176	13	972	26	37	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	748	473	7	4	659	73	176	13	972	26	37	10
PCE 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
MLF 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
Final Volume:	748	473	7	4	659	73	176	13	972	26	37	10

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.92	0.92	0.94	0.94	0.73	0.95	0.95	0.94
Lanes:	2.00	1.97	0.03	1.00	1.80	0.20	1.86	0.14	2.00	0.36	0.51	0.13
Final Sat.:	3432	3478	52	1769	3136	348	3307	253	2786	640	914	244

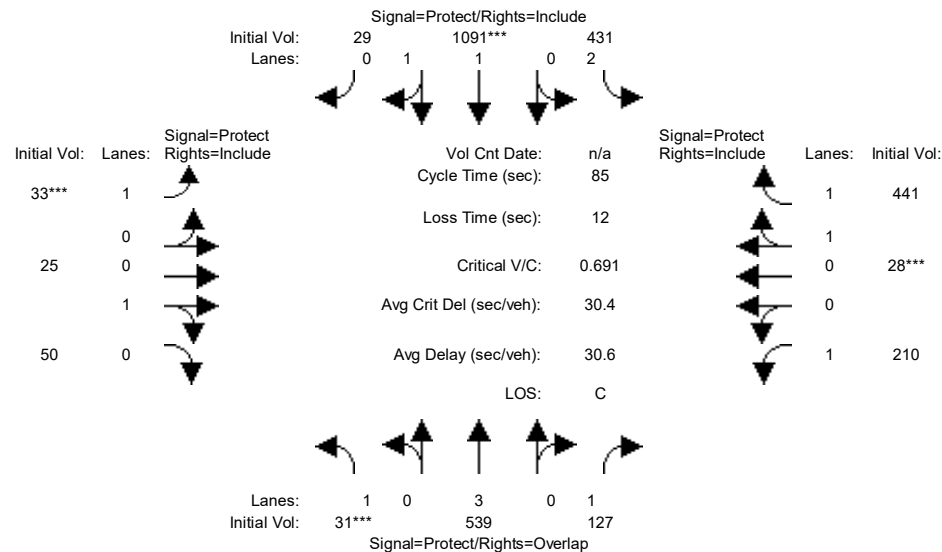
Capacity Analysis Module:

Vol/Sat:	0.22	0.14	0.14	0.00	0.21	0.21	0.05	0.05	0.35	0.04	0.04	0.04
Crit Moves:	***				***				***			
Green/Cycle:	0.23	0.37	0.37	0.08	0.22	0.22	0.37	0.37	0.37	0.09	0.09	0.09
Volume/Cap:	0.95	0.37	0.37	0.03	0.95	0.95	0.15	0.15	0.95	0.43	0.43	0.43
Uniform Del:	49.4	30.2	30.2	54.8	50.0	50.0	27.6	27.6	40.1	55.8	55.8	55.8
IncrementDel:	21.4	0.2	0.2	0.1	21.7	21.7	0.1	0.1	17.9	1.8	1.8	1.8
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	70.8	30.4	30.4	54.9	71.7	71.7	27.6	27.6	58.0	57.6	57.6	57.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	70.8	30.4	30.4	54.9	71.7	71.7	27.6	27.6	58.0	57.6	57.6	57.6
LOS by Move:	E	C	C	D	E	E	C	C	E	E	E	E
HCM2kAvgQ:	17	7	7	0	20	20	2	2	26	3	3	3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project AM

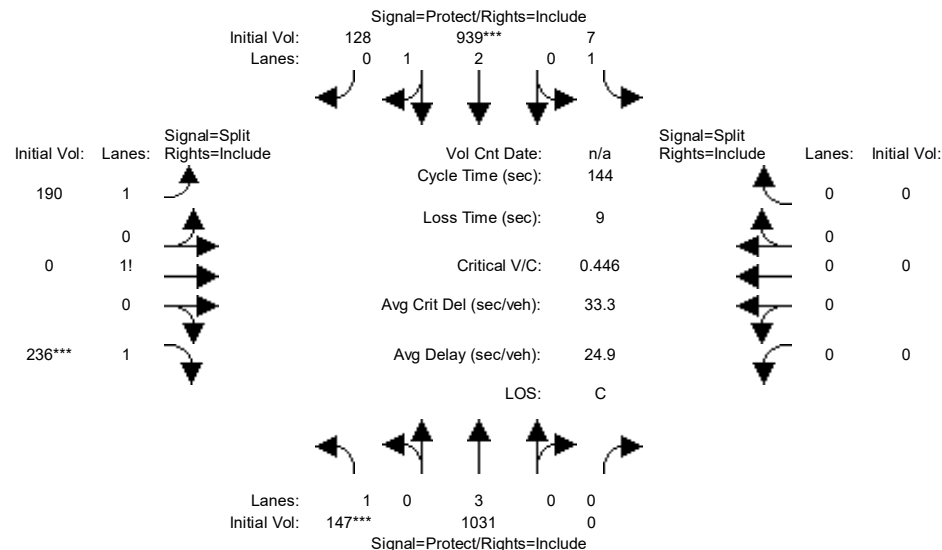
Intersection #2: El Camino Real / McLellan Dr



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Volume Module:												
Base Vol:	31	470	121	394	1087	29	33	25	50	213	28	365
Growth 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
Initial Bse:	31	470	121	394	1087	29	33	25	50	213	28	365
Added Vol:	0	69	6	37	4	0	0	0	0	-3	0	76
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	539	127	431	1091	29	33	25	50	210	28	441
User 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
PHF Adj:	0.90	0.90	0.90	0.88	0.88	0.88	0.82	0.82	0.82	0.79	0.79	0.79
PHF Volume:	34	596	140	492	1245	33	40	31	61	266	36	560
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	596	140	492	1245	33	40	31	61	266	36	560
PCE 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
MLF 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
FinalVolume:	34	596	140	492	1245	33	40	31	61	266	36	560
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.81	0.90	0.93	0.93	0.93	0.88	0.84	0.93	0.84	0.83
Lanes:	1.00	3.00	1.00	2.00	1.95	0.05	1.00	0.32	0.68	1.00	0.12	1.88
Final Sat.:	1769	5083	1530	3432	3432	91	1769	539	1078	1769	189	2974
Capacity Analysis Module:												
Vol/Sat:	0.02	0.12	0.09	0.14	0.36	0.36	0.02	0.06	0.06	0.15	0.19	0.19
Crit Moves:	***			***			***			***		
Green/Cycle:	0.05	0.22	0.40	0.26	0.43	0.43	0.15	0.19	0.19	0.19	0.22	0.22
Volume/Cap:	0.41	0.54	0.23	0.54	0.84	0.84	0.15	0.30	0.30	0.80	0.84	0.84
Uniform Del:	39.4	29.5	16.6	26.9	21.4	21.4	31.2	29.5	29.5	33.0	31.4	31.4
IncrcmntDel:	3.3	0.5	0.2	0.7	4.2	4.2	0.3	0.5	0.5	13.2	8.6	8.6
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	42.6	30.1	16.8	27.5	25.6	25.6	31.5	30.1	30.1	46.2	40.0	40.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.6	30.1	16.8	27.5	25.6	25.6	31.5	30.1	30.1	46.2	40.0	40.0
LOS by Move:	D	C	B	C	C	C	C	C	C	D	D	D
HCM2kAvgQ:	1	5	2	5	15	15	1	2	2	9	10	10
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project AM

Intersection #3: El Camino Real / Arroyo Dr

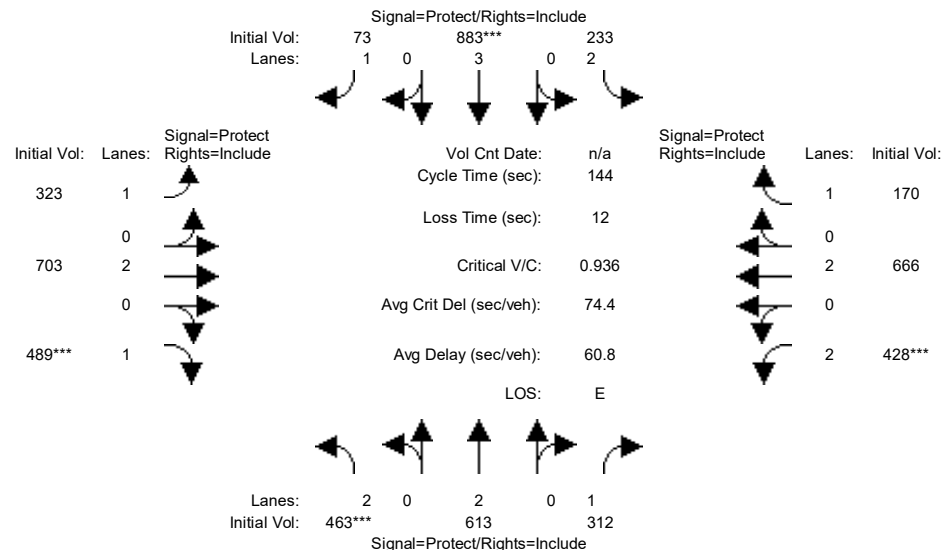


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	12	12	12	0	0	0
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	4.6	4.6	4.6	0.0	0.0	0.0
Volume Module:												
Base Vol:	141	947	0	7	912	154	200	0	244	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	947	0	7	912	154	200	0	244	0	0	0
Added Vol:	6	84	0	0	27	-26	-10	0	-8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	147	1031	0	7	939	128	190	0	236	0	0	0
User 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
PHF Adj:	0.85	0.85	0.85	0.98	0.98	0.98	0.89	0.89	0.89	1.00	1.00	1.00
PHF Volume:	174	1217	0	7	955	130	214	0	266	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	1217	0	7	955	130	214	0	266	0	0	0
PCE 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
MLF 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
Final Volume:	174	1217	0	7	955	130	214	0	266	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	1.00	0.93	0.88	0.87	0.88	1.00	0.88	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	2.64	0.36	1.45	0.00	1.55	0.00	0.00	0.00
Final Sat.:	1769	5083	0	1769	4391	599	2413	0	2586	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.24	0.00	0.00	0.22	0.22	0.09	0.00	0.10	0.00	0.00	0.00
Crit Moves:	***	***		***	***		***	***	***			
Green/Cycle:	0.22	0.63	0.00	0.07	0.49	0.49	0.23	0.00	0.23	0.00	0.00	0.00
Volume/Cap:	0.45	0.38	0.00	0.05	0.45	0.45	0.39	0.00	0.45	0.00	0.00	0.00
Uniform Del:	48.6	12.7	0.0	62.1	24.2	24.2	46.8	0.0	47.5	0.0	0.0	0.0
IncrementDel:	0.8	0.1	0.0	0.2	0.1	0.1	0.2	0.0	0.3	0.0	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	49.4	12.8	0.0	62.2	24.3	24.3	47.0	0.0	47.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.4	12.8	0.0	62.2	24.3	24.3	47.0	0.0	47.8	0.0	0.0	0.0
LOS by Move:	D	B	A	E	C	C	D	A	D	A	A	A
HCM2kAvgQ:	7	9	0	0	11	11	6	0	7	0	0	0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project AM

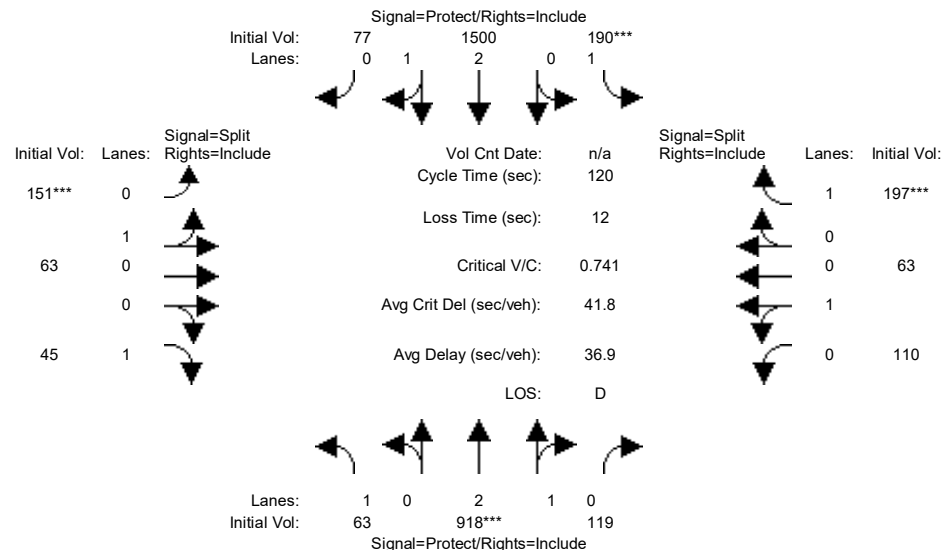
Intersection #4: El Camino Real / Chestnut Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Volume Module:												
Base Vol:	448	597	284	208	887	76	314	659	475	366	603	148
Growth 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
Initial Bse:	448	597	284	208	887	76	314	659	475	366	603	148
Added Vol:	15	16	28	25	-4	-3	9	44	14	62	63	22
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	463	613	312	233	883	73	323	703	489	428	666	170
User 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
PHF Adj:	0.93	0.93	0.93	0.88	0.88	0.88	0.92	0.92	0.92	0.75	0.75	0.75
PHF Volume:	499	661	336	265	1005	83	353	767	534	573	892	228
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	499	661	336	265	1005	83	353	767	534	573	892	228
PCE 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
MLF 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
Final Volume:	499	661	336	265	1005	83	353	767	534	573	892	228
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.81	0.93	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1560	3432	5083	1530	1769	3538	1535	3432	3538	1547
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.22	0.08	0.20	0.05	0.20	0.22	0.35	0.17	0.25	0.15
Crit Moves:	***				***				***	***		
Green/Cycle:	0.16	0.27	0.27	0.10	0.21	0.21	0.24	0.37	0.37	0.18	0.31	0.31
Volume/Cap:	0.94	0.69	0.80	0.80	0.94	0.26	0.82	0.58	0.94	0.94	0.82	0.48
Uniform Del:	60.1	47.2	48.9	63.7	55.8	47.4	51.5	36.3	43.6	58.3	46.2	40.5
IncrementDel:	24.1	2.2	10.3	12.8	14.6	0.4	11.9	0.7	23.0	21.9	5.1	0.8
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	84.2	49.4	59.3	76.4	70.4	47.8	63.4	37.0	66.6	80.2	51.3	41.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	84.2	49.4	59.3	76.4	70.4	47.8	63.4	37.0	66.6	80.2	51.3	41.3
LOS by Move:	F	D	E	E	E	D	E	D	E	F	D	D
HCM2kAvgQ:	15	15	16	8	20	3	17	14	27	17	21	8
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project AM

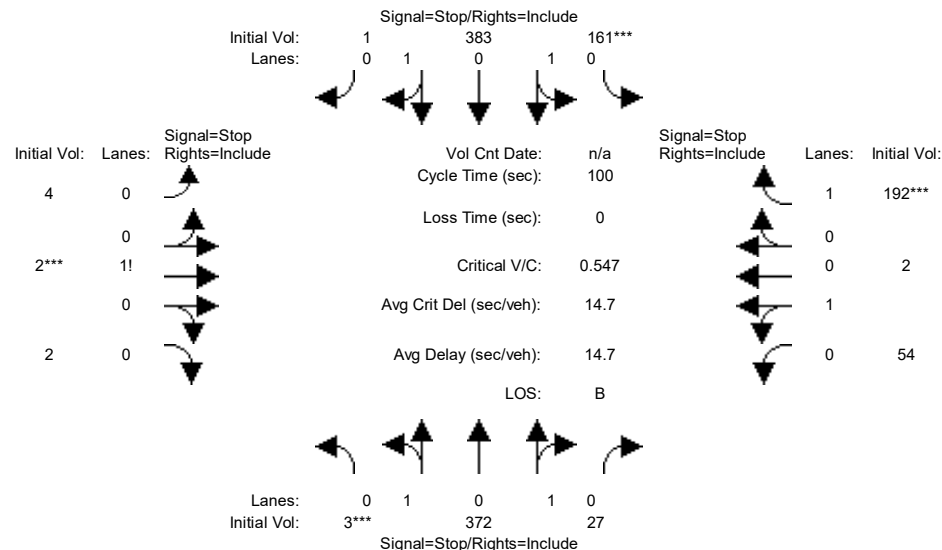
Intersection #5: El Camino Real / W. Orange Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Volume Module:												
Base Vol:	63	897	119	190	1427	77	151	63	45	110	63	197
Growth 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
Initial Bse:	63	897	119	190	1427	77	151	63	45	110	63	197
Added Vol:	0	21	0	0	73	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	918	119	190	1500	77	151	63	45	110	63	197
User 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
PHF Adj:	0.77	0.77	0.77	0.95	0.95	0.95	0.83	0.83	0.83	0.93	0.93	0.93
PHF Volume:	82	1198	155	201	1584	81	182	76	54	119	68	213
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	1198	155	201	1584	81	182	76	54	119	68	213
PCE 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
MLF 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
FinalVolume:	82	1198	155	201	1584	81	182	76	54	119	68	213
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.87	0.93	0.89	0.88	0.95	0.95	0.79	0.95	0.95	0.81
Lanes:	1.00	2.65	0.35	1.00	2.85	0.15	0.71	0.29	1.00	0.64	0.36	1.00
Final Sat.:	1769	4420	573	1769	4800	246	1269	530	1510	1147	657	1534
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.27	0.11	0.33	0.33	0.14	0.14	0.04	0.10	0.10	0.14
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.06	0.37	0.37	0.15	0.46	0.46	0.19	0.19	0.19	0.19	0.19	0.19
Volume/Cap:	0.73	0.74	0.74	0.74	0.73	0.73	0.74	0.74	0.19	0.55	0.55	0.74
Uniform Del:	55.1	33.1	33.1	48.5	26.6	26.6	45.6	45.6	40.5	44.2	44.2	46.0
IncramntDel:	20.7	1.7	1.7	10.4	1.2	1.2	8.2	8.2	0.3	2.0	2.0	9.9
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	75.8	34.7	34.7	59.0	27.8	27.8	53.8	53.8	40.8	46.2	46.2	55.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	75.8	34.7	34.7	59.0	27.8	27.8	53.8	53.8	40.8	46.2	46.2	55.9
LOS by Move:	E	C	C	E	C	C	D	D	D	D	D	E
HCM2kAvgQ:	4	17	17	9	19	19	10	10	2	7	7	9
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Project AM

Intersection #6: Mission Rd / Grand Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	3	273	19	161	334	1	4	2	2	50	2	192
Growth 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
Initial Bse:	3	273	19	161	334	1	4	2	2	50	2	192
Added Vol:	0	99	8	0	49	0	0	0	0	4	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	372	27	161	383	1	4	2	2	54	2	192
User 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
PHF Adj:	0.81	0.81	0.81	0.93	0.93	0.93	0.67	0.67	0.67	0.77	0.77	0.77
PHF Volume:	4	459	33	174	414	1	6	3	3	70	3	249
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	459	33	174	414	1	6	3	3	70	3	249
PCE 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
MLF 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
Final Volume:	4	459	33	174	414	1	6	3	3	70	3	249

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.86	0.13	0.59	1.40	0.01	0.50	0.25	0.25	0.96	0.04	1.00
Final Sat.:	8	1022	75	318	781	2	214	107	107	439	16	540

Capacity Analysis Module:

Vol/Sat:	0.45	0.45	0.45	0.55	0.53	0.52	0.03	0.03	0.03	0.16	0.16	0.46
Crit Moves:	****			****			****					****
Delay/Veh:	14.1	13.9	13.8	16.6	15.8	15.4	10.9	10.9	10.9	11.6	11.6	14.0
Delay 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
AdjDel/Veh:	14.1	13.9	13.8	16.6	15.8	15.4	10.9	10.9	10.9	11.6	11.6	14.0
LOS by Move:	B	B	B	C	C	C	B	B	B	B	B	B
ApproachDel:	13.9			16.0			10.9			13.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.9			16.0			10.9			13.5		
LOS by Appr:	B			C			B			B		
AllWayAvgQ:	0.8	0.7	0.7	1.1	1.0	1.0	0.0	0.0	0.0	0.2	0.2	0.7

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Mission Rd / Grand Ave

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	0 1 0 1 0	0 0 1 0 0	0 1 0 0 1
Initial Vol:	3 372 27	161 383 1	4 2 2	54 2 192
Major Street Volume:	947			
Minor Approach Volume:	248			
Minor Approach Volume Threshold:	398			

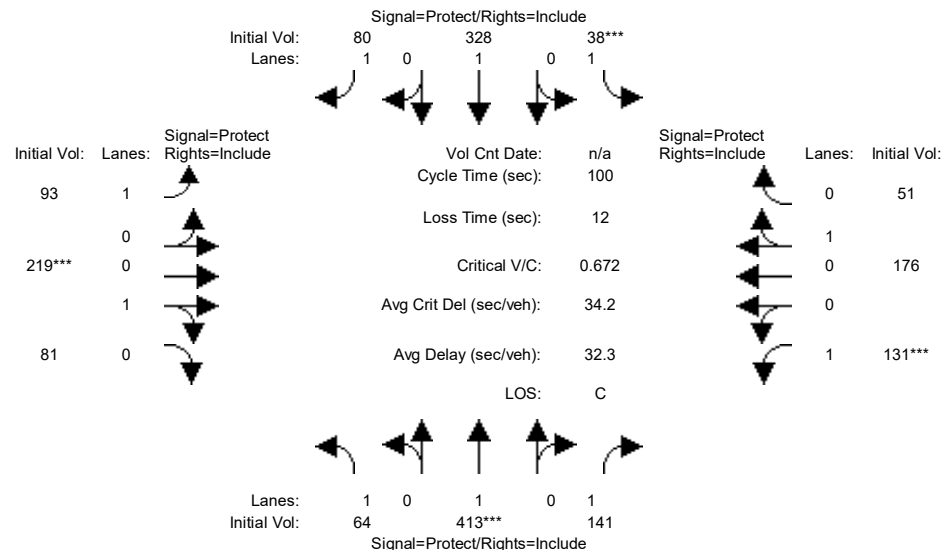
SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project AM

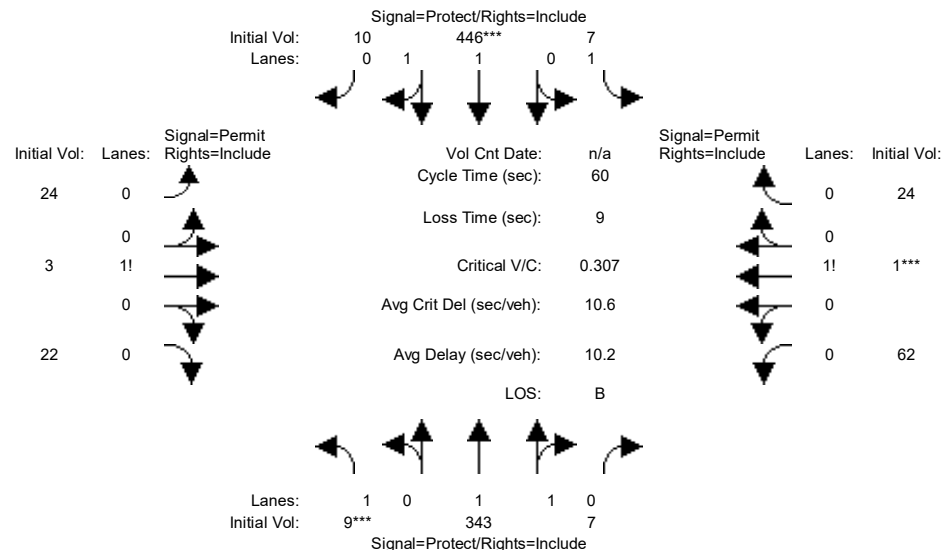
Intersection #7: Grand Ave / Chestnut Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	4	4	4	4	4	4	8	8	4	8	8
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	64	402	138	38	326	76	86	215	81	131	174	51
Growth 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
Initial Bse:	64	402	138	38	326	76	86	215	81	131	174	51
Added Vol:	0	11	3	0	2	4	7	4	0	0	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	64	413	141	38	328	80	93	219	81	131	176	51
User 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
PHF Adj:	0.90	0.90	0.90	0.84	0.84	0.84	0.72	0.72	0.72	0.86	0.86	0.86
PHF Volume:	71	457	156	45	390	95	130	305	113	152	204	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	457	156	45	390	95	130	305	113	152	204	59
PCE 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
MLF 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
FinalVolume:	71	457	156	45	390	95	130	305	113	152	204	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.82	0.93	0.98	0.79	0.93	0.94	0.93	0.93	0.95	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.73	0.27	1.00	0.77	0.23
Final Sat.:	1769	1862	1563	1769	1862	1502	1769	1301	481	1769	1393	404
Capacity Analysis Module:												
Vol/Sat:	0.04	0.25	0.10	0.03	0.21	0.06	0.07	0.23	0.23	0.09	0.15	0.15
Crit Moves:												
Green/Cycle:	0.06	0.36	0.36	0.04	0.34	0.34	0.16	0.35	0.35	0.13	0.32	0.32
Volume/Cap:	0.62	0.67	0.27	0.64	0.62	0.19	0.46	0.67	0.67	0.67	0.46	0.46
Uniform Del:	45.6	26.8	22.4	47.3	27.6	23.3	38.2	27.7	27.7	41.6	27.3	27.3
IncrementDel:	9.8	2.7	0.3	18.0	1.9	0.2	1.2	2.9	2.9	7.8	0.6	0.6
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	55.3	29.4	22.7	65.3	29.4	23.5	39.4	30.7	30.7	49.4	27.9	27.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.3	29.4	22.7	65.3	29.4	23.5	39.4	30.7	30.7	49.4	27.9	27.9
LOS by Move:	E	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	2	11	3	3	11	2	4	12	12	6	7	7
Note:	Queue reported is the number of cars per lane.											

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project AM

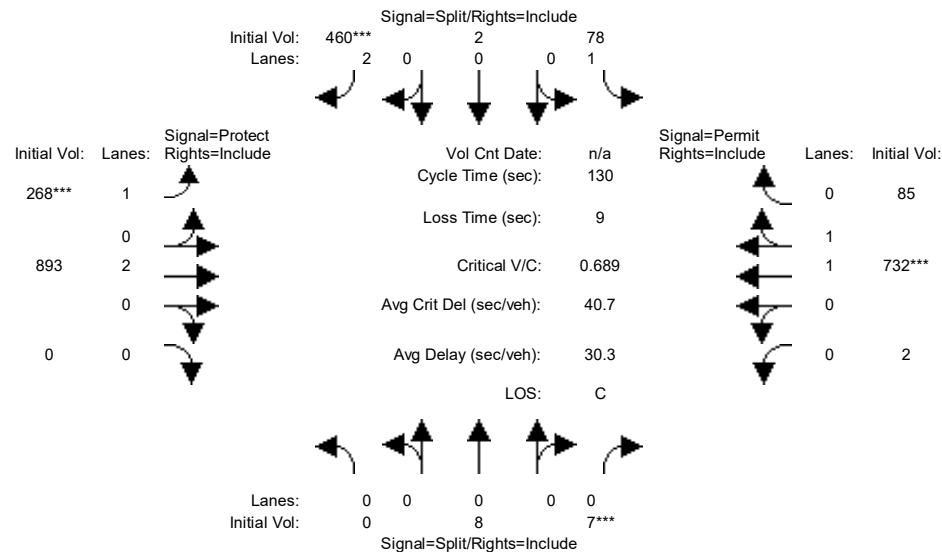
Intersection #8: Mission Rd / Oak Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	301	7	7	376	0	0	0	0	62	0	24
Growth 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
Initial Bse:	0	301	7	7	376	0	0	0	0	62	0	24
Added Vol:	9	42	0	0	70	10	24	3	22	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	343	7	7	446	10	24	3	22	62	1	24
User 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
PHF Adj:	0.88	0.88	0.88	0.84	0.84	0.84	1.00	1.00	1.00	0.61	0.61	0.61
PHF Volume:	10	392	8	8	531	12	24	3	22	101	2	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	392	8	8	531	12	24	3	22	101	2	39
PCE 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
MLF 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
Final Volume:	10	392	8	8	531	12	24	3	22	101	2	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.93	0.93	0.93	0.93	0.93	0.80	0.80	0.80	0.74	0.74	0.74
Lanes:	1.00	1.96	0.04	1.00	1.96	0.04	0.49	0.06	0.45	0.71	0.01	0.28
Final Sat.:	1769	3457	71	1769	3450	77	744	93	682	999	16	387
Capacity Analysis Module:												
Vol/Sat:	0.01	0.11	0.11	0.00	0.15	0.15	0.03	0.03	0.03	0.10	0.10	0.10
Crit Moves:	***			***						***		
Green/Cycle:	0.02	0.50	0.50	0.02	0.50	0.50	0.33	0.33	0.33	0.33	0.33	0.33
Volume/Cap:	0.31	0.23	0.23	0.23	0.31	0.31	0.10	0.10	0.10	0.31	0.31	0.31
Uniform Del:	29.0	8.5	8.5	28.9	8.8	8.8	13.9	13.9	13.9	15.0	15.0	15.0
IncramntDel:	5.1	0.1	0.1	3.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	34.2	8.5	8.5	32.0	8.9	8.9	14.0	14.0	14.0	15.4	15.4	15.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.2	8.5	8.5	32.0	8.9	8.9	14.0	14.0	14.0	15.4	15.4	15.4
LOS by Move:	C	A	A	C	A	A	B	B	B	B	B	B
HCM2kAvgQ:	0	2	2	0	3	3	1	1	1	2	2	2
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project AM

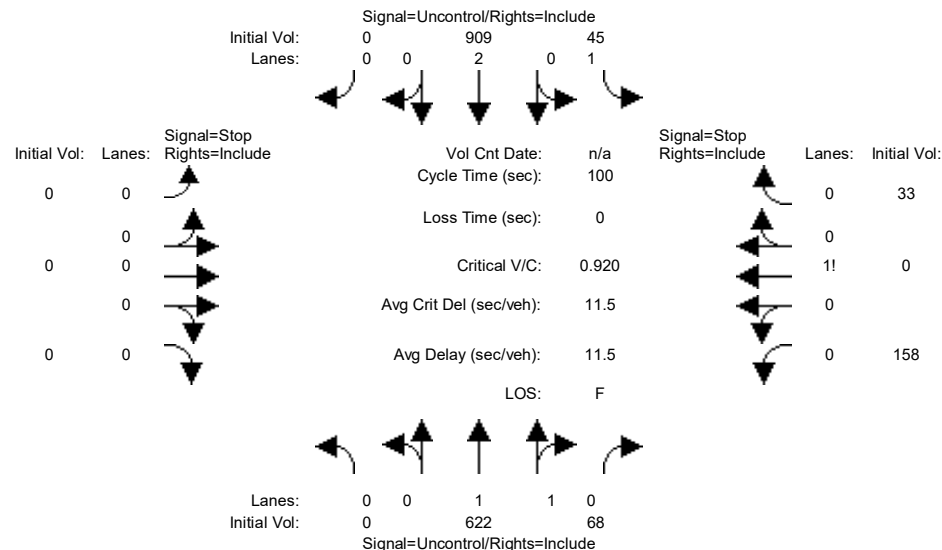
Intersection #9: Mission Rd / Chestnut Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	9	9	9	4	6	6	9	9	9
Y+R:	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.2	4.2	4.2
Volume Module:												
Base Vol:	0	0	0	76	0	372	226	888	0	0	733	84
Growth 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
Initial Bse:	0	0	0	76	0	372	226	888	0	0	733	84
Added Vol:	0	8	7	2	2	88	42	5	0	2	-1	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	8	7	78	2	460	268	893	0	2	732	85
User 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
PHF Adj:	1.00	1.00	1.00	0.81	0.81	0.81	0.90	0.90	0.90	0.88	0.88	0.88
PHF Volume:	0	8	7	96	2	567	299	998	0	2	828	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	8	7	96	2	567	299	998	0	2	828	96
PCE 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
MLF 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
FinalVolume:	0	8	7	96	2	567	299	998	0	2	828	96
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.92	0.91	0.81	0.81	0.81	0.93	0.93	1.00	0.87	0.87	0.87
Lanes:	0.00	0.53	0.47	0.98	0.02	2.00	1.00	2.00	0.00	0.01	1.78	0.21
Final Sat.:	0	927	811	1493	38	3063	1769	3538	0	8	2971	345
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.01	0.06	0.06	0.18	0.17	0.28	0.00	0.28	0.28	0.28
Crit Moves:												
Green/Cycle:	0.00	0.01	0.01	0.27	0.27	0.27	0.25	0.65	0.00	0.40	0.40	0.40
Volume/Cap:	0.00	0.69	0.69	0.24	0.24	0.69	0.69	0.43	0.00	0.69	0.69	0.69
Uniform Del:	0.0	63.9	63.9	37.2	37.2	42.7	44.5	11.1	0.0	32.0	32.0	32.0
IncrementDel:	0.0	65.7	65.7	0.0	0.0	2.1	4.7	0.1	0.0	1.5	1.5	1.5
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Delay/Veh:	0.0	130	129.6	37.2	37.2	44.8	49.2	11.2	0.0	33.5	33.5	33.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	130	129.6	37.2	37.2	44.8	49.2	11.2	0.0	33.5	33.5	33.5
LOS by Move:	A	F	F	D	D	D	D	B	A	C	C	C
HCM2kAvgQ:	0	2	2	3	3	11	12	10	0	16	16	16
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Project AM

Intersection #10: Juniperro Serra Blvd / Arroyo Dr



Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Volume Module:

Base Vol:	0	622	68	45	909	0	0	0	0	158	0	33
Growth 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
Initial Bse:	0	622	68	45	909	0	0	0	0	158	0	33
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	622	68	45	909	0	0	0	0	158	0	33
User 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
PHF Adj:	0.71	0.71	0.71	0.92	0.92	0.92	1.00	1.00	1.00	0.75	0.75	0.75
PHF Volume:	0	872	95	49	991	0	0	0	0	212	0	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	872	95	49	991	0	0	0	0	212	0	44

Critical Gap Module:

Critical Gp:	xxxx	xxxx	xxxx	4.1	xxxx	xxxx	xxxx	xxxx	xxxx	6.8	6.5	6.9
FollowUpTim:	xxxx	xxxx	xxxx	2.2	xxxx	xxxx	xxxx	xxxx	xxxx	3.5	4.0	3.3

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxx	968	xxxx	xxxx	xxxx	xxxx	xxxx	1514	2009	484
Potent Cap.:	xxxx	xxxx	xxxx	708	xxxx	xxxx	xxxx	xxxx	xxxx	110	58	529
Move Cap.:	xxxx	xxxx	xxxx	708	xxxx	xxxx	xxxx	xxxx	xxxx	105	54	529
Total Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	161	149	xxxx	230	163	xxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	0.92	0.00	0.08

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Control Del:	xxxx	xxxx	xxxx	10.5	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT		LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT		LT - LTR - RT	LT - LTR - RT	
Shared Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	255	xxxx	xxxx
SharedQueue:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	9.9	xxxx	xxxx
Shrd ConDel:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	99.7	xxxx	xxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	xxxxxx	xxxxxx	xxxxxx		xxxxxx	xxxxxx	xxxxxx	xxxxxx		99.7		
ApproachLOS:	*	*	*		*	*	*	*		F		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	0 0 1! 0 0
Initial Vol:	0 622 68	45 909 0	0 0 0 0	158 0 33
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	99.7

Approach[westbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=5.3]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=191]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1835]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	0 0 1! 0 0
Initial Vol:	0 622 68	45 909 0	0 0 0 0	158 0 33

Major Street Volume: 1644

Minor Approach Volume: 191

Minor Approach Volume Threshold: 114

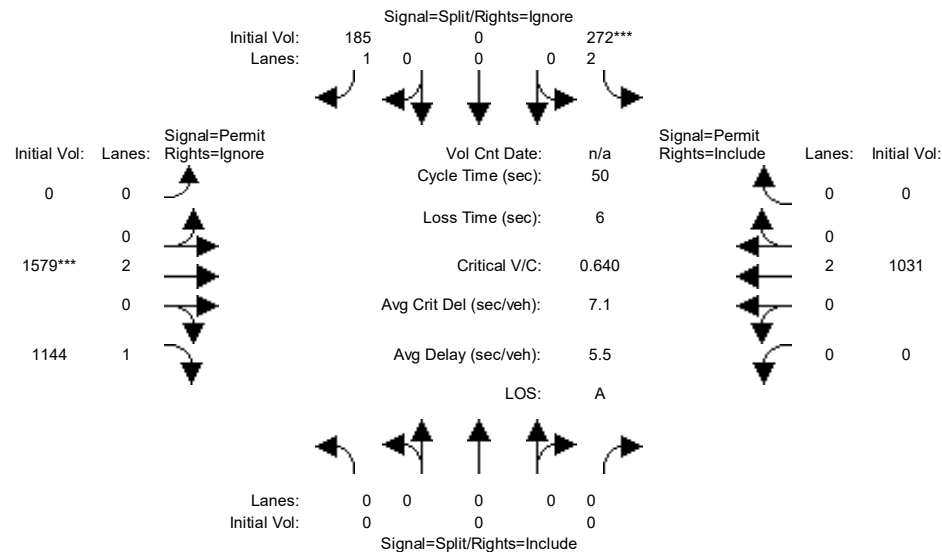
SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project AM

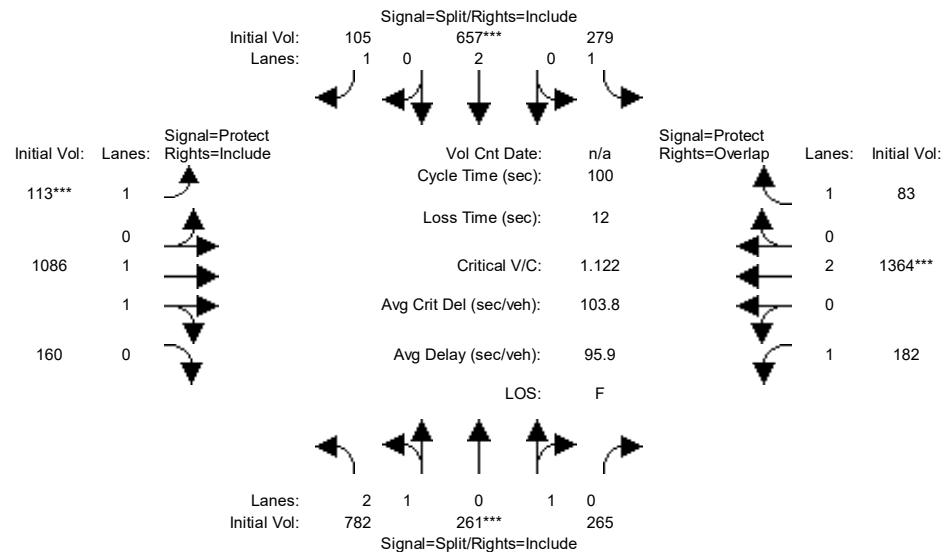
Intersection #11: I-280 SB Ramps / Westborough Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	4	4	4	9	9	9	9	9	9
Y+R:	0.0	0.0	0.0	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Volume Module:												
Base Vol:	0	0	0	262	0	185	0	1574	1144	0	1013	0
Growth 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
Initial Bse:	0	0	0	262	0	185	0	1574	1144	0	1013	0
Added Vol:	0	0	0	10	0	0	0	5	0	0	18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	272	0	185	0	1579	1144	0	1031	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.83	0.83	0.00	0.95	0.95	0.00	0.81	0.81	0.81
PHF Volume:	0	0	0	329	0	0	0	1655	0	0	1267	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	329	0	0	0	1655	0	0	1267	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	0	0	329	0	0	0	1655	0	0	1267	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	0.93	1.00	1.00	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	0	3432	0	1900	0	3538	1900	0	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.47	0.00	0.00	0.36	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.73	0.00	0.00	0.73	0.00
Volume/Cap:	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.64	0.00	0.00	0.49	0.00
Uniform Del:	0.0	0.0	0.0	20.0	0.0	0.0	0.0	3.4	0.0	0.0	2.8	0.0
IncrcmntDel:	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	22.7	0.0	0.0	0.0	4.0	0.0	0.0	3.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	22.7	0.0	0.0	0.0	4.0	0.0	0.0	3.0	0.0
LOS by Move:	A	A	A	C	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	4	0	0	0	8	0	0	5	0
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project AM

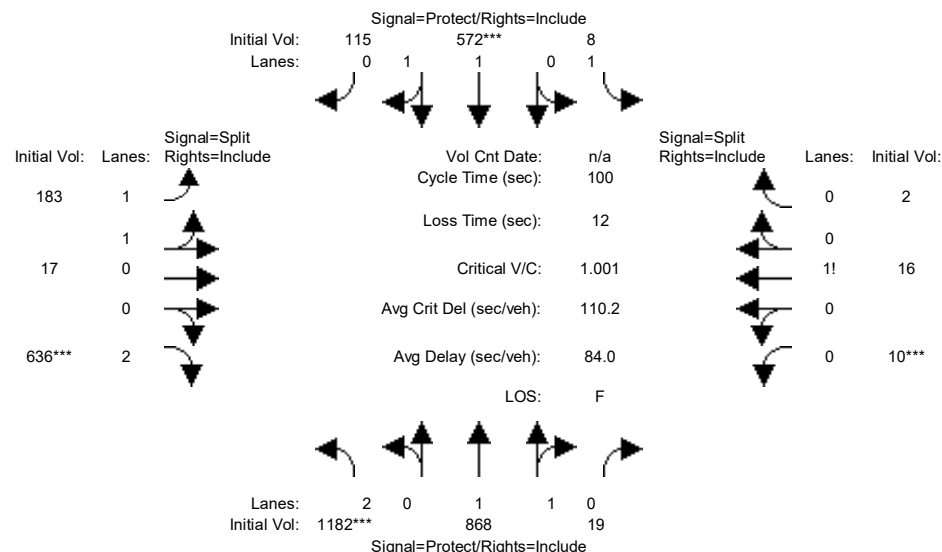
Intersection #12: I-280 NB Ramps / Westborough Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Volume Module:												
Base Vol:	782	261	255	279	657	105	113	1070	160	146	1310	83
Growth 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
Initial Bse:	782	261	255	279	657	105	113	1070	160	146	1310	83
Added Vol:	0	0	10	0	0	0	0	16	0	36	54	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	782	261	265	279	657	105	113	1086	160	182	1364	83
User 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
PHF Adj:	0.86	0.86	0.86	0.85	0.85	0.85	0.91	0.91	0.91	0.83	0.83	0.83
PHF Volume:	907	303	307	329	775	124	124	1192	176	220	1649	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	907	303	307	329	775	124	124	1192	176	220	1649	100
PCE 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
MLF 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
FinalVolume:	907	303	307	329	775	124	124	1192	176	220	1649	100
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.88	0.88	0.93	0.93	0.83	0.93	0.91	0.91	0.93	0.93	0.82
Lanes:	2.42	0.78	0.80	1.00	2.00	1.00	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	3912	1306	1326	1769	3538	1583	1769	3024	446	1769	3538	1562
Capacity Analysis Module:												
Vol/Sat:	0.23	0.23	0.23	0.19	0.22	0.08	0.07	0.39	0.39	0.12	0.47	0.06
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.21	0.21	0.21	0.20	0.20	0.20	0.06	0.36	0.36	0.11	0.42	0.61
Volume/Cap:	1.12	1.12	1.12	0.95	1.12	0.40	1.12	1.08	1.08	1.08	1.12	0.11
Uniform Del:	39.7	39.7	39.7	39.8	40.2	35.1	46.9	31.8	31.8	44.3	29.2	8.1
IncrcmntDel:	65.1	65.1	65.1	36.1	72.9	0.9	122.1	51.6	51.6	87.6	64.4	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	104.8	105	104.8	75.8	113	36.0	169.0	83.5	83.5	131.8	93.6	8.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	104.8	105	104.8	75.8	113	36.0	169.0	83.5	83.5	131.8	93.6	8.1
LOS by Move:	F	F	F	E	F	D	F	F	F	F	F	A
HCM2kAvgQ:	22	22	22	15	22	4	8	34	34	13	42	1
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project PM

Intersection #1: El Camino Real / Hickey Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6

Volume Module:

Base Vol:	1112	751	19	8	469	115	183	17	574	10	16	2
Growth 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
Initial Bse:	1112	751	19	8	469	115	183	17	574	10	16	2
Added Vol:	70	117	0	0	103	0	0	0	62	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1182	868	19	8	572	115	183	17	636	10	16	2
User 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
PHF Adj:	0.92	0.92	0.92	0.93	0.93	0.93	0.85	0.85	0.85	0.78	0.78	0.78
PHF Volume:	1292	949	21	9	614	124	217	20	753	13	21	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1292	949	21	9	614	124	217	20	753	13	21	3
PCE 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
MLF 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
Final Volume:	1292	949	21	9	614	124	217	20	753	13	21	3

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.91	0.90	0.94	0.94	0.73	0.95	0.95	0.95
Lanes:	2.00	1.96	0.04	1.00	1.66	0.34	1.83	0.17	2.00	0.36	0.57	0.07
Final Sat.:	3432	3452	76	1769	2868	577	3258	303	2786	646	1034	129

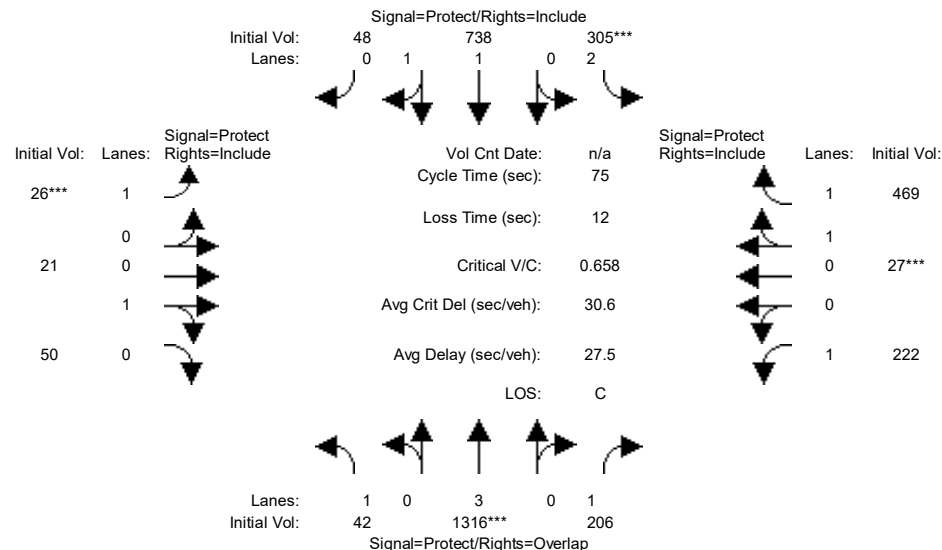
Capacity Analysis Module:

Vol/Sat:	0.38	0.27	0.27	0.00	0.21	0.21	0.07	0.07	0.27	0.02	0.02	0.02
Crit Moves:	***				***				***	***		
Green/Cycle:	0.33	0.46	0.46	0.07	0.19	0.19	0.24	0.24	0.24	0.12	0.12	0.12
Volume/Cap:	1.13	0.60	0.60	0.07	1.13	1.13	0.28	0.28	1.13	0.17	0.17	0.17
Uniform Del:	33.4	20.5	20.5	43.8	40.5	40.5	31.1	31.1	38.1	39.5	39.5	39.5
IncrcmntDel:	71.0	0.7	0.7	0.3	77.8	77.8	0.2	0.2	77.5	0.4	0.4	0.4
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	104.4	21.1	21.1	44.1	118	118.4	31.2	31.2	115.6	39.9	39.9	39.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	104.4	21.1	21.1	44.1	118	118.4	31.2	31.2	115.6	39.9	39.9	39.9
LOS by Move:	F	C	C	D	F	F	C	C	F	D	D	D
HCM2kAvgQ:	30	11	11	0	21	21	3	3	23	1	1	1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project PM

Intersection #2: El Camino Real / McLellan Dr

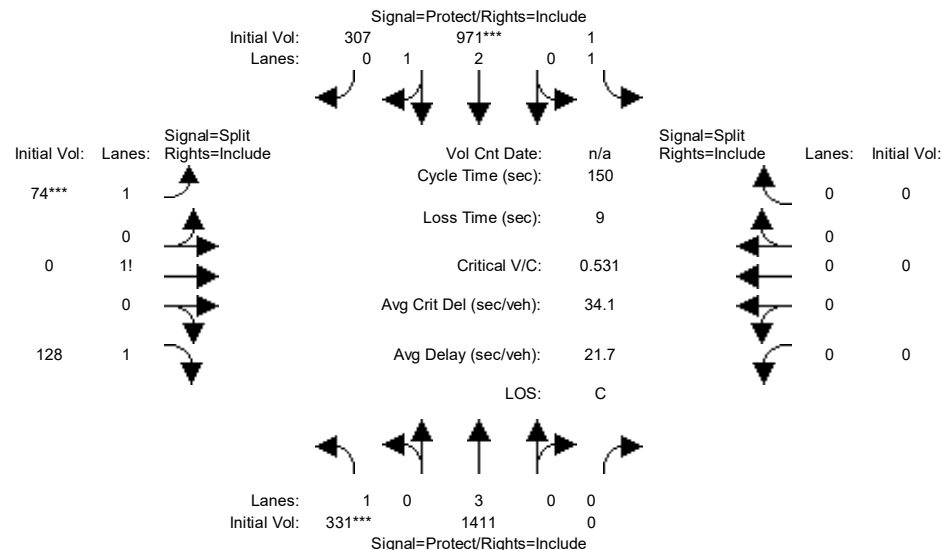


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Volume Module:												
Base Vol:	42	1186	185	227	651	48	26	21	50	217	27	411
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	1186	185	227	651	48	26	21	50	217	27	411
Added Vol:	0	130	21	78	87	0	0	0	0	5	0	58
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	1316	206	305	738	48	26	21	50	222	27	469
User 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
PHF Adj:	0.97	0.97	0.97	0.88	0.88	0.88	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	44	1364	213	347	839	55	28	23	54	240	29	507
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	1364	213	347	839	55	28	23	54	240	29	507
PCE 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
MLF 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
FinalVolume:	44	1364	213	347	839	55	28	23	54	240	29	507
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.77	0.90	0.92	0.92	0.93	0.88	0.85	0.93	0.84	0.84
Lanes:	1.00	3.00	1.00	2.00	1.88	0.12	1.00	0.29	0.71	1.00	0.11	1.89
Final Sat.:	1769	5083	1463	3432	3291	214	1769	483	1151	1769	174	3019
Capacity Analysis Module:												
Vol/Sat:	0.02	0.27	0.15	0.10	0.25	0.25	0.02	0.05	0.05	0.14	0.17	0.17
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.08	0.33	0.52	0.13	0.38	0.38	0.17	0.20	0.20	0.18	0.21	0.21
Volume/Cap:	0.31	0.81	0.28	0.81	0.67	0.67	0.09	0.23	0.23	0.74	0.81	0.81
Uniform Del:	32.6	22.8	10.3	31.9	19.4	19.4	26.0	25.3	25.3	28.9	28.2	28.2
IncrementDel:	1.3	2.9	0.2	10.7	1.4	1.4	0.1	0.4	0.4	8.8	7.2	7.2
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	33.9	25.8	10.5	42.6	20.8	20.8	26.2	25.6	25.6	37.7	35.4	35.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.9	25.8	10.5	42.6	20.8	20.8	26.2	25.6	25.6	37.7	35.4	35.4
LOS by Move:	C	C	B	D	C	C	C	C	C	D	D	D
HCM2kAvgQ:	1	11	3	4	8	8	1	2	2	7	8	8

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project PM

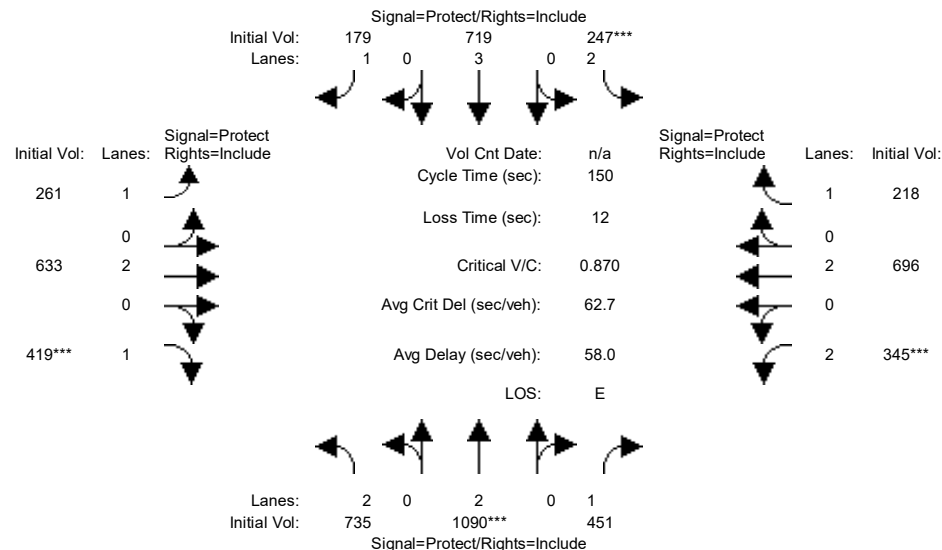
Intersection #3: El Camino Real / Arroyo Dr



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	12	12	12	0	0	0
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	4.6	4.6	4.6	0.0	0.0	0.0
Volume Module:												
Base Vol:	173	1225	0	1	926	260	110	0	157	0	0	0
Growth 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
Initial Bse:	173	1225	0	1	926	260	110	0	157	0	0	0
Added Vol:	158	186	0	0	45	47	-36	0	-29	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	331	1411	0	1	971	307	74	0	128	0	0	0
User 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
PHF Adj:	0.96	0.96	0.96	0.98	0.98	0.98	0.89	0.89	0.89	1.00	1.00	1.00
PHF Volume:	345	1470	0	1	992	314	83	0	144	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	345	1470	0	1	992	314	83	0	144	0	0	0
PCE 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
MLF 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
Final Volume:	345	1470	0	1	992	314	83	0	144	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	1.00	0.93	0.86	0.85	0.87	1.00	0.86	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	2.27	0.73	1.36	0.00	1.64	0.00	0.00	0.00
Final Sat.:	1769	5083	0	1769	3716	1175	2257	0	2682	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.19	0.29	0.00	0.00	0.27	0.27	0.04	0.00	0.05	0.00	0.00	0.00
Crit Moves:	***			***			***					
Green/Cycle:	0.35	0.77	0.00	0.07	0.48	0.48	0.10	0.00	0.10	0.00	0.00	0.00
Volume/Cap:	0.55	0.38	0.00	0.01	0.55	0.55	0.36	0.00	0.53	0.00	0.00	0.00
Uniform Del:	38.9	5.7	0.0	64.8	27.2	27.2	62.9	0.0	64.0	0.0	0.0	0.0
IncrcmntDel:	1.1	0.1	0.0	0.0	0.3	0.3	0.4	0.0	1.3	0.0	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	39.9	5.7	0.0	64.8	27.4	27.4	63.3	0.0	65.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.9	5.7	0.0	64.8	27.4	27.4	63.3	0.0	65.3	0.0	0.0	0.0
LOS by Move:	D	A	A	E	C	C	E	A	E	A	A	A
HCM2kAvgQ:	13	8	0	0	15	15	3	0	5	0	0	0
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project PM

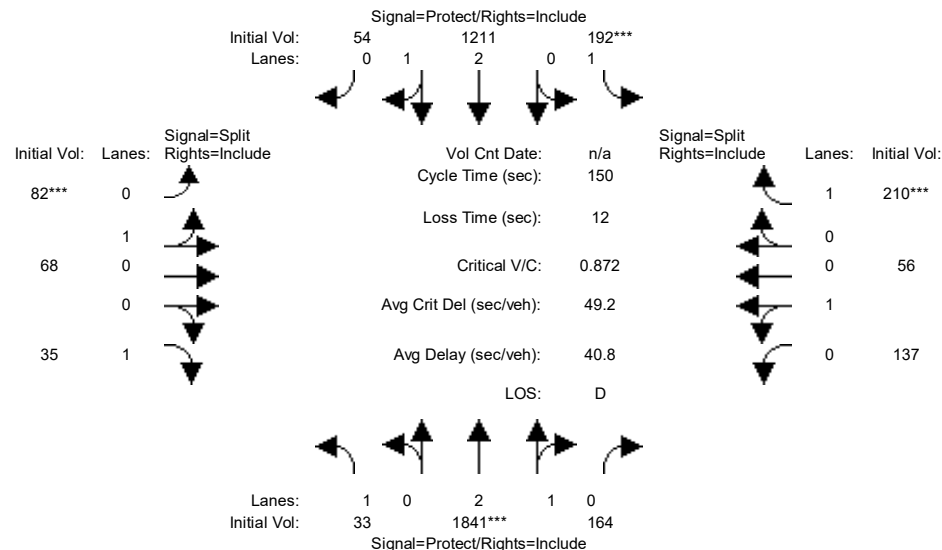
Intersection #4: El Camino Real / Chestnut Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Volume Module:												
Base Vol:	728	1057	407	207	734	188	176	534	355	300	647	184
Growth 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
Initial Bse:	728	1057	407	207	734	188	176	534	355	300	647	184
Added Vol:	7	33	44	40	-15	-9	85	99	64	45	49	34
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	735	1090	451	247	719	179	261	633	419	345	696	218
User 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
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.91	0.91	0.91	0.95	0.95	0.95
PHF Volume:	761	1128	467	255	744	185	288	699	462	364	733	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	761	1128	467	255	744	185	288	699	462	364	733	230
PCE 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
MLF 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
FinalVolume:	761	1128	467	255	744	185	288	699	462	364	733	230
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.79	0.93	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1562	3432	5083	1500	1769	3538	1534	3432	3538	1536
Capacity Analysis Module:												
Vol/Sat:	0.22	0.32	0.30	0.07	0.15	0.12	0.16	0.20	0.30	0.11	0.21	0.15
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.27	0.37	0.37	0.09	0.18	0.18	0.21	0.35	0.35	0.12	0.26	0.26
Volume/Cap:	0.81	0.87	0.82	0.87	0.81	0.69	0.79	0.57	0.87	0.87	0.79	0.57
Uniform Del:	51.0	44.2	42.9	67.8	59.1	57.6	56.5	39.9	45.9	64.7	51.5	48.0
IncramntDel:	5.6	6.6	8.9	23.3	5.7	7.2	11.1	0.6	14.5	17.6	4.7	2.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	56.6	50.9	51.8	91.1	64.8	64.8	67.6	40.6	60.3	82.3	56.2	50.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.6	50.9	51.8	91.1	64.8	64.8	67.6	40.6	60.3	82.3	56.2	50.0
LOS by Move:	E	D	D	F	E	E	E	D	E	F	E	D
HCM2kAvgQ:	19	28	21	8	14	9	14	14	22	11	18	10
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project PM

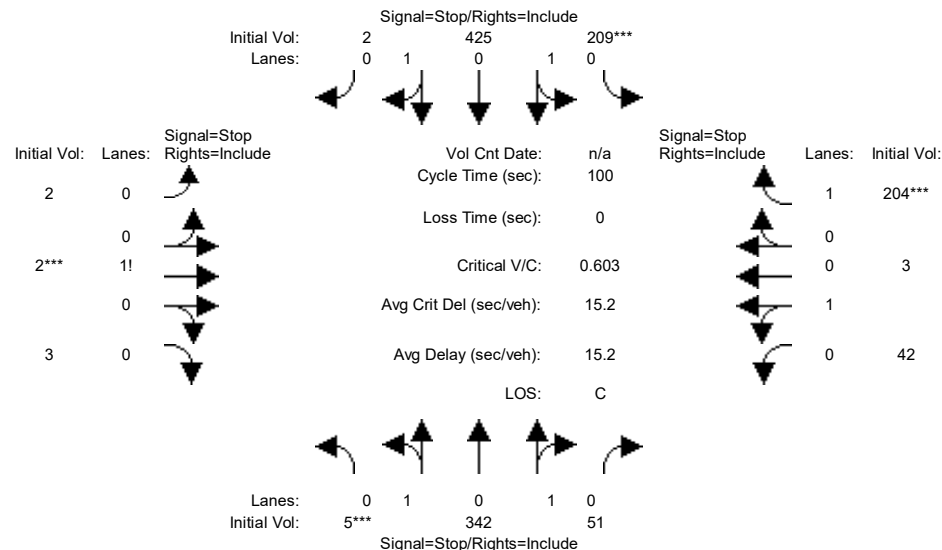
Intersection #5: El Camino Real / W. Orange Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Volume Module:												
Base Vol:	33	1758	164	192	1117	54	82	68	35	137	56	210
Growth 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
Initial Bse:	33	1758	164	192	1117	54	82	68	35	137	56	210
Added Vol:	0	83	0	0	94	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1841	164	192	1211	54	82	68	35	137	56	210
User 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
PHF Adj:	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93	0.84	0.84	0.84
PHF Volume:	36	1982	177	208	1312	59	89	74	38	163	67	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1982	177	208	1312	59	89	74	38	163	67	250
PCE 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
MLF 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
FinalVolume:	36	1982	177	208	1312	59	89	74	38	163	67	250
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.88	0.93	0.89	0.88	0.95	0.95	0.79	0.95	0.95	0.80
Lanes:	1.00	2.75	0.25	1.00	2.87	0.13	0.55	0.45	1.00	0.71	0.29	1.00
Final Sat.:	1769	4611	411	1769	4836	216	990	821	1510	1277	522	1516
Capacity Analysis Module:												
Vol/Sat:	0.02	0.43	0.43	0.12	0.27	0.27	0.09	0.09	0.03	0.13	0.13	0.16
Crit Moves:	****			****			****			****		
Green/Cycle:	0.06	0.49	0.49	0.13	0.57	0.57	0.10	0.10	0.10	0.19	0.19	0.19
Volume/Cap:	0.36	0.87	0.87	0.87	0.47	0.47	0.87	0.87	0.24	0.68	0.68	0.87
Uniform Del:	68.2	33.8	33.8	63.6	18.9	18.9	66.3	66.3	61.9	56.5	56.5	59.0
IncrcmntDel:	2.2	3.7	3.7	27.5	0.1	0.1	33.1	33.1	0.8	5.3	5.3	23.9
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	70.4	37.5	37.5	91.1	19.0	19.0	99.5	99.5	62.8	61.8	61.8	83.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	70.4	37.5	37.5	91.1	19.0	19.0	99.5	99.5	62.8	61.8	61.8	83.0
LOS by Move:	E	D	D	F	B	B	F	F	E	E	E	F
HCM2kAvgQ:	2	34	34	12	13	13	10	10	2	11	11	14
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Project PM

Intersection #6: Mission Rd / Grand Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	5	268	45	209	318	2	2	2	3	34	3	204
Growth 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
Initial Bse:	5	268	45	209	318	2	2	2	3	34	3	204
Added Vol:	0	74	6	0	107	0	0	0	0	8	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	342	51	209	425	2	2	2	3	42	3	204
User 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
PHF Adj:	0.92	0.92	0.92	0.97	0.97	0.97	0.44	0.44	0.44	0.78	0.78	0.78
PHF Volume:	5	370	55	215	437	2	5	5	7	54	4	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	370	55	215	437	2	5	5	7	54	4	261
PCE 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
MLF 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
Final Volume:	5	370	55	215	437	2	5	5	7	54	4	261

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	1.72	0.26	0.66	1.33	0.01	0.28	0.29	0.43	0.93	0.07	1.00
Final Sat.:	14	937	142	357	754	4	125	125	188	425	30	540

Capacity Analysis Module:

Vol/Sat:	0.40	0.39	0.39	0.60	0.58	0.57	0.04	0.04	0.04	0.13	0.13	0.48
Crit Moves:	****			****			****					****
Delay/Veh:	13.3	13.1	12.8	18.3	17.0	16.6	10.8	10.8	10.8	11.3	11.3	14.5
Delay 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
AdjDel/Veh:	13.3	13.1	12.8	18.3	17.0	16.6	10.8	10.8	10.8	11.3	11.3	14.5
LOS by Move:	B	B	B	C	C	C	B	B	B	B	B	B
ApproachDel:	13.0			17.4			10.8			13.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.0			17.4			10.8			13.9		
LOS by Appr:	B			C			B			B		
AllWayAvgQ:	0.6	0.6	0.6	1.4	1.2	1.2	0.0	0.0	0.0	0.1	0.1	0.8

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Mission Rd / Grand Ave

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	0 1 0 1 0	0 0 1 0 0	0 1 0 0 1
Initial Vol:	5 342 51	209 425 2	2 2 3	42 3 204
Major Street Volume:	1034			
Minor Approach Volume:	249			
Minor Approach Volume Threshold:	360			

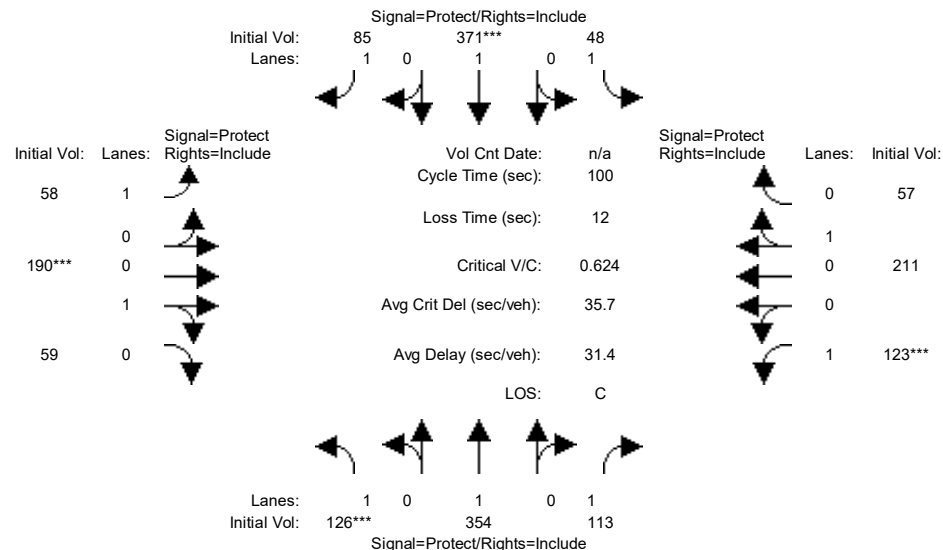
SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project PM

Intersection #7: Grand Ave / Chestnut Ave

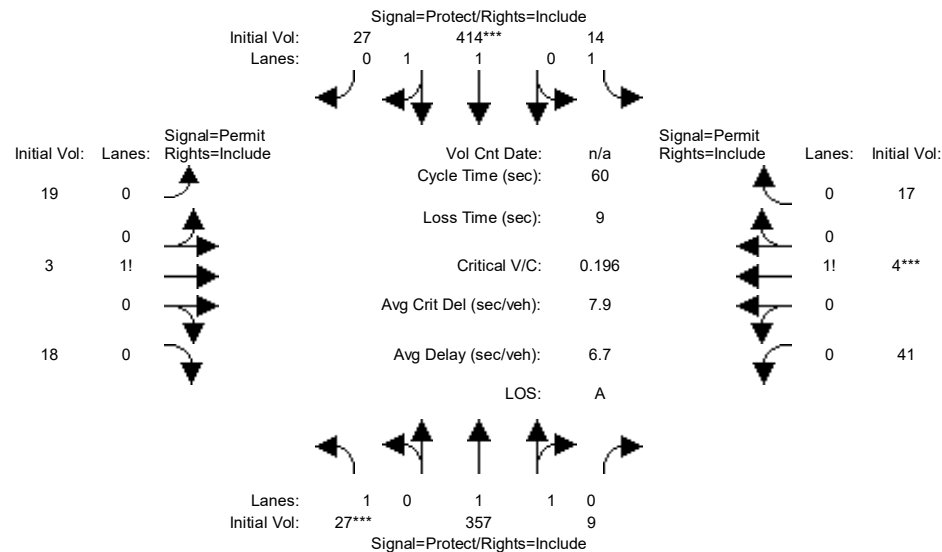


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	4	4	4	4	4	4	8	8	4	8	8
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	126	336	107	48	358	77	52	187	59	119	207	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	336	107	48	358	77	52	187	59	119	207	57
Added Vol:	0	18	6	0	13	8	6	3	0	4	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	126	354	113	48	371	85	58	190	59	123	211	57
User 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
PHF Adj:	0.94	0.94	0.94	0.91	0.91	0.91	0.84	0.84	0.84	0.80	0.80	0.80
PHF Volume:	135	378	121	53	409	94	69	227	70	154	264	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	378	121	53	409	94	69	227	70	154	264	71
PCE 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
MLF 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
FinalVolume:	135	378	121	53	409	94	69	227	70	154	264	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.81	0.93	0.98	0.83	0.93	0.94	0.94	0.93	0.95	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.76	0.24	1.00	0.79	0.21
Final Sat.:	1769	1862	1540	1769	1862	1570	1769	1367	424	1769	1416	383
Capacity Analysis Module:												
Vol/Sat:	0.08	0.20	0.08	0.03	0.22	0.06	0.04	0.17	0.17	0.09	0.19	0.19
Crit Moves:	***			***			***			***		
Green/Cycle:	0.12	0.40	0.40	0.08	0.35	0.35	0.07	0.27	0.27	0.14	0.33	0.33
Volume/Cap:	0.62	0.51	0.20	0.38	0.62	0.17	0.55	0.62	0.62	0.62	0.56	0.56
Uniform Del:	41.7	22.9	19.8	43.8	26.9	22.3	44.8	32.3	32.3	40.5	27.2	27.2
IncramntDel:	5.6	0.6	0.2	1.8	1.9	0.1	4.9	2.6	2.6	4.9	1.2	1.2
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	47.3	23.5	20.0	45.6	28.8	22.5	49.8	34.8	34.8	45.4	28.4	28.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.3	23.5	20.0	45.6	28.8	22.5	49.8	34.8	34.8	45.4	28.4	28.4
LOS by Move:	D	C	B	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	4	8	2	2	11	2	3	9	9	6	9	9

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project PM

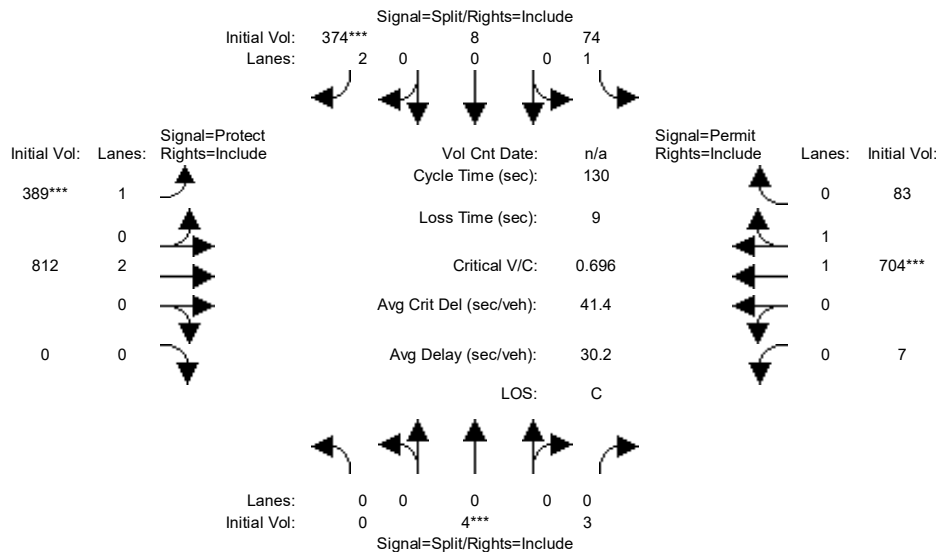
Intersection #8: Mission Rd / Oak Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	1	288	9	14	352	0	0	0	0	41	0	17
Growth 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
Initial Bse:	1	288	9	14	352	0	0	0	0	41	0	17
Added Vol:	26	69	0	0	62	27	19	3	18	0	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	357	9	14	414	27	19	3	18	41	4	17
User Adj:	0.88	0.88	0.88	0.84	0.84	0.84	0.00	0.00	0.00	0.61	0.61	0.61
PHF Adj:	0.90	0.90	0.90	0.87	0.87	0.87	1.00	1.00	1.00	0.76	0.76	0.76
PHF Volume:	26	348	9	14	399	26	0	0	0	33	3	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	348	9	14	399	26	0	0	0	33	3	14
PCE 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
MLF 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
FinalVolume:	26	348	9	14	399	26	0	0	0	33	3	14
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.93	0.93	0.93	0.92	0.92	1.00	1.00	1.00	0.86	0.86	0.86
Lanes:	1.00	1.95	0.05	1.00	1.88	0.12	0.00	1.00	0.00	0.67	0.06	0.27
Final Sat.:	1769	3437	87	1769	3291	215	0	1900	0	1080	105	448
Capacity Analysis Module:												
Vol/Sat:	0.01	0.10	0.10	0.01	0.12	0.12	0.00	0.00	0.00	0.03	0.03	0.03
Crit Moves:	***			***						***		
Green/Cycle:	0.08	0.65	0.65	0.05	0.62	0.62	0.00	0.00	0.00	0.16	0.16	0.16
Volume/Cap:	0.20	0.16	0.16	0.16	0.20	0.20	0.00	0.00	0.00	0.20	0.20	0.20
Uniform Del:	26.0	4.2	4.2	27.4	5.0	5.0	0.0	0.0	0.0	22.1	22.1	22.1
IncrcmntDel:	0.7	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00
Delay/Veh:	26.7	4.2	4.2	28.2	5.0	5.0	0.0	0.0	0.0	22.4	22.4	22.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.7	4.2	4.2	28.2	5.0	5.0	0.0	0.0	0.0	22.4	22.4	22.4
LOS by Move:	C	A	A	C	A	A	A	A	A	C	C	C
HCM2kAvgQ:	0	1	1	0	2	2	0	0	0	1	1	1

Note: Queue reported is the number of cars per lane.

Intersection #9: Mission Rd / Chestnut Ave

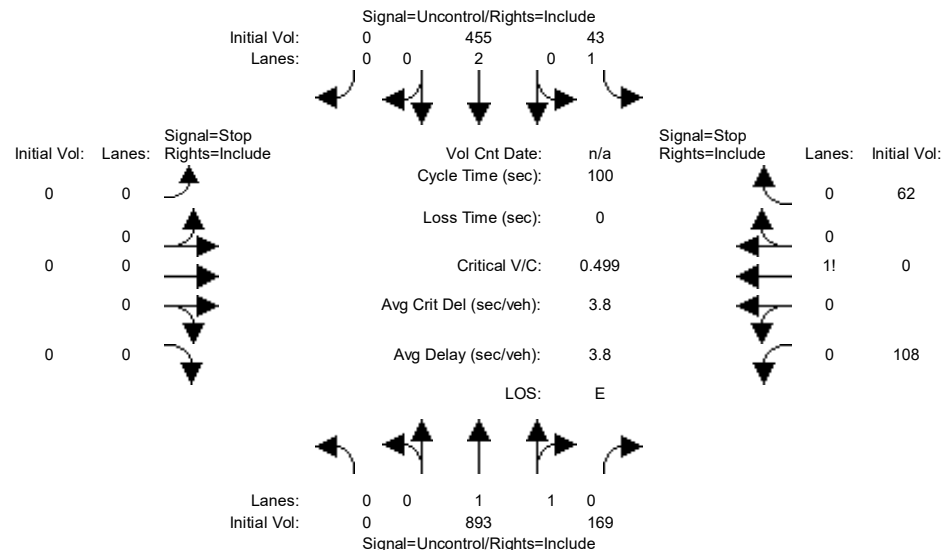


Approach:	North Bound				South Bound			East Bound			West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
-----	-----				-----			-----			-----				
Min. Green:	0		0		0	9		9		9	4		6		6
Y+R:	0.0		0.0		0.0	4.0		4.0		4.0	4.0		4.0		4.0
-----	-----				-----			-----			-----				
Volume Module:															
Base Vol:	0		0		0	72		0		304	300		793		0
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0		0		0	72		0		304	300		793		0
Added Vol:	0		4		3	2		8		70	89		19		0
PasserByVol:	0		0		0	0		0		0	0		0		0
Initial Fut:	0		4		3	74		8		374	389		812		0
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00		1.00		1.00	0.87		0.87		0.87	0.96		0.96		0.96
PHF Volume:	0		4		3	85		9		430	407		850		0
Reduct Vol:	0		0		0	0		0		0	0		0		0
Reduced Vol:	0		4		3	85		9		430	407		850		0
PCE Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
FinalVolume:	0		4		3	85		9		430	407		850		0
-----	-----				-----			-----			-----				
Saturation Flow Module:															
Sat/Lane:	1900		1900		1900	1900		1900		1900	1900		1900		1900
Adjustment:	1.00		0.92		0.91	0.81		0.81		0.81	0.93		0.93		1.00
Lanes:	0.00		0.57		0.43	0.90		0.10		2.00	1.00		2.00		0.00
Final Sat.:	0		998		748	1389		150		3078	1769		3538		0
-----	-----				-----			-----			-----				
Capacity Analysis Module:															
Vol/Sat:	0.00		0.00		0.00	0.06		0.06		0.14	0.23		0.24		0.00
Crit Moves:	****					****				****				****	
Green/Cycle:	0.00		0.01		0.01	0.20		0.20		0.20	0.33		0.72		0.00
Volume/Cap:	0.00		0.69		0.69	0.31		0.31		0.70	0.70		0.33		0.00
Uniform Del:	0.0		64.5		64.5	44.2		44.2		48.3	37.8		6.5		0.0
IncremntDel:	0.0		115		114.7	0.1		0.1		2.9	3.7		0.1		0.0
InitQueueDel:	0.0		0.0		0.0	0.0		0.0		0.0	0.0		0.0		0.0
Delay Adj:	0.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		0.00
Delay/Veh:	0.0		179		179.2	44.3		44.3		51.1	41.5		6.6		0.0
User DelAdj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	0.0		179		179.2	44.3		44.3		51.1	41.5		6.6		0.0
LOS by Move:	A		F		F	D		D		D	D		A		A
HCM2kAvgQ:	0		1		1	3		3		9	15		6		0
Note: Queue reported is the number of cars per lane.															

Licensed to K-H. PHOENIX, AZ

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Project PM

Intersection #10: Juniperro Serra Blvd / Arroyo Dr



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	893	169	43	455	0	0	0	0	108	0	62
Growth 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
Initial Bse:	0	893	169	43	455	0	0	0	0	108	0	62
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	893	169	43	455	0	0	0	0	108	0	62
User 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
PHF Adj:	0.90	0.90	0.90	0.84	0.84	0.84	1.00	1.00	1.00	0.99	0.99	0.99
PHF Volume:	0	992	188	51	544	0	0	0	0	109	0	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	992	188	51	544	0	0	0	0	109	0	63
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxx	4.1	xxxx	xxxx	xxxx	xxxx	xxxx	6.8	6.5	6.9
FollowUpTim:	xxxx	xxxx	xxxx	2.2	xxxx	xxxx	xxxx	xxxx	xxxx	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxx	1180	xxxx	xxxx	xxxx	xxxx	xxxx	1461	1733	590
Potent Cap.:	xxxx	xxxx	xxxx	588	xxxx	xxxx	xxxx	xxxx	xxxx	120	87	451
Move Cap.:	xxxx	xxxx	xxxx	588	xxxx	xxxx	xxxx	xxxx	xxxx	112	79	451
Total Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	237	156	xxxx	219	192	xxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.09	xxxx	xxxx	xxxx	xxxx	xxxx	0.50	0.00	0.14
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxx	0.3	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Control Del:	xxxx	xxxx	xxxx	11.7	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	270	xxxx
SharedQueue:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	4.0	xxxx
Shrd ConDel:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	39.2	xxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	E	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			39.2		
ApproachLOS:	*			*			*			E		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	0 0 1! 0 0
Initial Vol:	0 893 169	43 455 0	0 0 0 0	108 0 62
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	39.2

Approach[westbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=1.9]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=170]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1730]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	0 0 1! 0 0
Initial Vol:	0 893 169	43 455 0	0 0 0 0	108 0 62

Major Street Volume: 1560

Minor Approach Volume: 170

Minor Approach Volume Threshold: 132

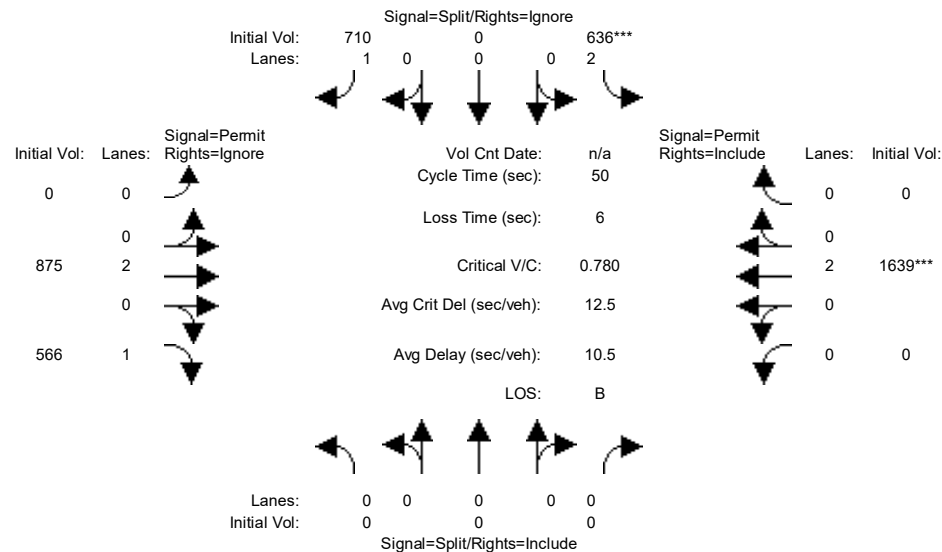
SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project PM

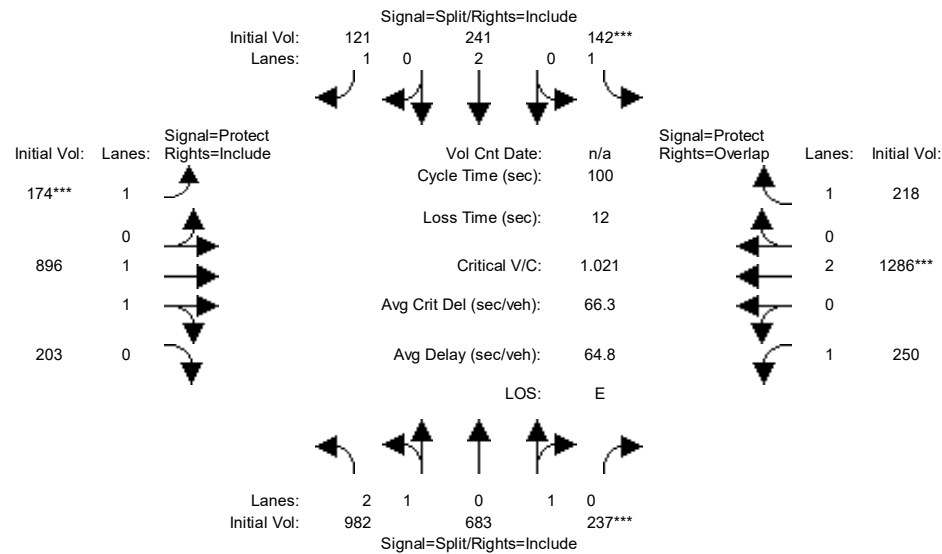
Intersection #11: I-280 SB Ramps / Westborough Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	4	4	4	9	9	9	9	9	9
Y+R:	0.0	0.0	0.0	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Volume Module:												
Base Vol:	0	0	0	595	0	710	0	854	566	0	1616	0
Growth 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
Initial Bse:	0	0	0	595	0	710	0	854	566	0	1616	0
Added Vol:	0	0	0	41	0	0	0	21	0	0	23	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	636	0	710	0	875	566	0	1639	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.92	0.92	0.00	0.95	0.95	0.00	0.96	0.96	0.96
PHF Volume:	0	0	0	694	0	0	0	919	0	0	1713	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	694	0	0	0	919	0	0	1713	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	0	0	694	0	0	0	919	0	0	1713	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	0.93	1.00	1.00	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	0	3432	0	1900	0	3538	1900	0	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.26	0.00	0.00	0.48	0.00
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.62	0.00	0.00	0.62	0.00
Volume/Cap:	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.42	0.00	0.00	0.78	0.00
Uniform Del:	0.0	0.0	0.0	17.2	0.0	0.0	0.0	4.9	0.0	0.0	7.0	0.0
IncrcmntDel:	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.1	0.0	0.0	1.9	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	21.7	0.0	0.0	0.0	5.0	0.0	0.0	8.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	21.7	0.0	0.0	0.0	5.0	0.0	0.0	8.8	0.0
LOS by Move:	A	A	A	C	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	8	0	0	0	4	0	0	12	0
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project PM

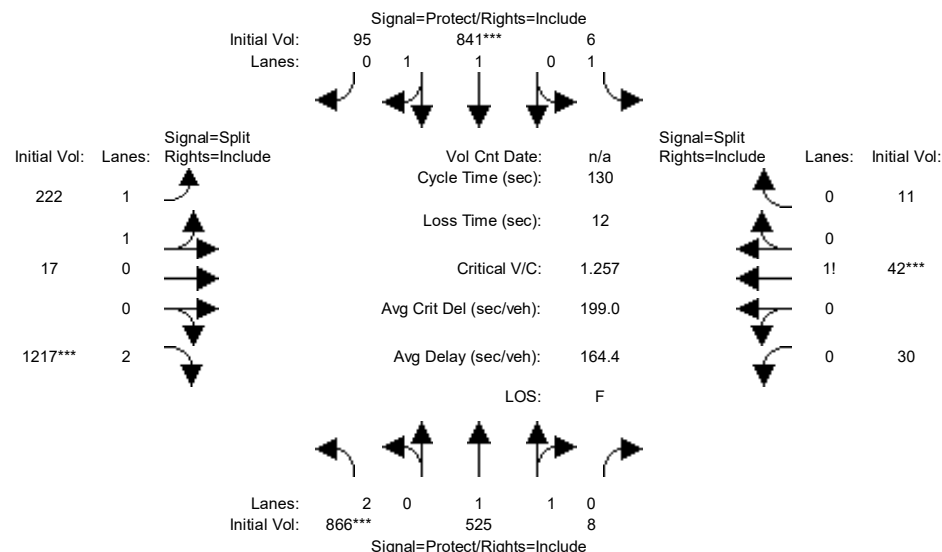
Intersection #12: I-280 NB Ramps / Westborough Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Volume Module:												
Base Vol:	982	683	196	142	241	121	174	834	203	203	1216	218
Growth 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
Initial Bse:	982	683	196	142	241	121	174	834	203	203	1216	218
Added Vol:	0	0	41	0	0	0	0	62	0	47	70	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	982	683	237	142	241	121	174	896	203	250	1286	218
User 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
PHF Adj:	0.97	0.97	0.97	0.80	0.80	0.80	0.96	0.96	0.96	0.91	0.91	0.91
PHF Volume:	1010	703	244	178	302	152	182	936	212	276	1418	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1010	703	244	178	302	152	182	936	212	276	1418	240
PCE 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
MLF 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
FinalVolume:	1010	703	244	178	302	152	182	936	212	276	1418	240
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.89	0.89	0.93	0.93	0.83	0.93	0.90	0.90	0.93	0.93	0.83
Lanes:	2.10	1.41	0.49	1.00	2.00	1.00	1.00	1.63	0.37	1.00	2.00	1.00
Final Sat.:	3439	2392	830	1769	3538	1583	1769	2804	635	1769	3538	1580
Capacity Analysis Module:												
Vol/Sat:	0.29	0.29	0.29	0.10	0.09	0.10	0.10	0.33	0.33	0.16	0.40	0.15
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green/Cycle:	0.29	0.29	0.29	0.10	0.10	0.10	0.10	0.34	0.34	0.16	0.39	0.49
Volume/Cap:	1.02	1.02	1.02	1.02	0.87	0.97	1.02	0.99	0.99	0.99	1.02	0.31
Uniform Del:	35.6	35.6	35.6	45.1	44.4	44.9	45.0	33.1	33.1	42.1	30.4	15.3
IncrementDel:	25.9	25.9	25.9	73.6	19.7	63.3	72.9	24.6	24.6	51.8	29.4	0.2
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	61.5	61.5	61.5	118.6	64.1	108.3	117.8	57.6	57.6	93.9	59.8	15.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	61.5	61.5	61.5	118.6	64.1	108.3	117.8	57.6	57.6	93.9	59.8	15.5
LOS by Move:	E	E	E	F	E	F	F	E	E	F	E	B
HCM2kAvgQ:	23	23	23	10	8	8	10	25	25	13	31	4
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P AM

Intersection #1: El Camino Real / Hickey Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6

Volume Module:

Base Vol:	575	307	6	4	577	67	157	12	850	21	30	8
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	812	434	8	6	815	95	222	17	1201	30	42	11
Added Vol:	54	91	0	0	26	0	0	0	16	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	866	525	8	6	841	95	222	17	1217	30	42	11
User 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
PHF Adj:	0.84	0.84	0.84	0.92	0.92	0.92	0.89	0.89	0.89	0.82	0.82	0.82
PHF Volume:	1030	624	10	6	919	103	249	19	1366	36	52	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1030	624	10	6	919	103	249	19	1366	36	52	14
PCE 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
MLF 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
Final Volume:	1030	624	10	6	919	103	249	19	1366	36	52	14

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.92	0.92	0.94	0.94	0.73	0.95	0.95	0.94
Lanes:	2.00	1.97	0.03	1.00	1.80	0.20	1.86	0.14	2.00	0.36	0.51	0.13
Final Sat.:	3432	3475	56	1769	3132	352	3307	253	2786	640	914	244

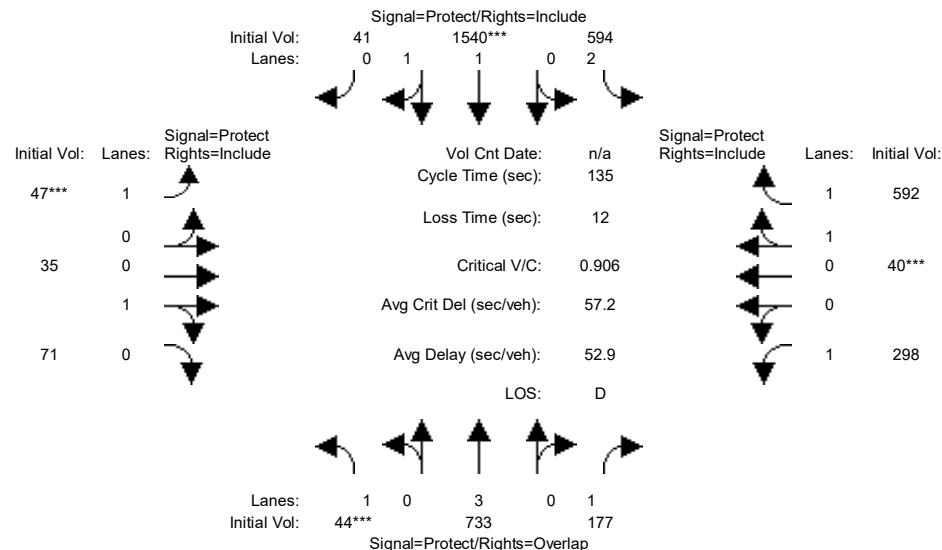
Capacity Analysis Module:

Vol/Sat:	0.30	0.18	0.18	0.00	0.29	0.29	0.08	0.08	0.49	0.06	0.06	0.06
Crit Moves:	***			***			***			***		
Green/Cycle:	0.23	0.38	0.38	0.07	0.22	0.22	0.37	0.37	0.37	0.09	0.09	0.09
Volume/Cap:	1.33	0.47	0.47	0.05	1.33	1.33	0.20	0.20	1.33	0.61	0.61	0.61
Uniform Del:	50.3	30.3	30.3	57.0	50.6	50.6	28.0	28.0	41.0	56.8	56.8	56.8
IncrementDel:	157.2	0.3	0.3	0.2	157	157.2	0.1	0.1	155.1	6.7	6.7	6.7
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	207.5	30.6	30.6	57.2	208	207.9	28.1	28.1	196.1	63.4	63.4	63.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	207.5	30.6	30.6	57.2	208	207.9	28.1	28.1	196.1	63.4	63.4	63.4
LOS by Move:	F	C	C	E	F	F	C	C	F	E	E	E
HCM2kAvgQ:	37	10	10	0	39	39	4	4	56	5	5	5

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P AM

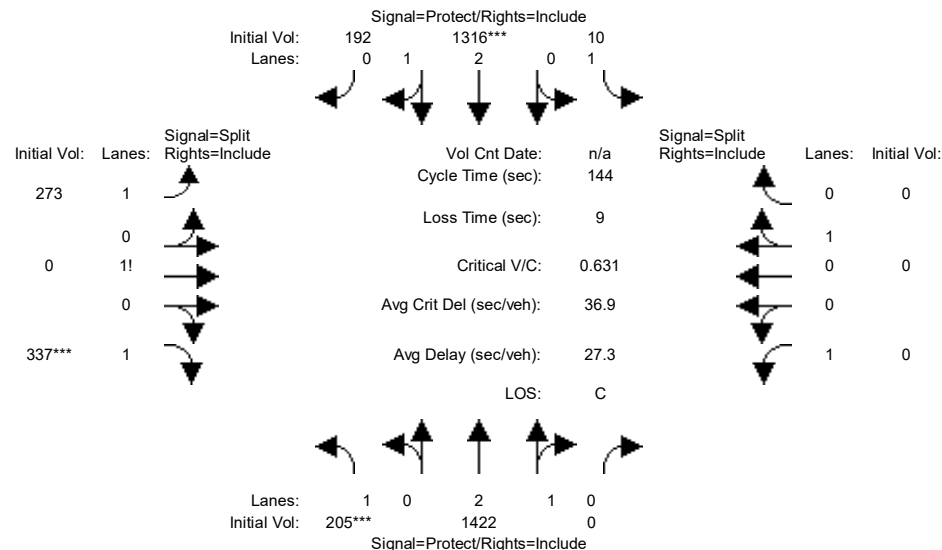
Intersection #2: El Camino Real / McLellan Dr



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Volume Module:												
Base Vol:	31	470	121	394	1087	29	33	25	50	213	28	365
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	44	664	171	557	1536	41	47	35	71	301	40	516
Added Vol:	0	69	6	37	4	0	0	0	0	-3	0	76
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	733	177	594	1540	41	47	35	71	298	40	592
User 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
PHF Adj:	0.90	0.90	0.90	0.88	0.88	0.88	0.82	0.82	0.82	0.79	0.79	0.79
PHF Volume:	48	811	196	678	1758	47	57	43	86	378	50	751
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	811	196	678	1758	47	57	43	86	378	50	751
PCE 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
MLF 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
Final Volume:	48	811	196	678	1758	47	57	43	86	378	50	751
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.79	0.90	0.93	0.93	0.93	0.88	0.81	0.93	0.84	0.83
Lanes:	1.00	3.00	1.00	2.00	1.95	0.05	1.00	0.32	0.68	1.00	0.12	1.88
Final Sat.:	1769	5083	1499	3432	3432	91	1769	529	1059	1769	198	2964
Capacity Analysis Module:												
Vol/Sat:	0.03	0.16	0.13	0.20	0.51	0.51	0.03	0.08	0.08	0.21	0.25	0.25
Crit Moves:	***			***			***			***		
Green/Cycle:	0.03	0.25	0.49	0.31	0.53	0.53	0.10	0.11	0.11	0.25	0.26	0.26
Volume/Cap:	0.92	0.64	0.26	0.64	0.98	0.98	0.33	0.74	0.74	0.87	0.98	0.98
Uniform Del:	65.3	45.4	19.9	40.4	31.2	31.2	57.0	58.1	58.1	48.9	49.5	49.5
IncramntDel:	96.4	1.1	0.2	1.4	15.4	15.4	1.2	15.1	15.1	17.1	25.3	25.3
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	161.7	46.6	20.1	41.8	46.6	46.6	58.1	73.3	73.3	65.9	74.8	74.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	161.7	46.6	20.1	41.8	46.6	46.6	58.1	73.3	73.3	65.9	74.8	74.8
LOS by Move:	F	D	C	D	D	D	E	E	E	E	E	E
HCM2kAvgQ:	2	11	5	11	37	36	2	7	7	18	22	21
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P AM

Intersection #3: El Camino Real / Arroyo Dr

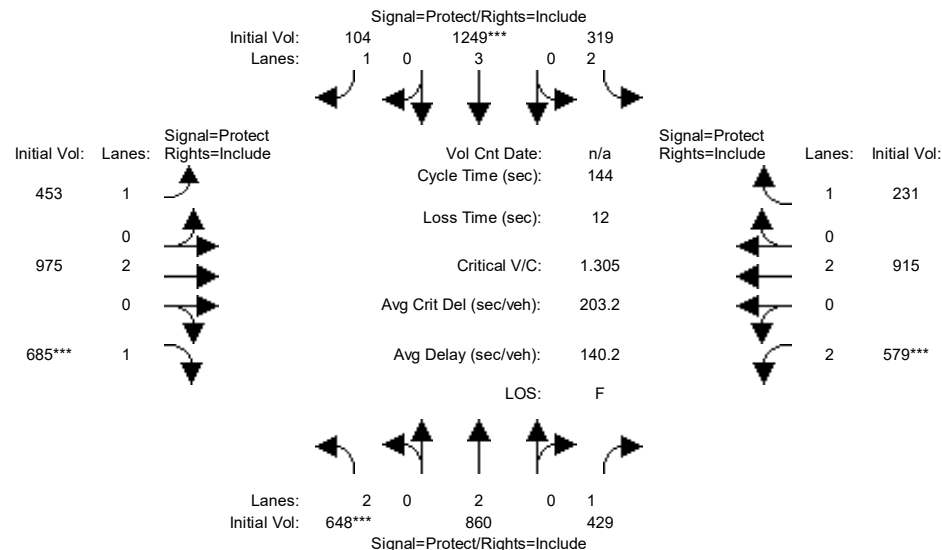


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	12	12	12	0	0	0
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	4.6	4.6	4.6	0.0	0.0	0.0
Volume Module:												
Base Vol:	141	947	0	7	912	154	200	0	244	0	0	0
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	199	1338	0	10	1289	218	283	0	345	0	0	0
Added Vol:	6	84	0	0	27	-26	-10	0	-8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	205	1422	0	10	1316	192	273	0	337	0	0	0
User 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
PHF Adj:	0.85	0.85	0.85	0.98	0.98	0.98	0.89	0.89	0.89	1.00	1.00	1.00
PHF Volume:	242	1679	0	10	1338	195	307	0	379	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	242	1679	0	10	1338	195	307	0	379	0	0	0
PCE 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
MLF 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
FinalVolume:	242	1679	0	10	1338	195	307	0	379	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.91	0.93	0.87	0.87	0.88	1.00	0.88	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	2.62	0.38	1.45	0.00	1.55	1.00	1.00	0.00
Final Sat.:	1769	5083	0	1769	4350	634	2415	0	2584	1900	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.33	0.00	0.01	0.31	0.31	0.13	0.00	0.15	0.00	0.00	0.00
Crit Moves:	***	***		***	***				***			
Green/Cycle:	0.22	0.65	0.00	0.05	0.49	0.49	0.23	0.00	0.23	0.00	0.00	0.00
Volume/Cap:	0.63	0.51	0.00	0.10	0.63	0.63	0.55	0.00	0.63	0.00	0.00	0.00
Uniform Del:	51.1	13.2	0.0	64.7	27.3	27.3	48.6	0.0	49.7	0.0	0.0	0.0
IncrcmntDel:	3.4	0.1	0.0	0.5	0.5	0.5	0.5	0.0	1.2	0.0	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	54.5	13.3	0.0	65.2	27.8	27.8	49.1	0.0	50.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.5	13.3	0.0	65.2	27.8	27.8	49.1	0.0	50.9	0.0	0.0	0.0
LOS by Move:	D	B	A	E	C	C	D	A	D	A	A	A
HCM2kAvgQ:	10	14	0	0	17	17	9	0	10	0	0	0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P AM

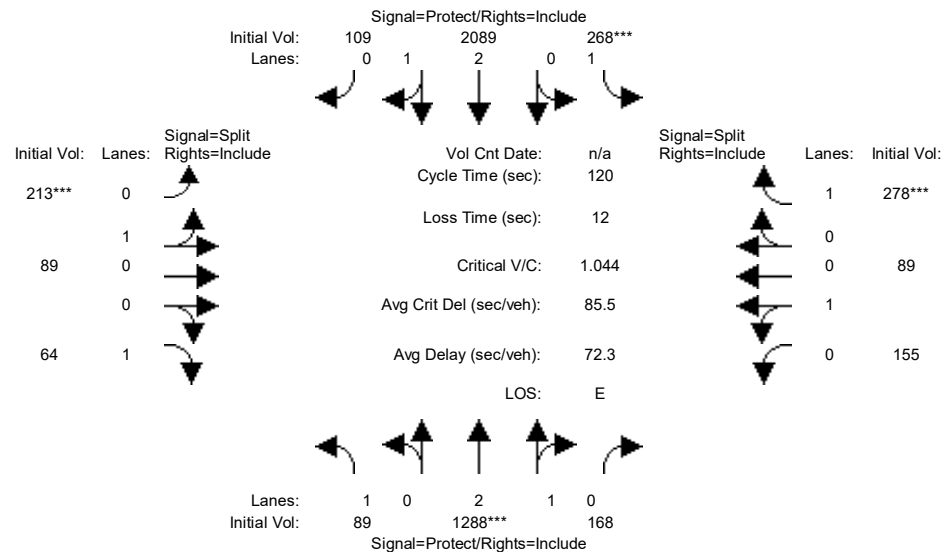
Intersection #4: El Camino Real / Chestnut Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Volume Module:												
Base Vol:	448	597	284	208	887	76	314	659	475	366	603	148
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	633	844	401	294	1253	107	444	931	671	517	852	209
Added Vol:	15	16	28	25	-4	-3	9	44	14	62	63	22
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	648	860	429	319	1249	104	453	975	685	579	915	231
User 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
PHF Adj:	0.93	0.93	0.93	0.88	0.88	0.88	0.92	0.92	0.92	0.75	0.75	0.75
PHF Volume:	698	926	463	363	1421	119	494	1065	748	775	1225	309
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	698	926	463	363	1421	119	494	1065	748	775	1225	309
PCE 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
MLF 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
FinalVolume:	698	926	463	363	1421	119	494	1065	748	775	1225	309
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.81	0.93	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1560	3432	5083	1530	1769	3538	1535	3432	3538	1547
Capacity Analysis Module:												
Vol/Sat:	0.20	0.26	0.30	0.11	0.28	0.08	0.28	0.30	0.49	0.23	0.35	0.20
Crit Moves:	***			***			***			***		
Green/Cycle:	0.16	0.27	0.27	0.10	0.21	0.21	0.24	0.37	0.37	0.17	0.30	0.30
Volume/Cap:	1.31	0.96	1.09	1.09	1.31	0.36	1.14	0.81	1.31	1.31	1.14	0.66
Uniform Del:	60.8	51.6	52.4	65.0	56.6	48.2	54.4	40.4	45.1	59.5	50.2	43.8
IncrcmntDel:	150.4	19.8	69.0	74.4	144	0.7	89.2	3.7	149.6	149.2	76.5	3.5
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	211.2	71.4	121.3	139.4	201	48.9	143.6	44.2	194.7	208.8	127	47.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	211.2	71.4	121.3	139.4	201	48.9	143.6	44.2	194.7	208.8	127	47.3
LOS by Move:	F	E	F	F	F	D	F	D	F	F	F	D
HCM2kAvgQ:	28	26	29	13	40	5	32	24	55	31	41	13
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P AM

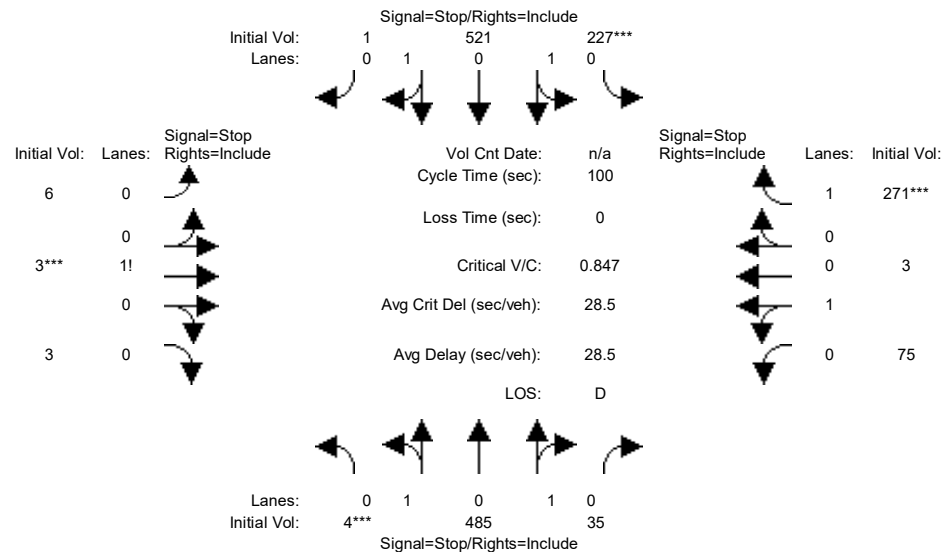
Intersection #5: El Camino Real / W. Orange Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Volume Module:												
Base Vol:	63	897	119	190	1427	77	151	63	45	110	63	197
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	89	1267	168	268	2016	109	213	89	64	155	89	278
Added Vol:	0	21	0	0	73	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	1288	168	268	2089	109	213	89	64	155	89	278
User 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
PHF Adj:	0.77	0.77	0.77	0.95	0.95	0.95	0.83	0.83	0.83	0.93	0.93	0.93
PHF Volume:	116	1682	220	283	2206	115	257	107	77	168	96	301
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	1682	220	283	2206	115	257	107	77	168	96	301
PCE 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
MLF 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
FinalVolume:	116	1682	220	283	2206	115	257	107	77	168	96	301
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.87	0.93	0.89	0.88	0.95	0.95	0.79	0.95	0.95	0.81
Lanes:	1.00	2.65	0.35	1.00	2.85	0.15	0.71	0.29	1.00	0.64	0.36	1.00
Final Sat.:	1769	4416	576	1769	4797	250	1269	530	1510	1147	657	1534
Capacity Analysis Module:												
Vol/Sat:	0.07	0.38	0.38	0.16	0.46	0.46	0.20	0.20	0.05	0.15	0.15	0.20
Crit Moves:	***			***			***			***		
Green/Cycle:	0.06	0.36	0.36	0.15	0.45	0.45	0.19	0.19	0.19	0.19	0.19	0.19
Volume/Cap:	1.01	1.04	1.04	1.04	1.01	1.01	1.04	1.04	0.26	0.78	0.78	1.04
Uniform Del:	56.1	38.1	38.1	50.8	32.8	32.8	48.4	48.4	41.1	46.4	46.4	48.7
IncrcmntDel:	88.0	33.7	33.7	66.6	22.5	22.5	60.2	60.2	0.5	11.0	11.0	65.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	144.1	71.8	71.8	117.4	55.2	55.2	108.5	109	41.5	57.4	57.4	113.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	144.1	71.8	71.8	117.4	55.2	55.2	108.5	109	41.5	57.4	57.4	113.8
LOS by Move:	F	E	E	F	E	E	F	F	D	E	E	F
HCM2kAvgQ:	8	35	34	16	39	39	20	20	3	11	11	17
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum+P AM

Intersection #6: Mission Rd / Grand Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	3	273	19	161	334	1	4	2	2	50	2	192
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	4	386	27	227	472	1	6	3	3	71	3	271
Added Vol:	0	99	8	0	49	0	0	0	0	4	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	485	35	227	521	1	6	3	3	75	3	271
User 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
PHF Adj:	0.81	0.81	0.81	0.93	0.93	0.93	0.67	0.67	0.67	0.77	0.77	0.77
PHF Volume:	5	598	43	246	563	2	8	4	4	97	4	351
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	598	43	246	563	2	8	4	4	97	4	351
PCE 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
MLF 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
Final Volume:	5	598	43	246	563	2	8	4	4	97	4	351

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	1.85	0.13	0.60	1.39	0.01	0.50	0.25	0.25	0.96	0.04	1.00
Final Sat.:	8	893	65	290	684	2	192	96	96	396	15	486

Capacity Analysis Module:

Vol/Sat:	0.67	0.67	0.67	0.85	0.82	0.81	0.04	0.04	0.04	0.24	0.24	0.72
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Delay/Veh:	23.6	23.3	22.9	38.8	35.1	33.7	12.3	12.3	12.3	13.7	13.7	25.5
Delay 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
AdjDel/Veh:	23.6	23.3	22.9	38.8	35.1	33.7	12.3	12.3	12.3	13.7	13.7	25.5
LOS by Move:	C	C	C	E	E	D	B	B	B	B	B	D
ApproachDel:	23.3			36.2			12.3			22.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	23.3			36.2			12.3			22.9		
LOS by Appr:	C			E			B			C		
AllWayAvgQ:	1.8	1.7	1.7	3.8	3.3	3.3	0.0	0.0	0.0	0.3	0.3	2.1

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Mission Rd / Grand Ave

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	0 1 0 1 0	0 0 1 0 0	0 1 0 0 1
Initial Vol:	4 485 35	227 521 1	6 3 3	75 3 271
Major Street Volume:	1274			
Minor Approach Volume:	349			
Minor Approach Volume Threshold:	270			

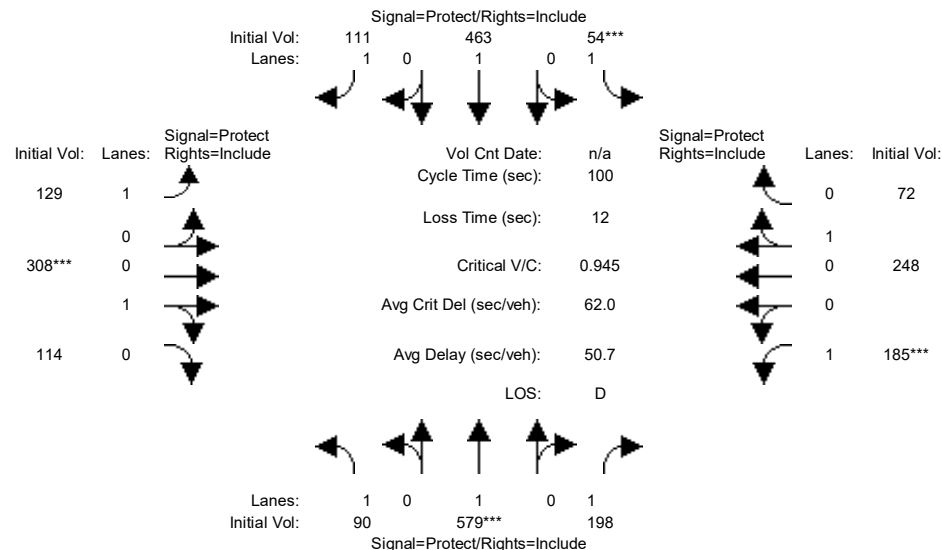
SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P AM

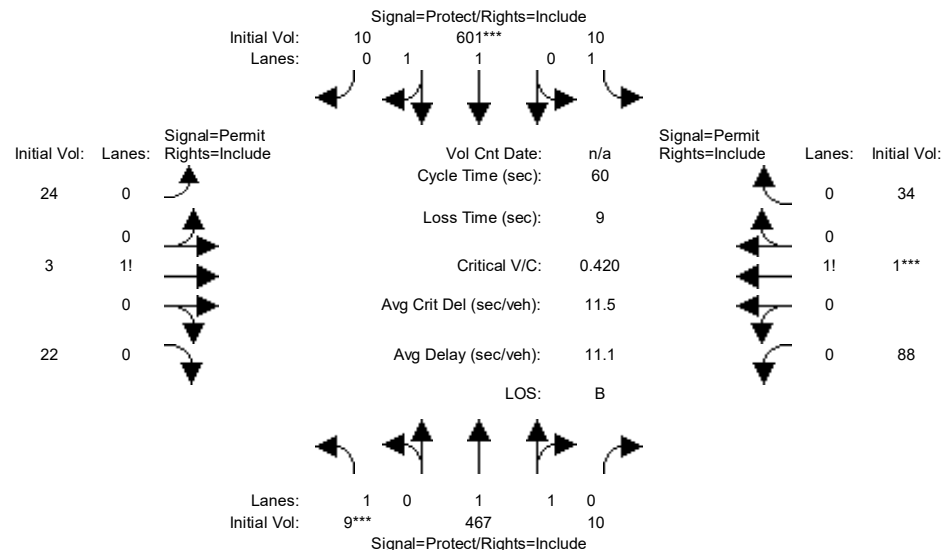
Intersection #7: Grand Ave / Chestnut Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	4	4	4	4	4	4	8	8	4	8	8
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	64	402	138	38	326	76	86	215	81	131	174	51
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	90	568	195	54	461	107	122	304	114	185	246	72
Added Vol:	0	11	3	0	2	4	7	4	0	0	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	90	579	198	54	463	111	129	308	114	185	248	72
User 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
PHF Adj:	0.90	0.90	0.90	0.84	0.84	0.84	0.72	0.72	0.72	0.86	0.86	0.86
PHF Volume:	100	641	219	64	551	133	179	429	159	214	287	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	641	219	64	551	133	179	429	159	214	287	83
PCE 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
MLF 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
FinalVolume:	100	641	219	64	551	133	179	429	159	214	287	83
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.82	0.93	0.98	0.79	0.93	0.94	0.93	0.93	0.95	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.73	0.27	1.00	0.77	0.23
Final Sat.:	1769	1862	1563	1769	1862	1502	1769	1298	483	1769	1392	405
Capacity Analysis Module:												
Vol/Sat:	0.06	0.34	0.14	0.04	0.30	0.09	0.10	0.33	0.33	0.12	0.21	0.21
Crit Moves:												
Green/Cycle:	0.06	0.36	0.36	0.04	0.34	0.34	0.16	0.35	0.35	0.13	0.32	0.32
Volume/Cap:	0.87	0.95	0.39	0.90	0.87	0.26	0.64	0.95	0.95	0.95	0.64	0.64
Uniform Del:	46.4	30.9	23.6	47.8	31.1	24.0	39.5	31.7	31.7	43.3	29.1	29.1
IncrementDel:	47.3	22.4	0.4	74.3	12.8	0.3	5.1	23.7	23.7	45.0	2.5	2.5
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	93.7	53.3	24.0	122.1	43.9	24.3	44.7	55.4	55.4	88.3	31.7	31.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	93.7	53.3	24.0	122.1	43.9	24.3	44.7	55.4	55.4	88.3	31.7	31.7
LOS by Move:	F	D	C	F	D	C	D	E	E	F	C	C
HCM2kAvgQ:	3	19	5	4	19	3	6	23	23	10	11	10
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P AM

Intersection #8: Mission Rd / Oak Ave

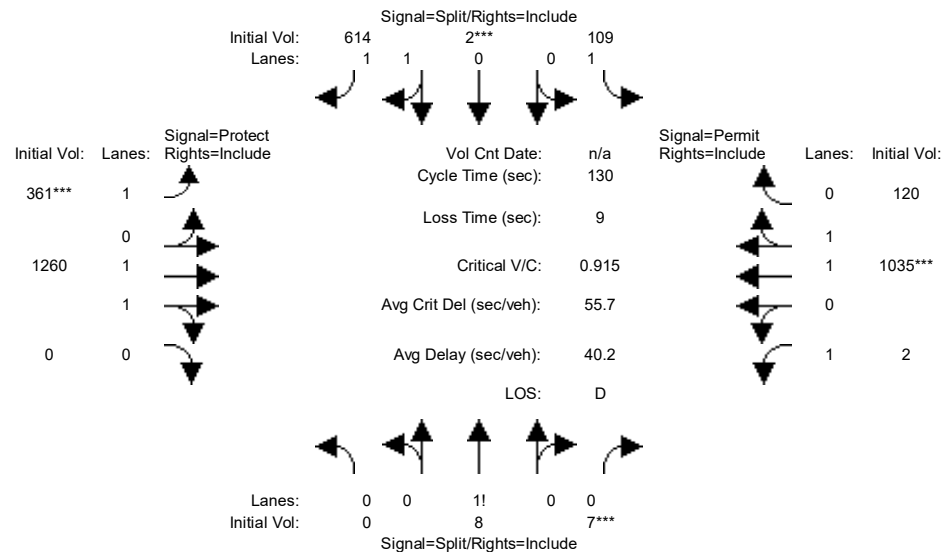


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	301	7	7	376	0	0	0	0	62	0	24
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	425	10	10	531	0	0	0	0	88	0	34
Added Vol:	9	42	0	0	70	10	24	3	22	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	467	10	10	601	10	24	3	22	88	1	34
User 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
PHF Adj:	0.88	0.88	0.88	0.84	0.84	0.84	1.00	1.00	1.00	0.61	0.61	0.61
PHF Volume:	10	534	11	12	716	12	24	3	22	143	2	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	534	11	12	716	12	24	3	22	143	2	55
PCE 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
MLF 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
Final Volume:	10	534	11	12	716	12	24	3	22	143	2	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.93	0.93	0.93	0.93	0.93	0.79	0.79	0.79	0.72	0.72	0.72
Lanes:	1.00	1.96	0.04	1.00	1.97	0.03	0.49	0.06	0.45	0.71	0.01	0.28
Final Sat.:	1769	3454	73	1769	3473	58	735	92	674	981	11	380
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.15	0.01	0.21	0.21	0.03	0.03	0.03	0.15	0.15	0.15
Crit Moves:	***			***						***		
Green/Cycle:	0.01	0.48	0.48	0.02	0.49	0.49	0.35	0.35	0.35	0.35	0.35	0.35
Volume/Cap:	0.42	0.32	0.32	0.32	0.42	0.42	0.09	0.09	0.09	0.42	0.42	0.42
Uniform Del:	29.3	9.5	9.5	29.0	9.8	9.8	13.3	13.3	13.3	15.0	15.0	15.0
IncrementDel:	11.3	0.1	0.1	5.0	0.2	0.2	0.1	0.1	0.1	0.6	0.6	0.6
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	40.6	9.6	9.6	33.9	10.0	10.0	13.3	13.3	13.3	15.6	15.6	15.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.6	9.6	9.6	33.9	10.0	10.0	13.3	13.3	13.3	15.6	15.6	15.6
LOS by Move:	D	A	A	C	A	A	B	B	B	B	B	B
HCM2kAvgQ:	0	3	3	1	5	5	1	1	1	3	3	3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P AM

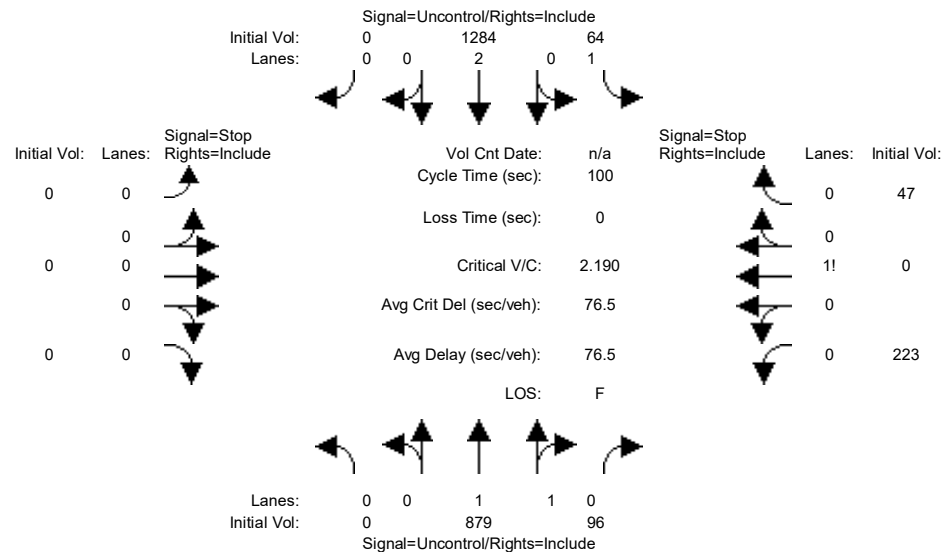
Intersection #9: Mission Rd / Chestnut Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	9	9	9	4	6	6	9	9	9
Y+R:	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.2	4.2	4.2
Volume Module:												
Base Vol:	0	0	0	76	0	372	226	888	0	0	733	84
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	0	0	107	0	526	319	1255	0	0	1036	119
Added Vol:	0	8	7	2	2	88	42	5	0	2	-1	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	8	7	109	2	614	361	1260	0	2	1035	120
User 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
PHF Adj:	1.00	1.00	1.00	0.81	0.81	0.81	0.90	0.90	0.90	0.88	0.88	0.88
PHF Volume:	0	8	7	135	2	756	404	1408	0	2	1171	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	8	7	135	2	756	404	1408	0	2	1171	135
PCE 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
MLF 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
FinalVolume:	0	8	7	135	2	756	404	1408	0	2	1171	135
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.92	0.91	0.93	0.83	0.83	0.93	0.93	0.95	0.09	0.92	0.91
Lanes:	0.00	0.53	0.47	1.00	0.01	1.99	1.00	2.00	0.00	1.00	1.79	0.21
Final Sat.:	0	928	812	1769	10	3155	1769	3538	0	164	3119	361
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.01	0.08	0.24	0.24	0.23	0.40	0.00	0.01	0.38	0.38
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.01	0.01	0.26	0.26	0.26	0.25	0.66	0.00	0.41	0.41	0.41
Volume/Cap:	0.00	0.92	0.92	0.29	0.91	0.91	0.91	0.60	0.00	0.03	0.91	0.91
Uniform Del:	0.0	64.3	64.3	38.3	46.6	46.6	47.4	12.5	0.0	22.9	36.2	36.2
IncemntDel:	0.0	181	180.8	0.4	14.6	14.6	23.5	0.5	0.0	0.2	9.4	9.4
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Delay/Veh:	0.0	245	245.1	38.7	61.2	61.2	70.9	13.0	0.0	23.1	45.6	45.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	245	245.1	38.7	61.2	61.2	70.9	13.0	0.0	23.1	45.6	45.6
LOS by Move:	A	F	F	D	E	E	E	B	A	C	D	D
HCM2kAvgQ:	0	2	2	4	16	16	19	17	0	0	27	27
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cum+P AM

Intersection #10: Juniperro Serra Blvd / Arroyo Dr



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	622	68	45	909	0	0	0	0	158	0	33
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	879	96	64	1284	0	0	0	0	223	0	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	879	96	64	1284	0	0	0	0	223	0	47
User 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
PHF Adj:	0.71	0.71	0.71	0.92	0.92	0.92	1.00	1.00	1.00	0.75	0.75	0.75
PHF Volume:	0	1233	135	69	1401	0	0	0	0	299	0	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1233	135	69	1401	0	0	0	0	299	0	63
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxx	4.1	xxxx	xxxx	xxxx	xxxx	xxxx	6.8	6.5	6.9
FollowUpTim:	xxxx	xxxx	xxxx	2.2	xxxx	xxxx	xxxx	xxxx	xxxx	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxx	1367	xxxx	xxxx	xxxx	xxxx	xxxx	2139	2839	684
Potent Cap.:	xxxx	xxxx	xxxx	498	xxxx	xxxx	xxxx	xxxx	xxxx	42	17	391
Move Cap.:	xxxx	xxxx	xxxx	498	xxxx	xxxx	xxxx	xxxx	xxxx	37	15	391
Total Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	77	73	xxxx	137	90	xxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	2.19	0.00	0.16
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxx	0.5	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Control Del:	xxxx	xxxx	xxxx	13.4	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	154	xxxx
SharedQueue:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	30.4	xxxx	xxxx
Shrd ConDel:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	674	xxxx	xxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			674.1		
ApproachLOS:	*			*			*			F		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	0 0 1! 0 0
Initial Vol:	0 879 96	64 1284 0	0 0 0 0	223 0 47
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	674.1

Approach[westbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=50.5]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=270]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2593]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	0 0 1! 0 0
Initial Vol:	0 879 96	64 1284 0	0 0 0 0	223 0 47

Major Street Volume: 2323

Minor Approach Volume: 270

Minor Approach Volume Threshold: -6 [less than minimum of 100]

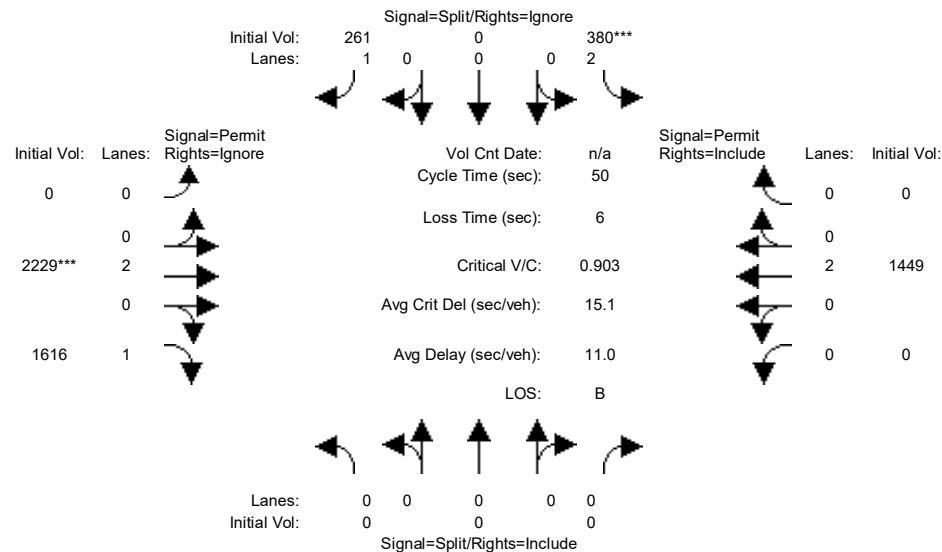
SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P AM

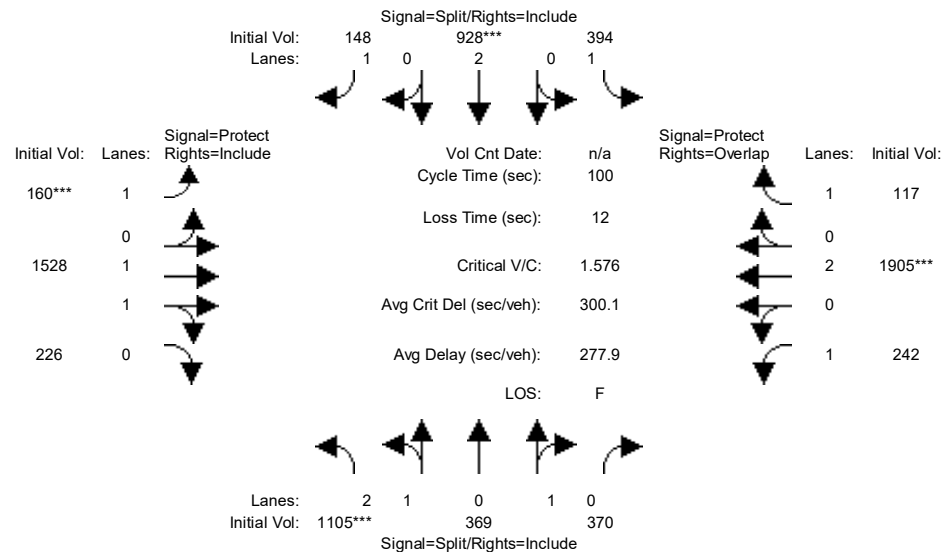
Intersection #11: I-280 SB Ramps / Westborough Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	4	4	4	9	9	9	9	9	9
Y+R:	0.0	0.0	0.0	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Volume Module:												
Base Vol:	0	0	0	262	0	185	0	1574	1144	0	1013	0
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	0	0	370	0	261	0	2224	1616	0	1431	0
Added Vol:	0	0	0	10	0	0	0	5	0	0	18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	380	0	261	0	2229	1616	0	1449	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.83	0.83	0.00	0.95	0.95	0.00	0.81	0.81	0.81
PHF Volume:	0	0	0	459	0	0	0	2337	0	0	1781	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	459	0	0	0	2337	0	0	1781	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	0	0	459	0	0	0	2337	0	0	1781	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	0.93	1.00	1.00	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	0	3432	0	1900	0	3538	1900	0	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.66	0.00	0.00	0.50	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.73	0.00	0.00	0.73	0.00
Volume/Cap:	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.90	0.00	0.00	0.69	0.00
Uniform Del:	0.0	0.0	0.0	20.9	0.0	0.0	0.0	5.3	0.0	0.0	3.6	0.0
IncrementDel:	0.0	0.0	0.0	19.2	0.0	0.0	0.0	4.9	0.0	0.0	0.8	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	40.2	0.0	0.0	0.0	10.2	0.0	0.0	4.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	40.2	0.0	0.0	0.0	10.2	0.0	0.0	4.4	0.0
LOS by Move:	A	A	A	D	A	A	A	B	A	A	A	A
HCM2kAvgQ:	0	0	0	7	0	0	0	20	0	0	9	0
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P AM

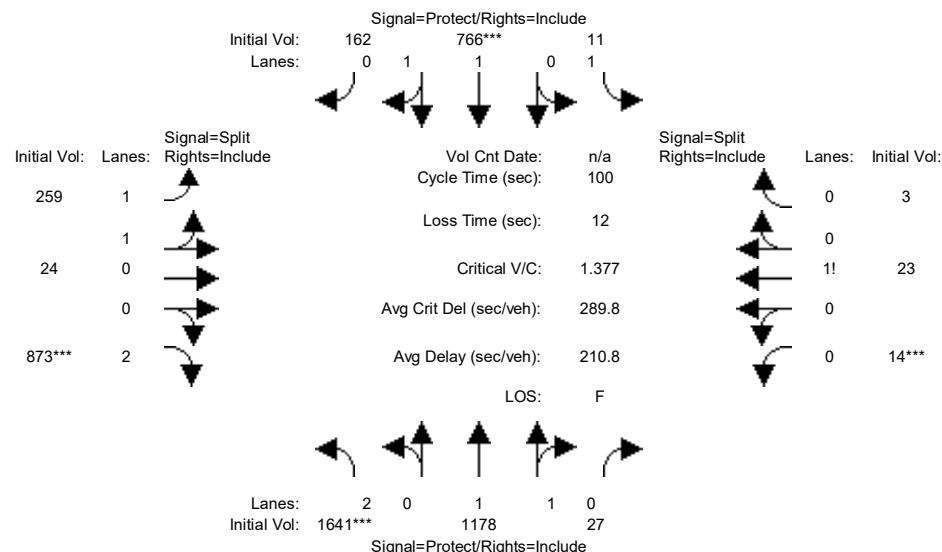
Intersection #12: I-280 NB Ramps / Westborough Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Volume Module:												
Base Vol:	782	261	255	279	657	105	113	1070	160	146	1310	83
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1105	369	360	394	928	148	160	1512	226	206	1851	117
Added Vol:	0	0	10	0	0	0	0	16	0	36	54	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1105	369	370	394	928	148	160	1528	226	242	1905	117
User 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
PHF Adj:	0.86	0.86	0.86	0.85	0.85	0.85	0.91	0.91	0.91	0.83	0.83	0.83
PHF Volume:	1282	428	430	465	1095	175	175	1677	248	293	2304	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1282	428	430	465	1095	175	175	1677	248	293	2304	142
PCE 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
MLF 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
FinalVolume:	1282	428	430	465	1095	175	175	1677	248	293	2304	142
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.88	0.88	0.93	0.93	0.83	0.93	0.91	0.91	0.93	0.93	0.82
Lanes:	2.43	0.78	0.79	1.00	2.00	1.00	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	3921	1309	1314	1769	3538	1583	1769	3023	447	1769	3538	1562
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.33	0.26	0.31	0.11	0.10	0.55	0.55	0.17	0.65	0.09
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green/Cycle:	0.21	0.21	0.21	0.20	0.20	0.20	0.06	0.37	0.37	0.11	0.41	0.61
Volume/Cap:	1.58	1.58	1.58	1.34	1.58	0.56	1.58	1.51	1.51	1.51	1.58	0.15
Uniform Del:	39.6	39.6	39.6	40.2	40.2	36.3	46.9	31.7	31.7	44.5	29.3	8.4
IncrcmntDel:	262.6	263	262.6	170.5	266	2.4	297.6	235	235.1	255.8	262	0.1
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	302.3	302	302.3	210.7	306	38.7	344.5	267	266.8	300.3	292	8.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	302.3	302	302.3	210.7	306	38.7	344.5	267	266.8	300.3	292	8.5
LOS by Move:	F	F	F	F	F	D	F	F	F	F	F	A
HCM2kAvgQ:	45	45	45	31	45	6	15	74	74	23	92	2
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P PM

Intersection #1: El Camino Real / Hickey Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6

Volume Module:

Base Vol:	1112	751	19	8	469	115	183	17	574	10	16	2
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1571	1061	27	11	663	162	259	24	811	14	23	3
Added Vol:	70	117	0	0	103	0	0	0	62	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1641	1178	27	11	766	162	259	24	873	14	23	3
User 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
PHF Adj:	0.92	0.92	0.92	0.93	0.93	0.93	0.85	0.85	0.85	0.78	0.78	0.78
PHF Volume:	1794	1288	29	12	822	175	306	28	1033	18	29	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1794	1288	29	12	822	175	306	28	1033	18	29	4
PCE 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
MLF 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
Final Volume:	1794	1288	29	12	822	175	306	28	1033	18	29	4

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.91	0.90	0.94	0.94	0.73	0.95	0.95	0.95
Lanes:	2.00	1.96	0.04	1.00	1.65	0.35	1.83	0.17	2.00	0.36	0.57	0.07
Final Sat.:	3432	3449	79	1769	2838	602	3258	303	2786	646	1034	129

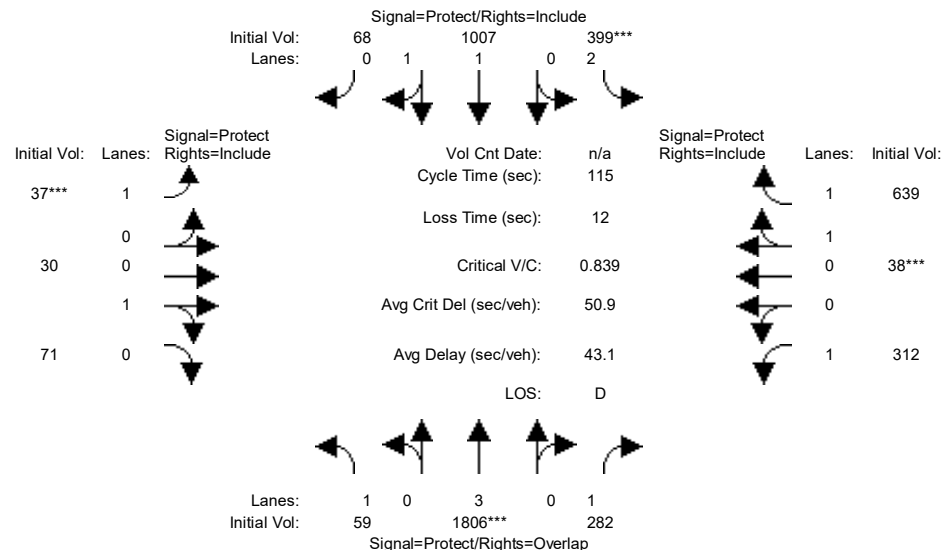
Capacity Analysis Module:

Vol/Sat:	0.52	0.37	0.37	0.01	0.29	0.29	0.09	0.09	0.37	0.03	0.03	0.03
Crit Moves:	***			***			***			***		
Green/Cycle:	0.34	0.47	0.47	0.05	0.19	0.19	0.24	0.24	0.24	0.12	0.12	0.12
Volume/Cap:	1.56	0.79	0.79	0.14	1.56	1.56	0.39	0.39	1.56	0.23	0.23	0.23
Uniform Del:	33.2	22.3	22.3	45.4	40.7	40.7	32.0	32.0	38.1	39.8	39.8	39.8
IncrementDel:	255.0	2.7	2.7	0.7	258	258.3	0.3	0.3	258.1	0.6	0.6	0.6
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	288.2	25.0	25.0	46.1	299	299.0	32.3	32.3	296.1	40.4	40.4	40.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	288.2	25.0	25.0	46.1	299	299.0	32.3	32.3	296.1	40.4	40.4	40.4
LOS by Move:	F	C	C	D	F	F	C	C	F	D	D	D
HCM2kAvgQ:	67	17	17	0	41	40	5	5	45	2	2	2

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P PM

Intersection #2: El Camino Real / McLellan Dr

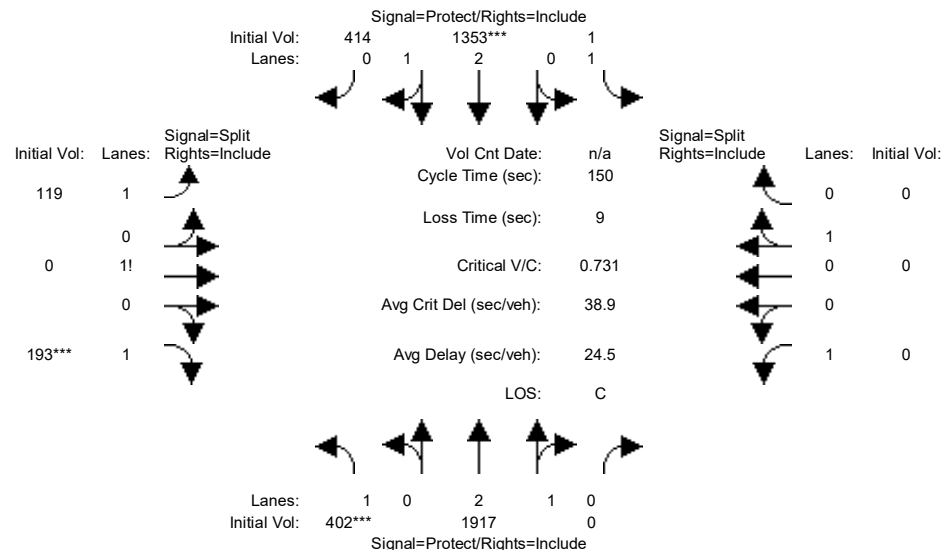


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Volume Module:												
Base Vol:	42	1186	185	227	651	48	26	21	50	217	27	411
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	59	1676	261	321	920	68	37	30	71	307	38	581
Added Vol:	0	130	21	78	87	0	0	0	0	5	0	58
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	1806	282	399	1007	68	37	30	71	312	38	639
User 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
PHF Adj:	0.97	0.97	0.97	0.88	0.88	0.88	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	61	1871	293	453	1144	77	39	32	76	337	41	691
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	1871	293	453	1144	77	39	32	76	337	41	691
PCE 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
MLF 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
FinalVolume:	61	1871	293	453	1144	77	39	32	76	337	41	691
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.74	0.90	0.92	0.92	0.93	0.88	0.84	0.93	0.84	0.84
Lanes:	1.00	3.00	1.00	2.00	1.87	0.13	1.00	0.29	0.71	1.00	0.11	1.89
Final Sat.:	1769	5083	1400	3432	3284	221	1769	478	1139	1769	180	3011
Capacity Analysis Module:												
Vol/Sat:	0.03	0.37	0.21	0.13	0.35	0.35	0.02	0.07	0.07	0.19	0.23	0.23
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green/Cycle:	0.05	0.39	0.62	0.14	0.49	0.49	0.11	0.13	0.13	0.23	0.25	0.25
Volume/Cap:	0.71	0.93	0.34	0.93	0.71	0.71	0.20	0.50	0.50	0.85	0.93	0.93
Uniform Del:	53.9	33.3	10.5	48.8	23.1	23.1	46.3	46.2	46.2	42.6	42.4	42.4
IncrementDel:	24.5	8.6	0.2	24.9	1.5	1.5	0.5	1.8	1.8	15.2	17.8	17.8
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	78.4	41.9	10.7	73.8	24.6	24.6	46.7	48.0	48.0	57.9	60.2	60.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.4	41.9	10.7	73.8	24.6	24.6	46.7	48.0	48.0	57.9	60.2	60.2
LOS by Move:	E	D	B	E	C	C	D	D	D	E	E	E
HCM2kAvgQ:	2	25	5	8	16	16	1	4	4	14	17	17

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P PM

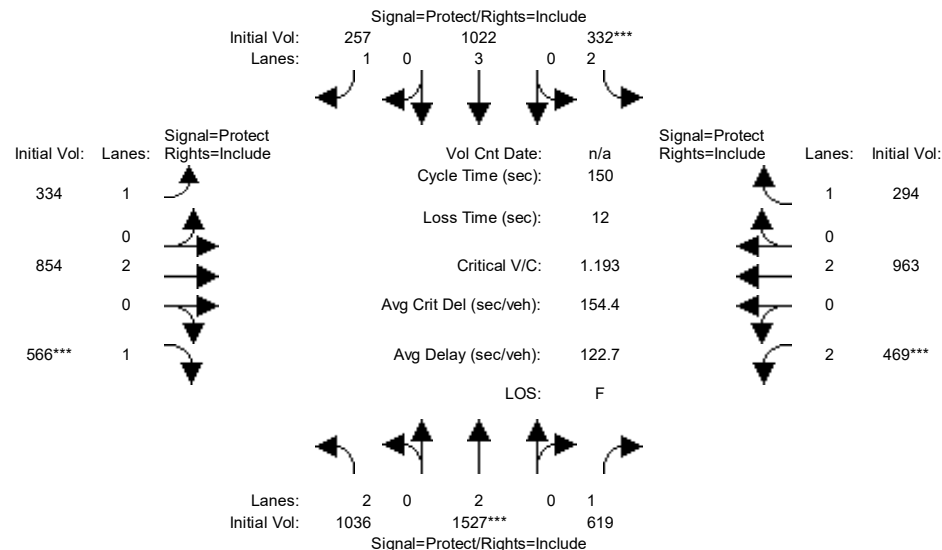
Intersection #3: El Camino Real / Arroyo Dr



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	12	12	12	0	0	0
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	4.6	4.6	4.6	0.0	0.0	0.0
Volume Module:												
Base Vol:	173	1225	0	1	926	260	110	0	157	0	0	0
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	244	1731	0	1	1308	367	155	0	222	0	0	0
Added Vol:	158	186	0	0	45	47	-36	0	-29	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	402	1917	0	1	1353	414	119	0	193	0	0	0
User 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
PHF Adj:	0.96	0.96	0.96	0.98	0.98	0.98	0.89	0.89	0.89	1.00	1.00	1.00
PHF Volume:	419	1997	0	1	1382	423	134	0	217	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	419	1997	0	1	1382	423	134	0	217	0	0	0
PCE 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
MLF 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
Final Volume:	419	1997	0	1	1382	423	134	0	217	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.91	0.93	0.86	0.85	0.87	1.00	0.86	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	2.29	0.71	1.38	0.00	1.62	1.00	1.00	0.00
Final Sat.:	1769	5083	0	1769	3749	1148	2287	0	2659	1900	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.24	0.39	0.00	0.00	0.37	0.37	0.06	0.00	0.08	0.00	0.00	0.00
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green/Cycle:	0.32	0.78	0.00	0.05	0.50	0.50	0.11	0.00	0.11	0.00	0.00	0.00
Volume/Cap:	0.73	0.51	0.00	0.02	0.73	0.73	0.53	0.00	0.73	0.00	0.00	0.00
Uniform Del:	44.9	6.2	0.0	67.4	29.2	29.2	62.9	0.0	64.5	0.0	0.0	0.0
IncrementDel:	4.8	0.1	0.0	0.1	1.1	1.1	0.8	0.0	5.7	0.0	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	49.7	6.3	0.0	67.4	30.3	30.3	63.7	0.0	70.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.7	6.3	0.0	67.4	30.3	30.3	63.7	0.0	70.2	0.0	0.0	0.0
LOS by Move:	D	A	A	E	C	C	E	A	E	A	A	A
HCM2kAvgQ:	18	12	0	0	23	23	5	0	7	0	0	0
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P PM

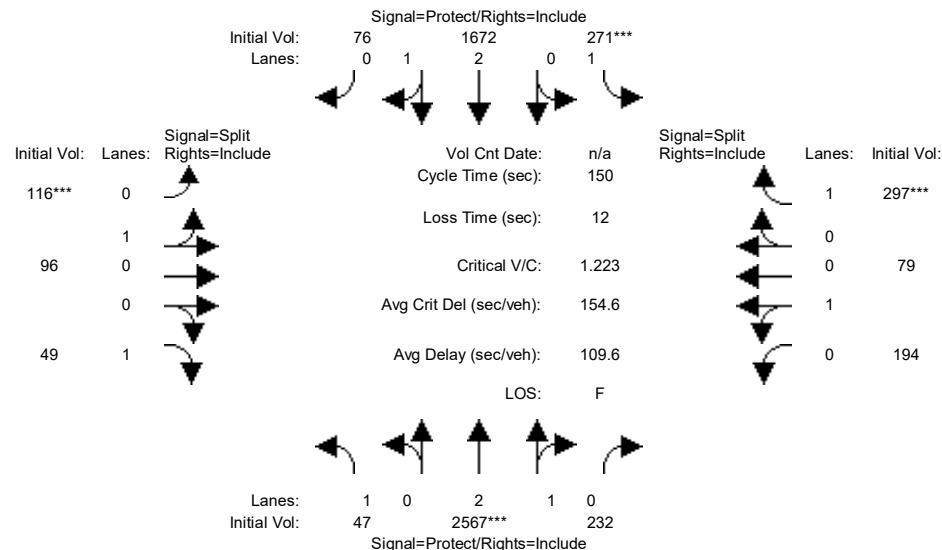
Intersection #4: El Camino Real / Chestnut Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Volume Module:												
Base Vol:	728	1057	407	207	734	188	176	534	355	300	647	184
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1029	1494	575	292	1037	266	249	755	502	424	914	260
Added Vol:	7	33	44	40	-15	-9	85	99	64	45	49	34
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1036	1527	619	332	1022	257	334	854	566	469	963	294
User 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
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.91	0.91	0.91	0.95	0.95	0.95
PHF Volume:	1072	1580	641	344	1057	265	368	942	624	494	1015	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1072	1580	641	344	1057	265	368	942	624	494	1015	310
PCE 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
MLF 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
FinalVolume:	1072	1580	641	344	1057	265	368	942	624	494	1015	310
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.79	0.93	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1562	3432	5083	1500	1769	3538	1534	3432	3538	1536
Capacity Analysis Module:												
Vol/Sat:	0.31	0.45	0.41	0.10	0.21	0.18	0.21	0.27	0.41	0.14	0.29	0.20
Crit Moves:	****			****			****			****		
Green/Cycle:	0.28	0.37	0.37	0.08	0.18	0.18	0.19	0.34	0.34	0.12	0.27	0.27
Volume/Cap:	1.14	1.19	1.10	1.19	1.14	0.97	1.07	0.78	1.19	1.19	1.07	0.75
Uniform Del:	54.4	46.9	46.9	68.7	61.3	60.8	60.4	44.4	49.4	66.0	54.9	50.4
IncrcmntDel:	74.1	94.7	66.2	116.0	74.3	44.8	69.1	3.4	104.7	108.5	50.6	7.7
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	128.5	142	113.1	184.7	136	105.6	129.5	47.7	154.1	174.5	106	58.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	128.5	142	113.1	184.7	136	105.6	129.5	47.7	154.1	174.5	106	58.1
LOS by Move:	F	F	F	F	F	F	F	D	F	F	F	E
HCM2kAvgQ:	36	56	40	14	27	16	24	22	43	19	33	14
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P PM

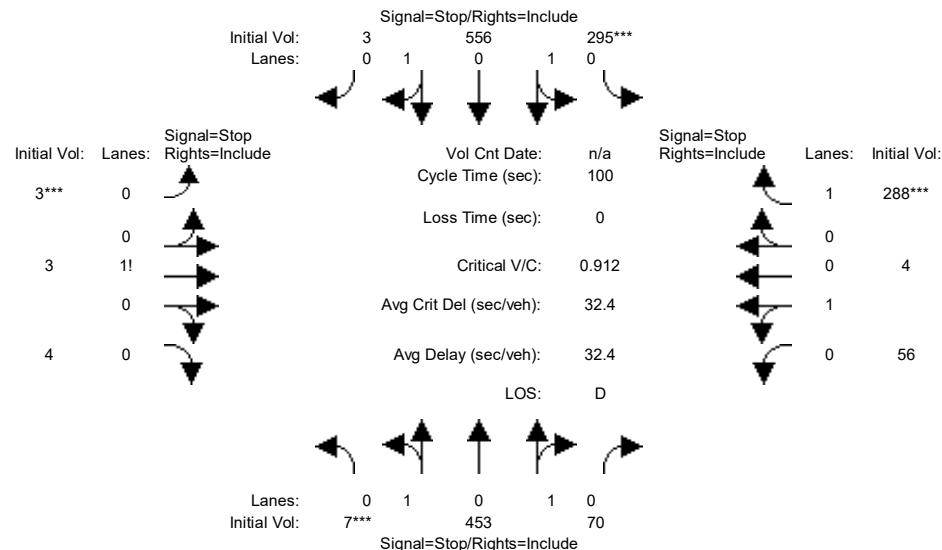
Intersection #5: El Camino Real / W. Orange Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Volume Module:												
Base Vol:	33	1758	164	192	1117	54	82	68	35	137	56	210
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	47	2484	232	271	1578	76	116	96	49	194	79	297
Added Vol:	0	83	0	0	94	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	2567	232	271	1672	76	116	96	49	194	79	297
User 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
PHF Adj:	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93	0.84	0.84	0.84
PHF Volume:	50	2763	249	294	1812	83	125	104	53	230	94	353
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	2763	249	294	1812	83	125	104	53	230	94	353
PCE 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
MLF 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
FinalVolume:	50	2763	249	294	1812	83	125	104	53	230	94	353
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.88	0.93	0.89	0.88	0.95	0.95	0.79	0.95	0.95	0.80
Lanes:	1.00	2.75	0.25	1.00	2.87	0.13	0.55	0.45	1.00	0.71	0.29	1.00
Final Sat.:	1769	4606	416	1769	4826	220	990	821	1510	1277	522	1516
Capacity Analysis Module:												
Vol/Sat:	0.03	0.60	0.60	0.17	0.38	0.38	0.13	0.13	0.04	0.18	0.18	0.23
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.04	0.49	0.49	0.14	0.58	0.58	0.10	0.10	0.10	0.19	0.19	0.19
Volume/Cap:	0.64	1.22	1.22	1.22	0.64	0.64	1.22	1.22	0.34	0.95	0.95	1.22
Uniform Del:	70.5	38.2	38.2	64.8	21.0	21.0	67.2	67.2	62.5	60.0	60.0	60.7
IncrementDel:	17.1	104	104.4	131.8	0.5	0.5	138.7	139	1.3	35.0	35.0	127.5
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	87.7	143	142.6	196.7	21.5	21.5	206.0	206	63.8	95.0	95.0	188.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	87.7	143	142.6	196.7	21.5	21.5	206.0	206	63.8	95.0	95.0	188.2
LOS by Move:	F	F	F	F	C	C	F	F	E	F	F	F
HCM2kAvgQ:	3	76	76	23	21	21	18	18	3	19	19	27
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum+P PM

Intersection #6: Mission Rd / Grand Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	5	268	45	209	318	2	2	2	3	34	3	204
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	7	379	64	295	449	3	3	3	4	48	4	288
Added Vol:	0	74	6	0	107	0	0	0	0	8	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	453	70	295	556	3	3	3	4	56	4	288
User 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
PHF Adj:	0.92	0.92	0.92	0.97	0.97	0.97	0.44	0.44	0.44	0.78	0.78	0.78
PHF Volume:	8	490	75	304	572	3	6	6	10	72	5	369
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	490	75	304	572	3	6	6	10	72	5	369
PCE 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
MLF 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
Final Volume:	8	490	75	304	572	3	6	6	10	72	5	369

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	1.71	0.26	0.69	1.30	0.01	0.28	0.29	0.43	0.93	0.07	1.00
Final Sat.:	13	816	127	333	650	3	112	112	168	385	29	489

Capacity Analysis Module:

Vol/Sat:	0.61	0.60	0.59	0.91	0.88	0.87	0.06	0.06	0.06	0.19	0.19	0.75
Crit Moves:	***			***			***					***
Delay/Veh:	20.7	20.2	19.6	48.7	42.4	40.4	12.2	12.2	12.2	12.9	12.9	27.7
Delay 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
AdjDel/Veh:	20.7	20.2	19.6	48.7	42.4	40.4	12.2	12.2	12.2	12.9	12.9	27.7
LOS by Move:	C	C	C	E	E	E	B	B	B	B	B	D
ApproachDel:	20.1			44.6			12.2			25.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	20.1			44.6			12.2			25.1		
LOS by Appr:	C			E			B			D		
AllWayAvgQ:	1.4	1.3	1.3	5.2	4.3	4.3	0.1	0.1	0.1	0.2	0.2	2.4

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Mission Rd / Grand Ave

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	0 1 0 1 0	0 0 1 0 0	0 1 0 0 1
Initial Vol:	7 453 70	295 556 3	3 3 4	56 4 288
Major Street Volume:	1384			
Minor Approach Volume:	349			
Minor Approach Volume Threshold:	234			

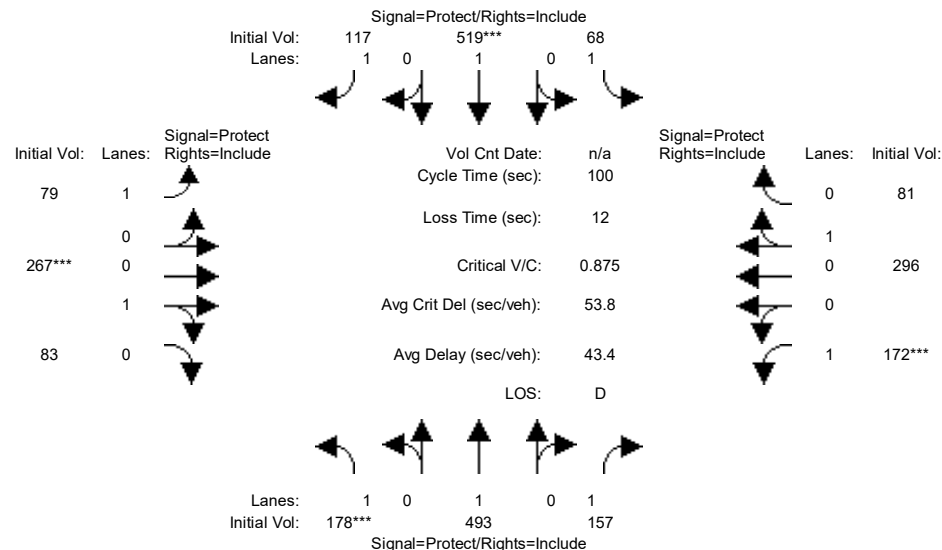
SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P PM

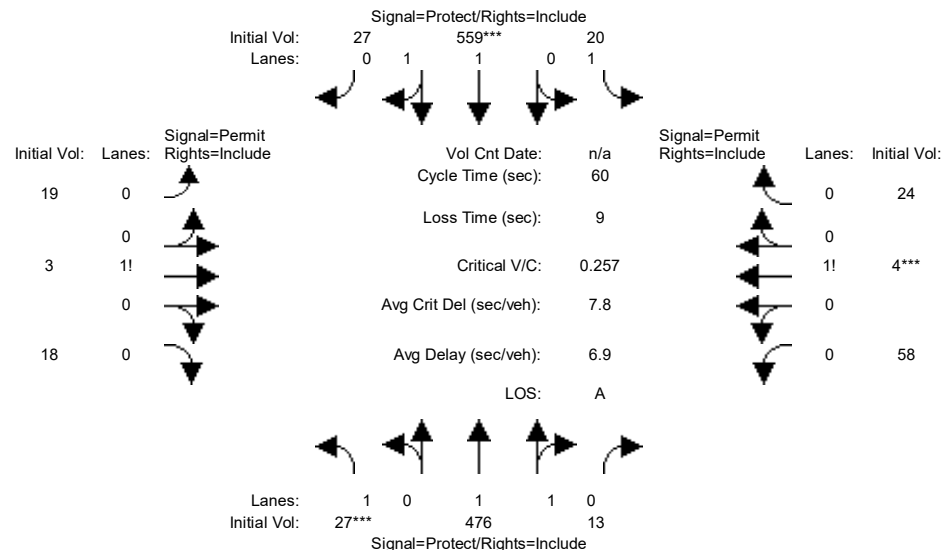
Intersection #7: Grand Ave / Chestnut Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	4	4	4	4	4	4	8	8	4	8	8
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	126	336	107	48	358	77	52	187	59	119	207	57
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	178	475	151	68	506	109	73	264	83	168	292	81
Added Vol:	0	18	6	0	13	8	6	3	0	4	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	178	493	157	68	519	117	79	267	83	172	296	81
User 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
PHF Adj:	0.94	0.94	0.94	0.91	0.91	0.91	0.84	0.84	0.84	0.80	0.80	0.80
PHF Volume:	190	526	168	75	571	129	95	319	100	216	372	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	526	168	75	571	129	95	319	100	216	372	101
PCE 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
MLF 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
FinalVolume:	190	526	168	75	571	129	95	319	100	216	372	101
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.81	0.93	0.98	0.83	0.93	0.94	0.94	0.93	0.95	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.76	0.24	1.00	0.78	0.22
Final Sat.:	1769	1862	1540	1769	1862	1570	1769	1365	426	1769	1414	384
Capacity Analysis Module:												
Vol/Sat:	0.11	0.28	0.11	0.04	0.31	0.08	0.05	0.23	0.23	0.12	0.26	0.26
Crit Moves:	***				***			***			***	
Green/Cycle:	0.12	0.41	0.41	0.06	0.35	0.35	0.07	0.27	0.27	0.14	0.34	0.34
Volume/Cap:	0.88	0.69	0.26	0.69	0.88	0.23	0.78	0.88	0.88	0.88	0.78	0.78
Uniform Del:	43.1	24.1	19.4	46.0	30.4	23.0	45.8	35.0	35.0	42.2	29.8	29.8
IncrcmntDel:	30.2	2.6	0.2	16.8	12.6	0.2	26.6	16.4	16.4	27.5	6.4	6.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	73.3	26.7	19.6	62.7	43.1	23.2	72.4	51.4	51.4	69.7	36.1	36.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	73.3	26.7	19.6	62.7	43.1	23.2	72.4	51.4	51.4	69.7	36.1	36.1
LOS by Move:	E	C	B	E	D	C	E	D	D	E	D	D
HCM2kAvgQ:	6	12	3	4	20	3	5	16	15	9	15	15
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P PM

Intersection #8: Mission Rd / Oak Ave

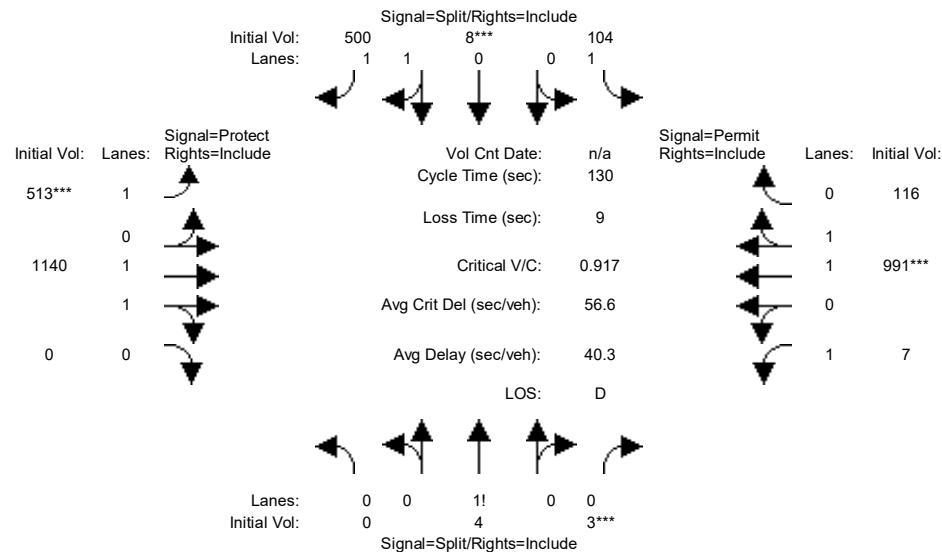


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	1	288	9	14	352	0	0	0	0	41	0	17
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1	407	13	20	497	0	0	0	0	58	0	24
Added Vol:	26	69	0	0	62	27	19	3	18	0	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	476	13	20	559	27	19	3	18	58	4	24
User Adj:	0.88	0.88	0.88	0.84	0.84	0.84	0.00	0.00	0.00	0.61	0.61	0.61
PHF Adj:	0.90	0.90	0.90	0.87	0.87	0.87	1.00	1.00	1.00	0.76	0.76	0.76
PHF Volume:	27	464	12	19	539	26	0	0	0	47	3	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	464	12	19	539	26	0	0	0	47	3	19
PCE 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
MLF 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
Final Volume:	27	464	12	19	539	26	0	0	0	47	3	19
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.93	0.93	0.93	0.92	0.92	1.00	1.00	1.00	0.86	0.86	0.86
Lanes:	1.00	1.95	0.05	1.00	1.91	0.09	0.00	1.00	0.00	0.67	0.05	0.28
Final Sat.:	1769	3432	92	1769	3351	162	0	1900	0	1097	76	455
Capacity Analysis Module:												
Vol/Sat:	0.02	0.14	0.14	0.01	0.16	0.16	0.00	0.00	0.00	0.04	0.04	0.04
Crit Moves:	***			***						***		
Green/Cycle:	0.06	0.63	0.63	0.05	0.63	0.63	0.00	0.00	0.00	0.17	0.17	0.17
Volume/Cap:	0.26	0.21	0.21	0.21	0.26	0.26	0.00	0.00	0.00	0.26	0.26	0.26
Uniform Del:	27.0	4.6	4.6	27.3	5.0	5.0	0.0	0.0	0.0	21.8	21.8	21.8
IncrementDel:	1.3	0.0	0.0	1.2	0.1	0.1	0.0	0.0	0.0	0.5	0.5	0.5
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00
Delay/Veh:	28.3	4.7	4.7	28.5	5.1	5.1	0.0	0.0	0.0	22.3	22.3	22.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.3	4.7	4.7	28.5	5.1	5.1	0.0	0.0	0.0	22.3	22.3	22.3
LOS by Move:	C	A	A	C	A	A	A	A	A	C	C	C
HCM2kAvgQ:	0	2	2	1	3	3	0	0	0	1	1	1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P PM

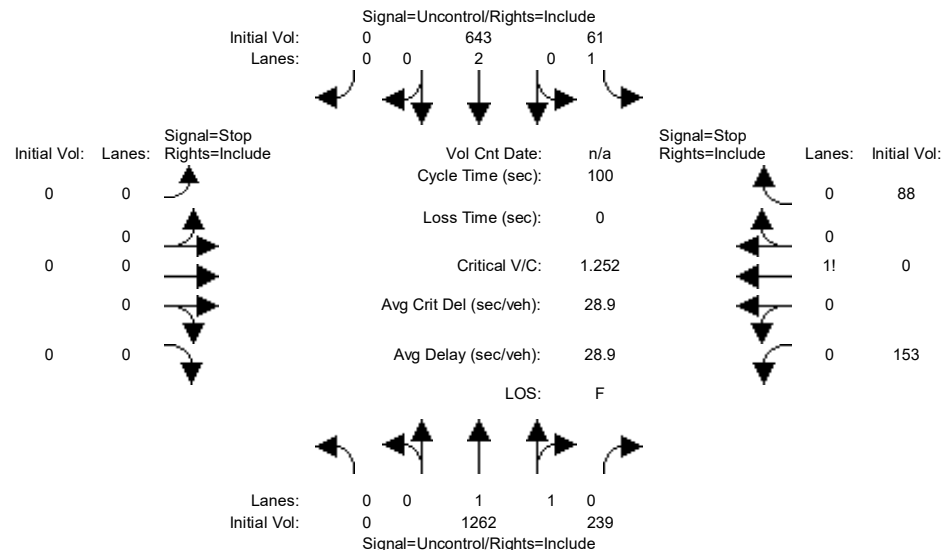
Intersection #9: Mission Rd / Chestnut Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	9	9	9	4	6	6	9	9	9
Y+R:	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.2	4.2	4.2
Volume Module:												
Base Vol:	0	0	0	72	0	304	300	793	0	0	696	81
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	0	0	102	0	430	424	1121	0	0	983	114
Added Vol:	0	4	3	2	8	70	89	19	0	7	8	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	4	3	104	8	500	513	1140	0	7	991	116
User 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
PHF Adj:	1.00	1.00	1.00	0.87	0.87	0.87	0.96	0.96	0.96	0.88	0.88	0.88
PHF Volume:	0	4	3	119	9	574	537	1193	0	8	1128	132
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	4	3	119	9	574	537	1193	0	8	1128	132
PCE 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
MLF 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
Final Volume:	0	4	3	119	9	574	537	1193	0	8	1128	132
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.92	0.91	0.93	0.83	0.83	0.93	0.93	0.95	0.16	0.92	0.92
Lanes:	0.00	0.57	0.43	1.00	0.03	1.97	1.00	2.00	0.00	1.00	1.79	0.21
Final Sat.:	0	998	749	1769	50	3123	1769	3538	0	296	3115	366
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.18	0.18	0.30	0.34	0.00	0.03	0.36	0.36
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.00	0.00	0.20	0.20	0.20	0.33	0.73	0.00	0.39	0.39	0.39
Volume/Cap:	0.00	0.91	0.91	0.34	0.92	0.92	0.92	0.46	0.00	0.07	0.92	0.92
Uniform Del:	0.0	64.7	64.7	44.6	50.9	50.9	41.8	7.4	0.0	24.5	37.3	37.3
IncrementDel:	0.0	267	267.3	0.6	18.2	18.2	19.4	0.1	0.0	0.2	9.9	9.9
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Delay/Veh:	0.0	332	332.0	45.1	69.1	69.1	61.1	7.5	0.0	24.7	47.3	47.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	332	332.0	45.1	69.1	69.1	61.1	7.5	0.0	24.7	47.3	47.3
LOS by Move:	A	F	F	D	E	E	E	A	A	C	D	D
HCM2kAvgQ:	0	1	1	4	13	13	24	10	0	0	26	26
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cum+P PM

Intersection #10: Juniperro Serra Blvd / Arroyo Dr



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	893	169	43	455	0	0	0	0	108	0	62
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	1262	239	61	643	0	0	0	0	153	0	88
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1262	239	61	643	0	0	0	0	153	0	88
User 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
PHF Adj:	0.90	0.90	0.90	0.84	0.84	0.84	1.00	1.00	1.00	0.99	0.99	0.99
PHF Volume:	0	1402	265	73	769	0	0	0	0	154	0	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1402	265	73	769	0	0	0	0	154	0	89
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxx	4.1	xxxx	xxxx	xxxx	xxxx	xxxx	6.8	6.5	6.9
FollowUpTim:	xxxx	xxxx	xxxx	2.2	xxxx	xxxx	xxxx	xxxx	xxxx	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxx	1667	xxxx	xxxx	xxxx	xxxx	xxxx	2065	2449	834
Potent Cap.:	xxxx	xxxx	xxxx	382	xxxx	xxxx	xxxx	xxxx	xxxx	47	31	312
Move Cap.:	xxxx	xxxx	xxxx	382	xxxx	xxxx	xxxx	xxxx	xxxx	40	25	312
Total Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	121	62	xxxx	123	110	xxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.19	xxxx	xxxx	xxxx	xxxx	xxxx	1.25	0.00	0.28
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxx	0.7	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Control Del:	xxxx	xxxx	xxxx	16.6	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
LOS by Move:	*	*	*	C	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	158	xxxx
SharedQueue:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	16.2	xxxx
Shrd ConDel:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	323	xxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			322.7		
ApproachLOS:	*			*			*			F		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	0 0 1! 0 0
Initial Vol:	0 1262 239	61 643 0	0 0 0 0	153 0 88
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	322.7

Approach[westbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=21.5]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=240]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2444]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	0 0 1! 0 0
Initial Vol:	0 1262 239	61 643 0	0 0 0 0	153 0 88

Major Street Volume: 2204

Minor Approach Volume: 240

Minor Approach Volume Threshold: 13 [less than minimum of 100]

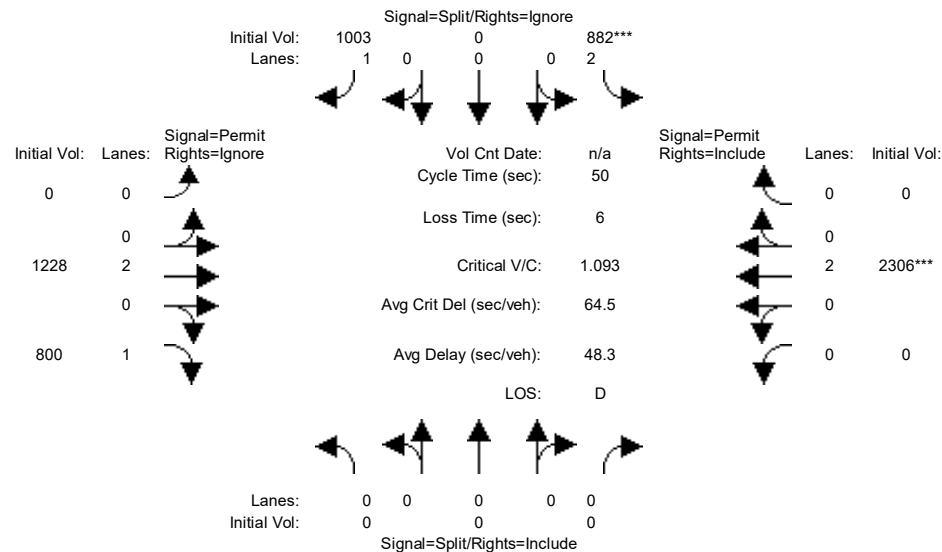
SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P PM

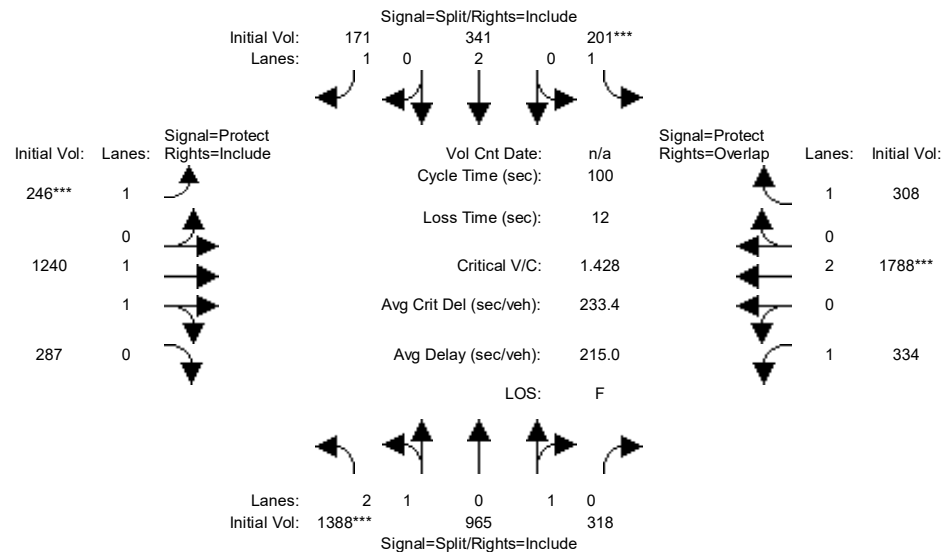
Intersection #11: I-280 SB Ramps / Westborough Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	4	4	4	9	9	9	9	9	9
Y+R:	0.0	0.0	0.0	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Volume Module:												
Base Vol:	0	0	0	595	0	710	0	854	566	0	1616	0
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	0	0	841	0	1003	0	1207	800	0	2283	0
Added Vol:	0	0	0	41	0	0	0	21	0	0	23	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	882	0	1003	0	1228	800	0	2306	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.92	0.92	0.00	0.95	0.95	0.00	0.96	0.96	0.96
PHF Volume:	0	0	0	963	0	0	0	1290	0	0	2410	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	963	0	0	0	1290	0	0	2410	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	0	0	963	0	0	0	1290	0	0	2410	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	0.93	1.00	1.00	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	0	3432	0	1900	0	3538	1900	0	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.36	0.00	0.00	0.68	0.00
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.62	0.00	0.00	0.62	0.00
Volume/Cap:	0.00	0.00	0.00	1.09	0.00	0.00	0.00	0.58	0.00	0.00	1.09	0.00
Uniform Del:	0.0	0.0	0.0	18.6	0.0	0.0	0.0	5.6	0.0	0.0	9.4	0.0
IncrcmntDel:	0.0	0.0	0.0	58.9	0.0	0.0	0.0	0.4	0.0	0.0	49.8	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	77.4	0.0	0.0	0.0	6.0	0.0	0.0	59.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	77.4	0.0	0.0	0.0	6.0	0.0	0.0	59.3	0.0
LOS by Move:	A	A	A	E	A	A	A	A	A	A	E	A
HCM2kAvgQ:	0	0	0	18	0	0	0	7	0	0	39	0
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+P PM

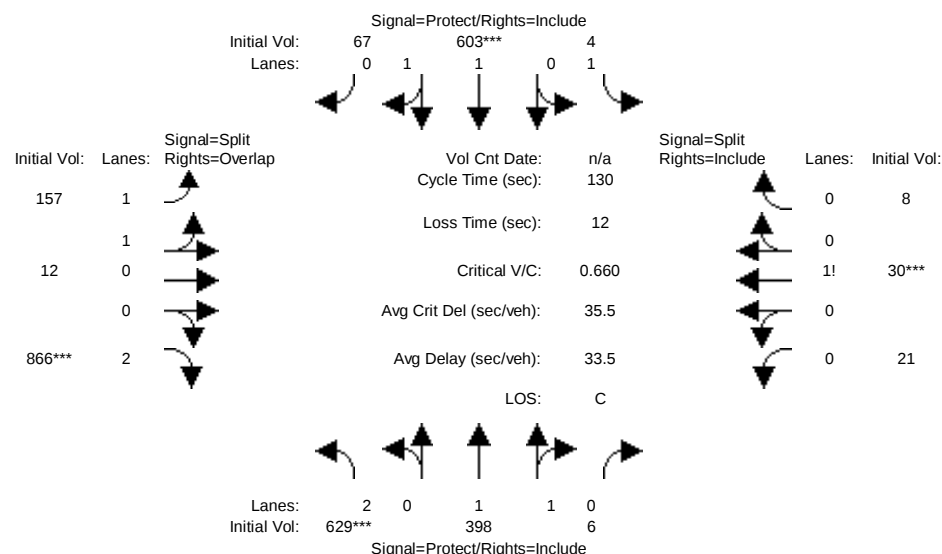
Intersection #12: I-280 NB Ramps / Westborough Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Volume Module:												
Base Vol:	982	683	196	142	241	121	174	834	203	203	1216	218
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1388	965	277	201	341	171	246	1178	287	287	1718	308
Added Vol:	0	0	41	0	0	0	0	62	0	47	70	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1388	965	318	201	341	171	246	1240	287	334	1788	308
User 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
PHF Adj:	0.97	0.97	0.97	0.80	0.80	0.80	0.96	0.96	0.96	0.91	0.91	0.91
PHF Volume:	1428	993	327	252	427	215	257	1296	300	368	1972	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1428	993	327	252	427	215	257	1296	300	368	1972	340
PCE 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
MLF 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
Final Volume:	1428	993	327	252	427	215	257	1296	300	368	1972	340
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.89	0.89	0.93	0.93	0.83	0.93	0.90	0.90	0.93	0.93	0.83
Lanes:	2.11	1.42	0.47	1.00	2.00	1.00	1.00	1.62	0.38	1.00	2.00	1.00
Final Sat.:	3464	2409	794	1769	3538	1583	1769	2793	646	1769	3538	1580
Capacity Analysis Module:												
Vol/Sat:	0.41	0.41	0.41	0.14	0.12	0.14	0.15	0.46	0.46	0.21	0.56	0.21
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green/Cycle:	0.29	0.29	0.29	0.10	0.10	0.10	0.10	0.34	0.34	0.15	0.39	0.49
Volume/Cap:	1.43	1.43	1.43	1.43	1.21	1.36	1.43	1.37	1.37	1.37	1.43	0.44
Uniform Del:	35.6	35.6	35.6	45.0	45.0	45.0	44.9	33.0	33.0	42.4	30.5	16.6
IncrementDel:	195.8	196	195.8	222.3	119	197.5	221.8	171	170.5	187.0	197	0.4
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	231.4	231	231.4	267.3	164	242.5	266.7	204	203.6	229.4	227	17.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	231.4	231	231.4	267.3	164	242.5	266.7	204	203.6	229.4	227	17.0
LOS by Move:	F	F	F	F	F	F	F	F	F	F	F	B
HCM2kAvgQ:	51	51	51	19	15	16	19	55	55	26	71	7
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project AM - mit

Intersection #1: El Camino Real / Hickey Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6

Volume Module:

Base Vol:	629	398	6	4	603	67	157	12	866	21	30	8
Growth 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
Initial Bse:	629	398	6	4	603	67	157	12	866	21	30	8
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	629	398	6	4	603	67	157	12	866	21	30	8
User 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
PHF Adj:	0.84	0.84	0.84	0.92	0.92	0.92	0.89	0.89	0.89	0.82	0.82	0.82
PHF Volume:	748	473	7	4	659	73	176	13	972	26	37	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	748	473	7	4	659	73	176	13	972	26	37	10
PCE 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
MLF 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
Final Volume:	748	473	7	4	659	73	176	13	972	26	37	10

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.92	0.92	0.94	0.94	0.73	0.95	0.95	0.94
Lanes:	2.00	1.97	0.03	1.00	1.80	0.20	1.86	0.14	2.00	0.36	0.51	0.13
Final Sat.:	3432	3478	52	1769	3136	348	3307	253	2786	640	914	244

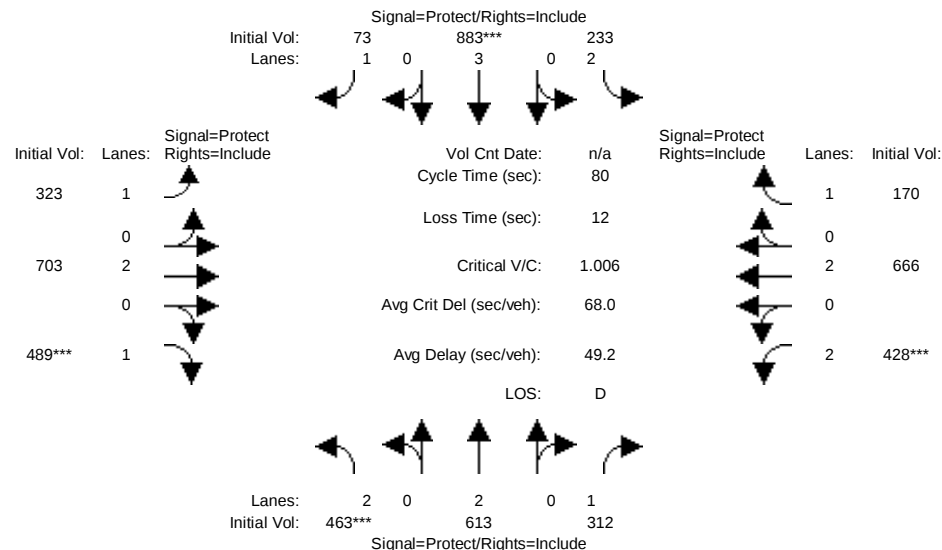
Capacity Analysis Module:

Vol/Sat:	0.22	0.14	0.14	0.00	0.21	0.21	0.05	0.05	0.35	0.04	0.04	0.04
Crit Moves:	***				***				***			
Green/Cycle:	0.32	0.51	0.51	0.12	0.31	0.31	0.19	0.19	0.51	0.09	0.09	0.09
Volume/Cap:	0.69	0.27	0.27	0.02	0.69	0.69	0.28	0.28	0.69	0.43	0.43	0.43
Uniform Del:	38.7	18.1	18.1	51.0	39.6	39.6	44.9	44.9	24.1	55.8	55.8	55.8
IncrementDel:	1.8	0.1	0.1	0.0	1.9	1.9	0.2	0.2	1.4	1.8	1.8	1.8
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	40.5	18.2	18.2	51.1	41.5	41.5	45.2	45.2	25.5	57.6	57.6	57.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.5	18.2	18.2	51.1	41.5	41.5	45.2	45.2	25.5	57.6	57.6	57.6
LOS by Move:	D	B	B	D	D	D	D	D	C	E	E	E
HCM2kAvgQ:	13	5	5	0	14	14	3	3	17	3	3	3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project AM - mit

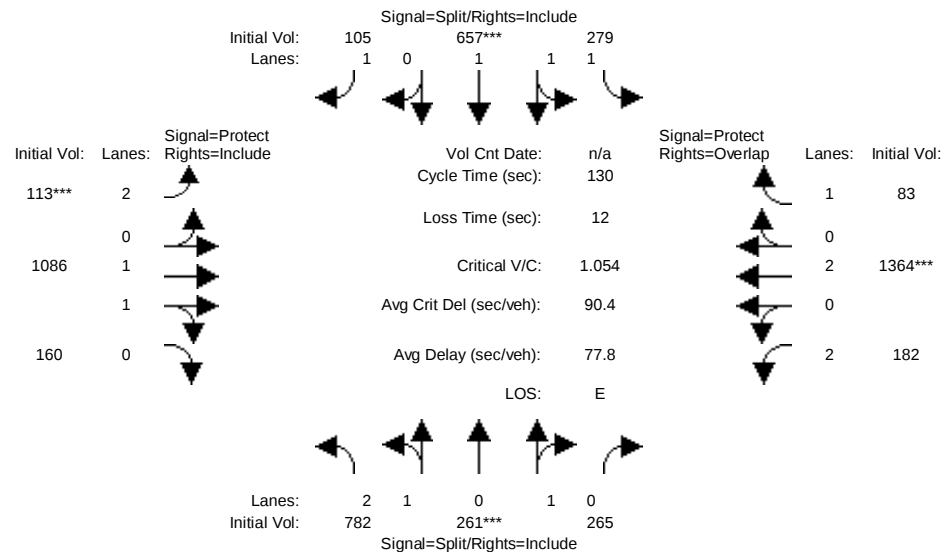
Intersection #4: El Camino Real / Chestnut Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Volume Module:												
Base Vol:	463	613	312	233	883	73	323	703	489	428	666	170
Growth 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
Initial Bse:	463	613	312	233	883	73	323	703	489	428	666	170
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	463	613	312	233	883	73	323	703	489	428	666	170
User 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
PHF Adj:	0.93	0.93	0.93	0.88	0.88	0.88	0.92	0.92	0.92	0.75	0.75	0.75
PHF Volume:	499	661	336	265	1005	83	353	767	534	573	892	228
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	499	661	336	265	1005	83	353	767	534	573	892	228
PCE 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
MLF 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
FinalVolume:	499	661	336	265	1005	83	353	767	534	573	892	228
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.83	0.90	0.89	0.81	0.93	0.93	0.81	0.90	0.93	0.82
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1570	3432	5083	1545	1769	3538	1548	3432	3538	1554
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.21	0.08	0.20	0.05	0.20	0.22	0.34	0.17	0.25	0.15
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green/Cycle:	0.14	0.25	0.25	0.09	0.20	0.20	0.22	0.34	0.34	0.17	0.28	0.28
Volume/Cap:	1.01	0.74	0.85	0.85	1.01	0.27	0.89	0.63	1.01	1.01	0.89	0.52
Uniform Del:	34.2	27.6	28.6	35.9	32.1	27.3	30.0	22.1	26.3	33.4	27.4	24.0
IncrementDel:	41.8	3.5	16.4	20.0	29.9	0.5	20.7	1.1	40.5	39.1	9.7	1.1
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	76.1	31.1	45.0	55.9	62.0	27.8	50.7	23.1	66.8	72.5	37.1	25.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	76.1	31.1	45.0	55.9	62.0	27.8	50.7	23.1	66.8	72.5	37.1	25.1
LOS by Move:	E	C	D	E	E	C	D	C	E	E	D	C
HCM2kAvgQ:	11	10	11	6	15	2	12	9	20	13	15	5
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project AM - mit

Intersection #12: I-280 NB Ramps / Westborough Blvd

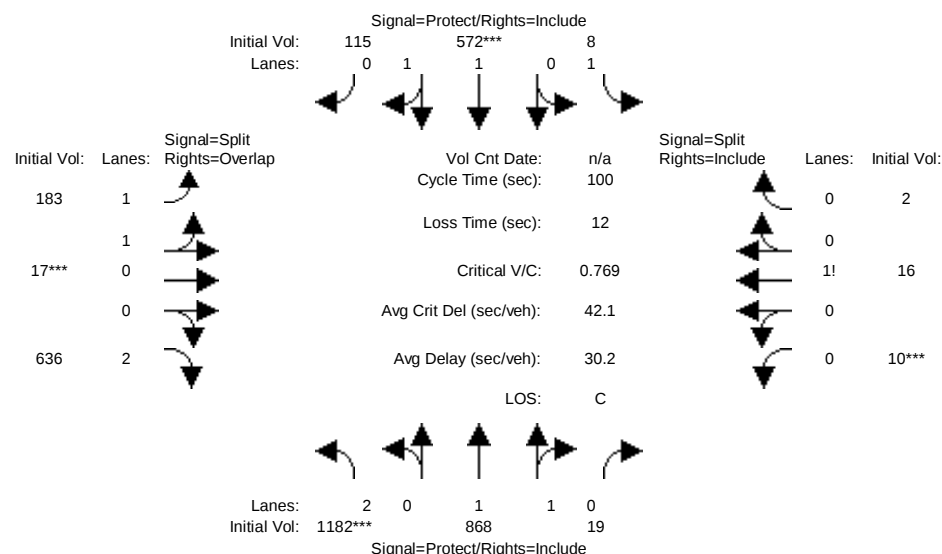


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Volume Module:												
Base Vol:	782	261	265	279	657	105	113	1086	160	182	1364	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	782	261	265	279	657	105	113	1086	160	182	1364	83
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	782	261	265	279	657	105	113	1086	160	182	1364	83
User 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
PHF Adj:	0.86	0.86	0.86	0.85	0.85	0.85	0.91	0.91	0.91	0.83	0.83	0.83
PHF Volume:	907	303	307	329	775	124	124	1192	176	220	1649	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	907	303	307	329	775	124	124	1192	176	220	1649	100
PCE 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
MLF 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
FinalVolume:	907	303	307	329	775	124	124	1192	176	220	1649	100
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.88	0.88	0.92	0.92	0.83	0.90	0.91	0.91	0.90	0.93	0.82
Lanes:	2.42	0.78	0.80	1.00	2.00	1.00	2.00	1.74	0.26	2.00	2.00	1.00
Final Sat.:	3912	1306	1326	1742	3485	1583	3432	3024	446	3432	3538	1562
Capacity Analysis Module:												
Vol/Sat:	0.23	0.23	0.23	0.19	0.22	0.08	0.04	0.39	0.39	0.06	0.47	0.06
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.22	0.22	0.22	0.21	0.21	0.21	0.05	0.42	0.42	0.07	0.44	0.64
Volume/Cap:	1.07	1.07	1.07	0.91	1.07	0.38	0.78	0.95	0.95	0.95	1.07	0.10
Uniform Del:	50.9	50.9	50.9	50.3	51.5	44.2	61.4	36.7	36.7	60.4	36.6	8.8
IncrcmntDel:	44.5	44.5	44.5	10.0	48.2	0.7	22.0	13.6	13.6	45.1	43.6	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	95.4	95.4	95.4	60.2	99.6	44.9	83.3	50.3	50.3	105.5	80.3	8.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.4	95.4	95.4	60.2	99.6	44.9	83.3	50.3	50.3	105.5	80.3	8.8
LOS by Move:	F	F	F	E	F	D	F	D	D	F	F	A
HCM2kAvgQ:	24	24	24	17	24	4	4	33	32	7	46	1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project PM - mit

Intersection #1: El Camino Real / Hickey Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6

Volume Module:

Base Vol:	1182	868	19	8	572	115	183	17	636	10	16	2
Growth 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
Initial Bse:	1182	868	19	8	572	115	183	17	636	10	16	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1182	868	19	8	572	115	183	17	636	10	16	2
User 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
PHF Adj:	0.92	0.92	0.92	0.93	0.93	0.93	0.85	0.85	0.85	0.78	0.78	0.78
PHF Volume:	1292	949	21	9	614	124	217	20	753	13	21	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1292	949	21	9	614	124	217	20	753	13	21	3
PCE 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
MLF 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
Final Volume:	1292	949	21	9	614	124	217	20	753	13	21	3

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.91	0.90	0.94	0.94	0.73	0.95	0.95	0.95
Lanes:	2.00	1.96	0.04	1.00	1.66	0.34	1.83	0.17	2.00	0.36	0.57	0.07
Final Sat.:	3432	3452	76	1769	2868	577	3258	303	2786	646	1034	129

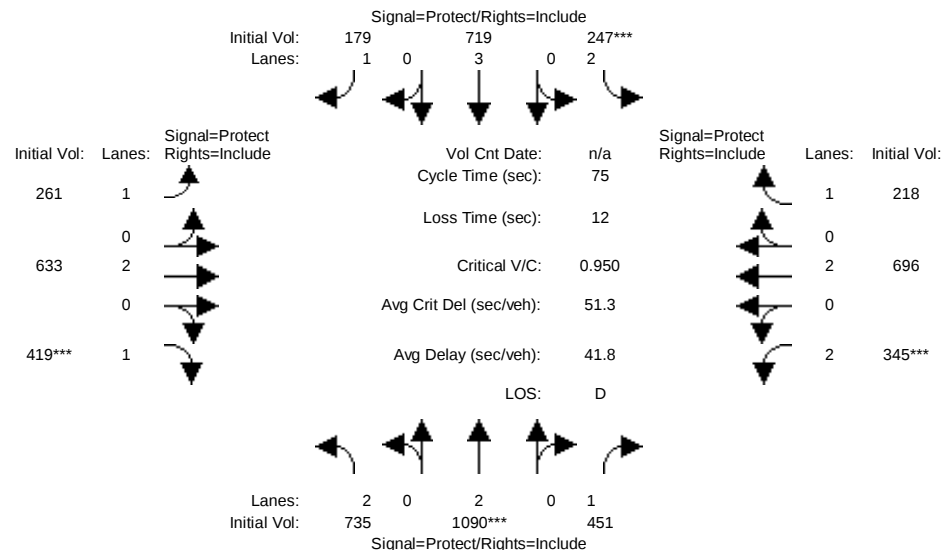
Capacity Analysis Module:

Vol/Sat:	0.38	0.27	0.27	0.00	0.21	0.21	0.07	0.07	0.27	0.02	0.02	0.02
Crit Moves:	***				***		***			***		
Green/Cycle:	0.41	0.57	0.57	0.08	0.24	0.24	0.11	0.11	0.52	0.12	0.12	0.12
Volume/Cap:	0.91	0.48	0.48	0.06	0.91	0.91	0.60	0.60	0.52	0.17	0.17	0.17
Uniform Del:	27.5	12.9	12.9	42.3	37.2	37.2	42.4	42.4	15.5	39.5	39.5	39.5
IncramntDel:	8.9	0.2	0.2	0.2	14.0	14.0	2.7	2.7	0.3	0.4	0.4	0.4
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	36.4	13.1	13.1	42.5	51.2	51.2	45.1	45.1	15.8	39.9	39.9	39.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.4	13.1	13.1	42.5	51.2	51.2	45.1	45.1	15.8	39.9	39.9	39.9
LOS by Move:	D	B	B	D	D	D	D	D	B	D	D	D
HCM2kAvgQ:	20	9	9	0	15	15	4	4	9	1	1	1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project PM - mit

Intersection #4: El Camino Real / Chestnut Ave

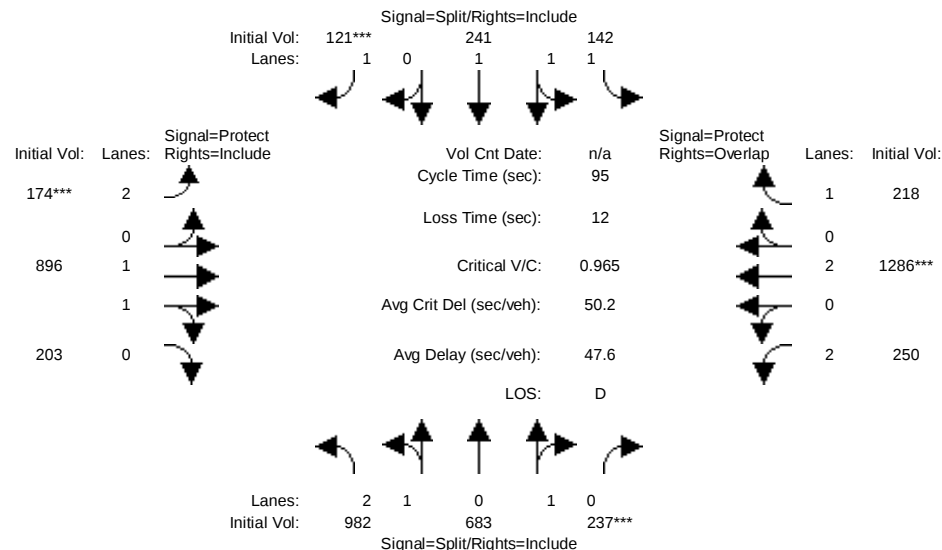


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Volume Module:												
Base Vol:	735	1090	451	247	719	179	261	633	419	345	696	218
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	735	1090	451	247	719	179	261	633	419	345	696	218
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	735	1090	451	247	719	179	261	633	419	345	696	218
User 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
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.91	0.91	0.91	0.95	0.95	0.95
PHF Volume:	761	1128	467	255	744	185	288	699	462	364	733	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	761	1128	467	255	744	185	288	699	462	364	733	230
PCE 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
MLF 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
FinalVolume:	761	1128	467	255	744	185	288	699	462	364	733	230
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.83	0.90	0.89	0.81	0.93	0.93	0.82	0.90	0.93	0.82
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1572	3432	5083	1532	1769	3538	1549	3432	3538	1550
Capacity Analysis Module:												
Vol/Sat:	0.22	0.32	0.30	0.07	0.15	0.12	0.16	0.20	0.30	0.11	0.21	0.15
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green/Cycle:	0.25	0.34	0.34	0.08	0.16	0.16	0.19	0.31	0.31	0.11	0.24	0.24
Volume/Cap:	0.89	0.95	0.88	0.95	0.89	0.73	0.87	0.63	0.95	0.95	0.87	0.62
Uniform Del:	27.2	24.3	23.5	34.4	30.6	29.7	29.6	22.0	25.1	33.1	27.4	25.5
IncrcmntDel:	11.4	15.6	16.2	41.3	11.3	10.5	21.0	1.2	28.5	33.2	9.6	3.2
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	38.5	39.9	39.7	75.7	42.0	40.3	50.6	23.1	53.6	66.3	37.1	28.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.5	39.9	39.7	75.7	42.0	40.3	50.6	23.1	53.6	66.3	37.1	28.8
LOS by Move:	D	D	D	E	D	D	D	C	D	E	D	C
HCM2kAvgQ:	12	19	14	6	10	6	10	8	16	8	12	6

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Project PM - mit

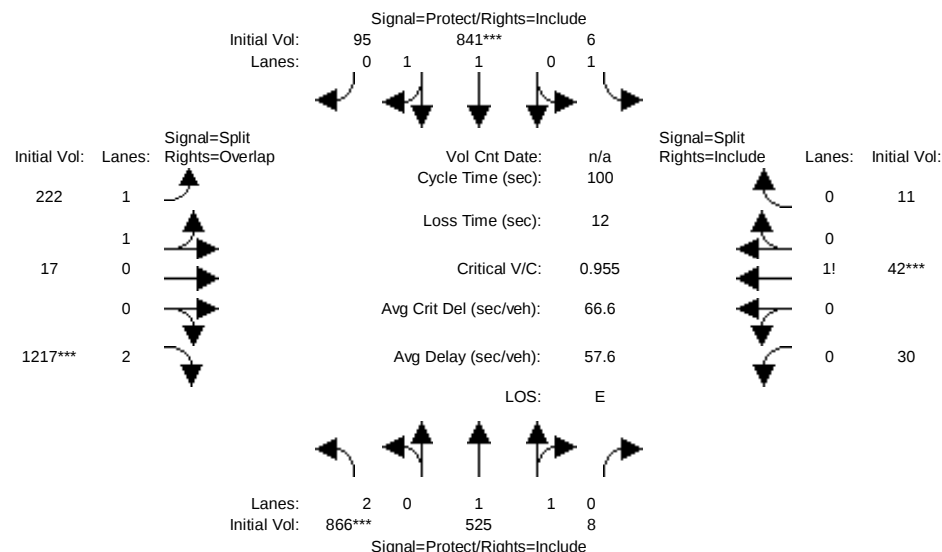
Intersection #12: I-280 NB Ramps / Westborough Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Volume Module:												
Base Vol:	982	683	237	142	241	121	174	896	203	250	1286	218
Growth 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
Initial Bse:	982	683	237	142	241	121	174	896	203	250	1286	218
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	982	683	237	142	241	121	174	896	203	250	1286	218
User 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
PHF Adj:	0.97	0.97	0.97	0.80	0.80	0.80	0.96	0.96	0.96	0.91	0.91	0.91
PHF Volume:	1010	703	244	178	302	152	182	936	212	276	1418	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1010	703	244	178	302	152	182	936	212	276	1418	240
PCE 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
MLF 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
FinalVolume:	1010	703	244	178	302	152	182	936	212	276	1418	240
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.89	0.89	0.91	0.91	0.83	0.90	0.90	0.90	0.90	0.93	0.83
Lanes:	2.10	1.41	0.49	1.11	1.89	1.00	2.00	1.63	0.37	2.00	2.00	1.00
Final Sat.:	3439	2392	830	1932	3279	1583	3432	2804	635	3432	3538	1581
Capacity Analysis Module:												
Vol/Sat:	0.29	0.29	0.29	0.09	0.09	0.10	0.05	0.33	0.33	0.08	0.40	0.15
Crit Moves:	***			***			***			***		
Green/Cycle:	0.30	0.30	0.30	0.10	0.10	0.10	0.06	0.38	0.38	0.09	0.41	0.51
Volume/Cap:	0.98	0.98	0.98	0.94	0.94	0.98	0.84	0.87	0.87	0.87	0.98	0.30
Uniform Del:	32.8	32.8	32.8	42.5	42.5	42.7	44.0	27.2	27.2	42.6	27.5	13.5
IncrcmntDel:	14.7	14.7	14.7	25.1	25.1	64.5	24.1	6.8	6.8	22.6	17.9	0.2
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	47.5	47.5	47.5	67.6	67.6	107.2	68.1	34.0	34.0	65.2	45.4	13.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.5	47.5	47.5	67.6	67.6	107.2	68.1	34.0	34.0	65.2	45.4	13.7
LOS by Move:	D	D	D	E	E	F	E	C	C	E	D	B
HCM2kAvgQ:	21	21	21	8	8	8	5	20	20	7	28	4
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum + Project AM - mit

Intersection #1: El Camino Real / Hickey Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6

Volume Module:

Base Vol:	866	525	8	6	841	95	222	17	1217	30	42	11
Growth 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
Initial Bse:	866	525	8	6	841	95	222	17	1217	30	42	11
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	866	525	8	6	841	95	222	17	1217	30	42	11
User 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
PHF Adj:	0.84	0.84	0.84	0.92	0.92	0.92	0.89	0.89	0.89	0.82	0.82	0.82
PHF Volume:	1030	624	10	7	919	104	249	19	1366	37	51	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1030	624	10	7	919	104	249	19	1366	37	51	13
PCE 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
MLF 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
Final Volume:	1030	624	10	7	919	104	249	19	1366	37	51	13

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.92	0.92	0.94	0.94	0.73	0.95	0.95	0.94
Lanes:	2.00	1.97	0.03	1.00	1.80	0.20	1.86	0.14	2.00	0.36	0.51	0.13
Final Sat.:	3432	3478	53	1769	3131	354	3307	253	2786	649	908	238

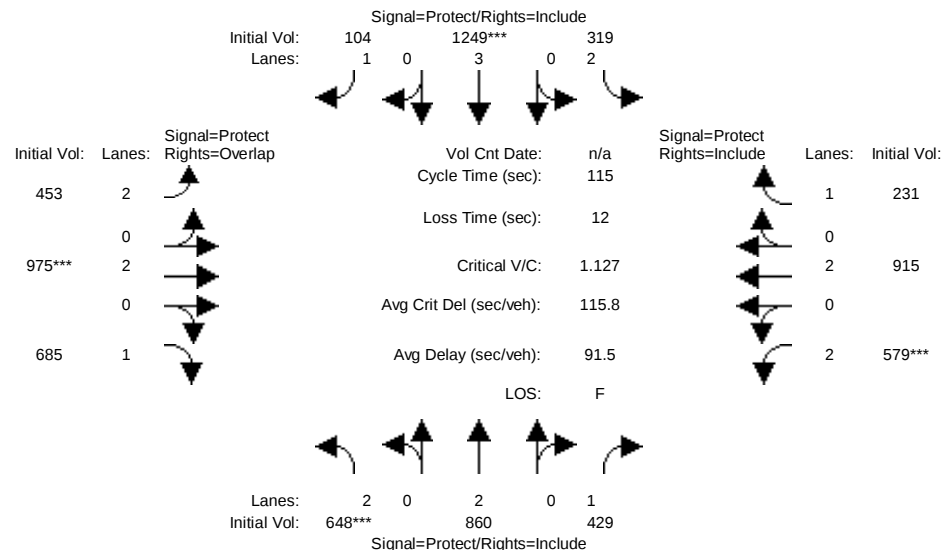
Capacity Analysis Module:

Vol/Sat:	0.30	0.18	0.18	0.00	0.29	0.29	0.08	0.08	0.49	0.06	0.06	0.06
Crit Moves:	***			***					***	***		
Green/Cycle:	0.29	0.47	0.47	0.10	0.28	0.28	0.18	0.18	0.48	0.12	0.12	0.12
Volume/Cap:	1.03	0.38	0.38	0.04	1.03	1.03	0.41	0.41	1.03	0.47	0.47	0.47
Uniform Del:	35.5	17.1	17.1	40.2	35.8	35.8	36.0	36.0	26.2	41.0	41.0	41.0
IncrementDel:	36.9	0.1	0.1	0.1	37.0	37.0	0.4	0.4	33.2	1.6	1.6	1.6
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	72.3	17.2	17.2	40.3	72.7	72.7	36.4	36.4	59.4	42.7	42.7	42.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	72.3	17.2	17.2	40.3	72.7	72.7	36.4	36.4	59.4	42.7	42.7	42.7
LOS by Move:	E	B	B	D	E	E	D	D	E	D	D	D
HCM2kAvgQ:	21	6	6	0	24	24	4	4	33	3	3	3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum + Project AM - mit

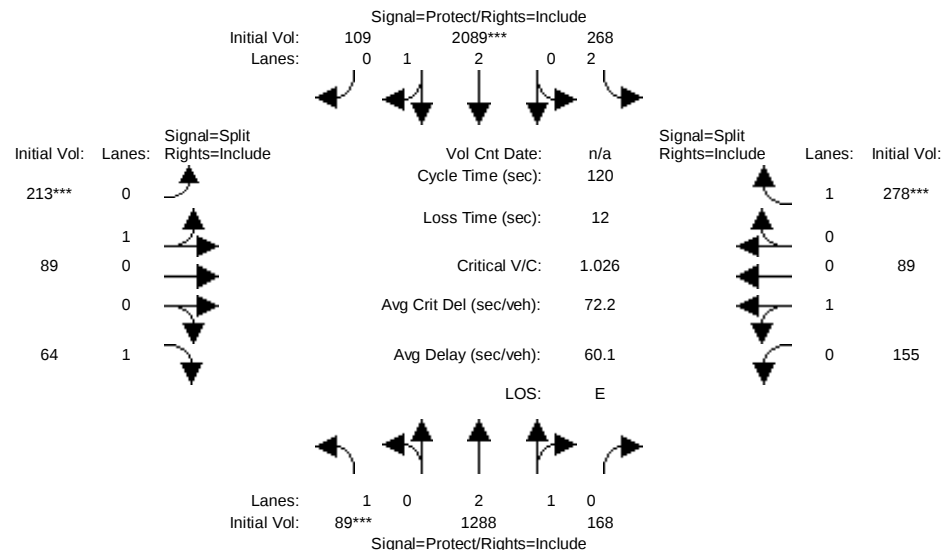
Intersection #4: El Camino Real / Chestnut Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Volume Module:												
Base Vol:	648	860	429	319	1249	104	453	975	685	579	915	231
Growth 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
Initial Bse:	648	860	429	319	1249	104	453	975	685	579	915	231
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	648	860	429	319	1249	104	453	975	685	579	915	231
User 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
PHF Adj:	0.93	0.93	0.93	0.88	0.88	0.88	0.92	0.92	0.92	0.75	0.75	0.75
PHF Volume:	698	927	462	363	1421	118	495	1064	748	775	1225	309
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	698	927	462	363	1421	118	495	1064	748	775	1225	309
PCE 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
MLF 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
Final Volume:	698	927	462	363	1421	118	495	1064	748	775	1225	309
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.81	0.90	0.93	0.81	0.90	0.93	0.82
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1565	3432	5083	1540	3432	3538	1541	3432	3538	1550
Capacity Analysis Module:												
Vol/Sat:	0.20	0.26	0.30	0.11	0.28	0.08	0.14	0.30	0.49	0.23	0.35	0.20
Crit Moves:	***			***			***			***		
Green/Cycle:	0.18	0.32	0.32	0.11	0.25	0.25	0.14	0.27	0.45	0.20	0.33	0.33
Volume/Cap:	1.13	0.83	0.94	0.94	1.13	0.31	1.05	1.13	1.08	1.13	1.05	0.60
Uniform Del:	47.1	36.5	38.2	50.6	43.2	35.2	49.6	42.2	31.8	46.0	38.5	32.3
IncrcmntDel:	76.6	5.4	25.5	30.0	68.0	0.5	55.0	71.0	59.6	75.0	40.3	2.1
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	123.7	41.9	63.7	80.6	111	35.7	104.7	113	91.4	121.0	78.9	34.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	123.7	41.9	63.7	80.6	111	35.7	104.7	113	91.4	121.0	78.9	34.3
LOS by Move:	F	D	E	F	F	D	F	F	F	F	E	C
HCM2kAvgQ:	21	18	20	10	29	4	15	31	38	23	32	10
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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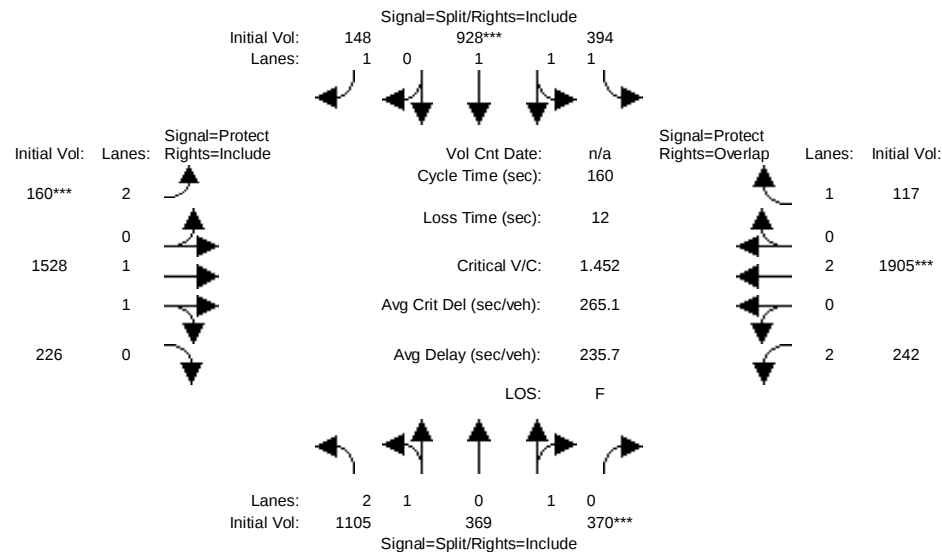
Intersection #5: El Camino Real / W. Orange Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Volume Module:												
Base Vol:	89	1288	168	268	2089	109	213	89	64	155	89	278
Growth 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
Initial Bse:	89	1288	168	268	2089	109	213	89	64	155	89	278
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	1288	168	268	2089	109	213	89	64	155	89	278
User 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
PHF Adj:	0.77	0.77	0.77	0.95	0.95	0.95	0.83	0.83	0.83	0.93	0.93	0.93
PHF Volume:	116	1681	219	283	2206	115	257	107	77	168	96	301
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	1681	219	283	2206	115	257	107	77	168	96	301
PCE 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
MLF 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
FinalVolume:	116	1681	219	283	2206	115	257	107	77	168	96	301
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.87	0.90	0.89	0.88	0.95	0.95	0.79	0.95	0.95	0.81
Lanes:	1.00	2.65	0.35	2.00	2.85	0.15	0.71	0.29	1.00	0.64	0.36	1.00
Final Sat.:	1769	4417	576	3432	4796	250	1269	530	1510	1146	658	1538
Capacity Analysis Module:												
Vol/Sat:	0.07	0.38	0.38	0.08	0.46	0.46	0.20	0.20	0.05	0.15	0.15	0.20
Crit Moves:	***			***			***					***
Green/Cycle:	0.06	0.42	0.42	0.09	0.45	0.45	0.20	0.20	0.20	0.19	0.19	0.19
Volume/Cap:	1.03	0.90	0.90	0.90	1.03	1.03	1.03	1.03	0.26	0.77	0.77	1.03
Uniform Del:	56.2	32.5	32.5	54.0	33.1	33.1	48.2	48.2	40.8	46.0	46.0	48.6
IncrementDel:	91.7	6.0	6.0	27.9	25.9	25.9	54.6	54.6	0.5	10.0	10.0	59.4
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	147.9	38.5	38.5	81.9	59.0	59.0	102.8	103	41.2	56.1	56.1	108.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	147.9	38.5	38.5	81.9	59.0	59.0	102.8	103	41.2	56.1	56.1	108.0
LOS by Move:	F	D	D	F	E	E	F	F	D	E	E	F
HCM2kAvgQ:	8	28	27	8	40	40	19	19	3	11	11	17
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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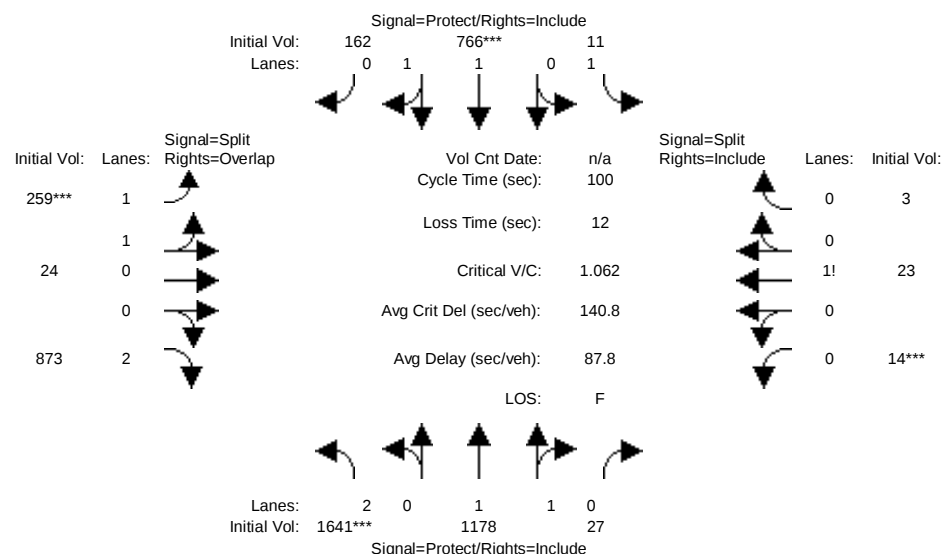
Intersection #12: I-280 NB Ramps / Westborough Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Volume Module:												
Base Vol:	1105	369	370	394	928	148	160	1528	226	242	1905	117
Growth 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
Initial Bse:	1105	369	370	394	928	148	160	1528	226	242	1905	117
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1105	369	370	394	928	148	160	1528	226	242	1905	117
User 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
PHF Adj:	0.86	0.86	0.86	0.85	0.85	0.85	0.91	0.91	0.91	0.83	0.83	0.83
PHF Volume:	1282	428	429	465	1094	175	176	1677	248	293	2304	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1282	428	429	465	1094	175	176	1677	248	293	2304	141
PCE 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
MLF 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
FinalVolume:	1282	428	429	465	1094	175	176	1677	248	293	2304	141
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.88	0.88	0.92	0.92	0.83	0.90	0.91	0.91	0.90	0.93	0.82
Lanes:	2.43	0.78	0.79	1.00	2.00	1.00	2.00	1.74	0.26	2.00	2.00	1.00
Final Sat.:	3921	1309	1313	1742	3485	1583	3432	3023	447	3432	3538	1561
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.33	0.27	0.31	0.11	0.05	0.55	0.55	0.09	0.65	0.09
Crit Moves:	****			****			****			****		
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.04	0.42	0.42	0.06	0.45	0.66
Volume/Cap:	1.46	1.46	1.46	1.24	1.46	0.51	1.36	1.32	1.32	1.32	1.46	0.14
Uniform Del:	62.0	62.0	62.0	62.7	62.7	55.3	77.0	46.4	46.4	74.8	44.2	10.0
IncrcmntDel:	209.0	209	209.0	113.3	210	1.3	205.9	149	149.2	172.3	209	0.1
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	271.0	271	271.0	176.1	273	56.6	282.9	196	195.6	247.2	253	10.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	271.0	271	271.0	176.1	273	56.6	282.9	196	195.6	247.2	253	10.1
LOS by Move:	F	F	F	F	F	E	F	F	F	F	F	B
HCM2kAvgQ:	51	51	51	37	51	8	9	79	79	14	104	2
Note: Queue reported is the number of cars per lane.												

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Intersection #1: El Camino Real / Hickey Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6

Volume Module:

Base Vol:	1641	1178	27	11	766	162	259	24	873	14	23	3
Growth 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
Initial Bse:	1641	1178	27	11	766	162	259	24	873	14	23	3
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1641	1178	27	11	766	162	259	24	873	14	23	3
User 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
PHF Adj:	0.92	0.92	0.92	0.93	0.93	0.93	0.85	0.85	0.85	0.78	0.78	0.78
PHF Volume:	1793	1287	30	12	823	174	307	28	1033	18	30	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1793	1287	30	12	823	174	307	28	1033	18	30	4
PCE 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
MLF 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
Final Volume:	1793	1287	30	12	823	174	307	28	1033	18	30	4

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.91	0.90	0.94	0.94	0.73	0.95	0.95	0.95
Lanes:	2.00	1.96	0.04	1.00	1.65	0.35	1.83	0.17	2.00	0.35	0.57	0.08
Final Sat.:	3432	3448	79	1769	2840	601	3258	302	2786	634	1042	136

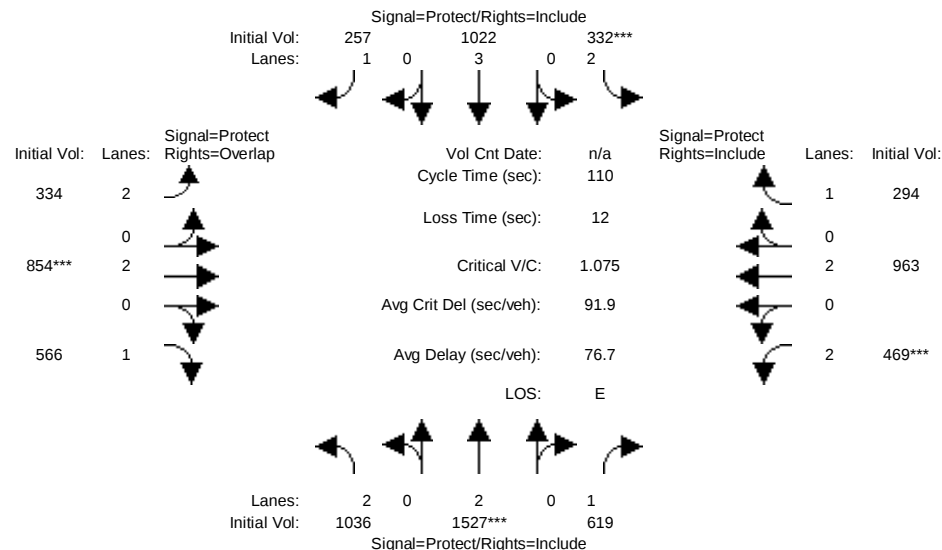
Capacity Analysis Module:

Vol/Sat:	0.52	0.37	0.37	0.01	0.29	0.29	0.09	0.09	0.37	0.03	0.03	0.03
Crit Moves:	***			***			***			***		
Green/Cycle:	0.42	0.59	0.59	0.06	0.23	0.23	0.11	0.11	0.53	0.12	0.12	0.12
Volume/Cap:	1.25	0.64	0.64	0.11	1.25	1.25	0.86	0.86	0.70	0.24	0.24	0.24
Uniform Del:	29.1	13.6	13.6	44.2	38.4	38.4	43.7	43.7	17.7	39.9	39.9	39.9
IncrementDel:	118.3	0.7	0.7	0.4	123	122.7	16.6	16.6	1.5	0.6	0.6	0.6
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	147.4	14.3	14.3	44.6	161	161.1	60.3	60.3	19.2	40.4	40.4	40.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	147.4	14.3	14.3	44.6	161	161.1	60.3	60.3	19.2	40.4	40.4	40.4
LOS by Move:	F	B	B	D	F	F	E	E	B	D	D	D
HCM2kAvgQ:	50	13	13	0	32	31	8	8	14	2	2	2

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
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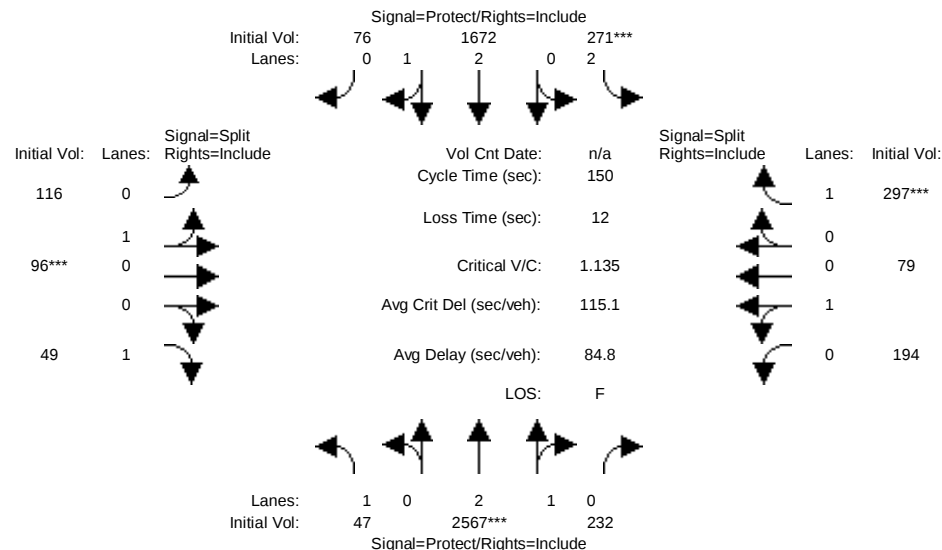
Intersection #4: El Camino Real / Chestnut Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Volume Module:												
Base Vol:	1036	1527	619	332	1022	257	334	854	566	469	963	294
Growth 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
Initial Bse:	1036	1527	619	332	1022	257	334	854	566	469	963	294
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1036	1527	619	332	1022	257	334	854	566	469	963	294
User 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
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.91	0.91	0.91	0.95	0.95	0.95
PHF Volume:	1072	1581	641	343	1057	266	369	943	625	494	1015	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1072	1581	641	343	1057	266	369	943	625	494	1015	310
PCE 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
MLF 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
Final Volume:	1072	1581	641	343	1057	266	369	943	625	494	1015	310
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.83	0.90	0.89	0.80	0.90	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1568	3432	5083	1523	3432	3538	1542	3432	3538	1544
Capacity Analysis Module:												
Vol/Sat:	0.31	0.45	0.41	0.10	0.21	0.17	0.11	0.27	0.41	0.14	0.29	0.20
Crit Moves:	****			****			****			****		
Green/Cycle:	0.31	0.42	0.42	0.09	0.20	0.20	0.10	0.25	0.55	0.13	0.28	0.28
Volume/Cap:	1.02	1.07	0.98	1.07	1.02	0.86	1.03	1.07	0.73	1.07	1.03	0.72
Uniform Del:	38.2	32.1	31.7	49.9	43.8	42.3	49.3	41.4	18.4	47.6	39.7	35.9
IncrementDel:	33.6	46.3	30.9	71.6	33.8	20.6	56.2	52.5	3.3	63.4	37.3	5.9
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	71.8	78.4	62.6	121.5	77.7	62.9	105.4	93.8	21.7	111.0	77.0	41.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	71.8	78.4	62.6	121.5	77.7	62.9	105.4	93.8	21.7	111.0	77.0	41.8
LOS by Move:	E	E	E	F	E	E	F	F	C	F	E	D
HCM2kAvgQ:	26	40	28	11	19	11	11	25	17	15	26	11
Note: Queue reported is the number of cars per lane.												

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Intersection #5: El Camino Real / W. Orange Ave



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6

Volume Module:

Base Vol:	47	2567	232	271	1672	76	116	96	49	194	79	297
Growth 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
Initial Bse:	47	2567	232	271	1672	76	116	96	49	194	79	297
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	2567	232	271	1672	76	116	96	49	194	79	297
User 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
PHF Adj:	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93	0.84	0.84	0.84
PHF Volume:	51	2763	250	294	1811	82	125	104	53	231	94	354
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	2763	250	294	1811	82	125	104	53	231	94	354
PCE 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
MLF 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
FinalVolume:	51	2763	250	294	1811	82	125	104	53	231	94	354

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.88	0.90	0.89	0.88	0.95	0.95	0.79	0.95	0.95	0.80
Lanes:	1.00	2.75	0.25	2.00	2.87	0.13	0.55	0.45	1.00	0.71	0.29	1.00
Final Sat.:	1769	4606	416	3432	4832	220	991	820	1510	1278	521	1521

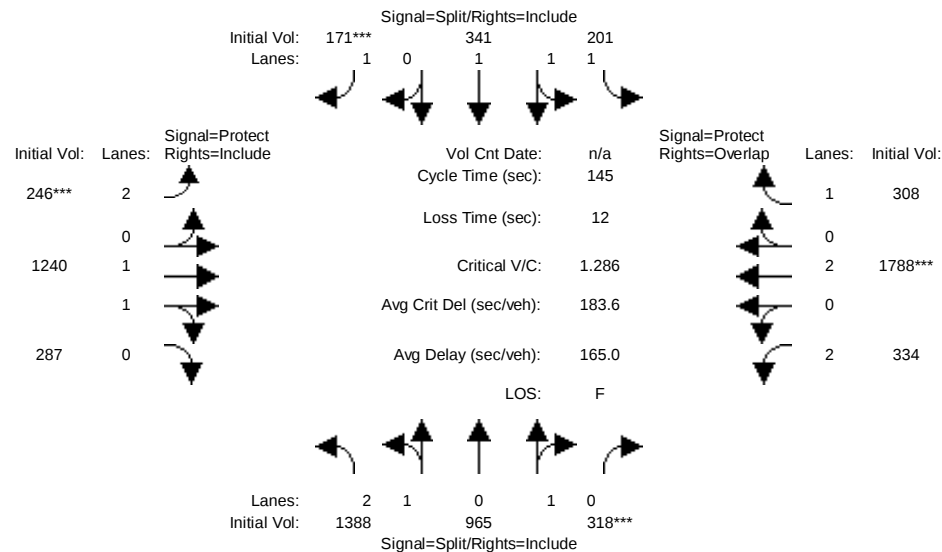
Capacity Analysis Module:

Vol/Sat:	0.03	0.60	0.60	0.09	0.37	0.37	0.13	0.13	0.04	0.18	0.18	0.23
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green/Cycle:	0.04	0.53	0.53	0.08	0.56	0.56	0.11	0.11	0.11	0.20	0.20	0.20
Volume/Cap:	0.67	1.14	1.14	1.14	0.67	0.67	1.14	1.14	0.31	0.88	0.88	1.14
Uniform Del:	70.7	35.4	35.4	69.3	23.1	23.1	66.6	66.6	61.4	57.9	57.9	59.6
IncramntDel:	20.6	66.1	66.1	97.4	0.6	0.6	104.5	104	1.1	21.3	21.3	92.7
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	91.3	101	101.5	166.7	23.7	23.7	171.1	171	62.4	79.2	79.2	152.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	91.3	101	101.5	166.7	23.7	23.7	171.1	171	62.4	79.2	79.2	152.4
LOS by Move:	F	F	F	F	C	C	F	F	E	E	E	F
HCM2kAvgQ:	3	69	68	12	22	22	17	17	2	17	17	25

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum + Project PM - mit

Intersection #12: I-280 NB Ramps / Westborough Blvd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Volume Module:												
Base Vol:	1388	965	318	201	341	171	246	1240	287	334	1788	308
Growth 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
Initial Bse:	1388	965	318	201	341	171	246	1240	287	334	1788	308
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1388	965	318	201	341	171	246	1240	287	334	1788	308
User 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
PHF Adj:	0.97	0.97	0.97	0.80	0.80	0.80	0.96	0.96	0.96	0.91	0.91	0.91
PHF Volume:	1428	993	327	252	428	215	257	1296	300	368	1971	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1428	993	327	252	428	215	257	1296	300	368	1971	340
PCE 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
MLF 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
FinalVolume:	1428	993	327	252	428	215	257	1296	300	368	1971	340
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.89	0.89	0.91	0.91	0.83	0.90	0.90	0.90	0.90	0.93	0.83
Lanes:	2.11	1.42	0.47	1.11	1.89	1.00	2.00	1.62	0.38	2.00	2.00	1.00
Final Sat.:	3465	2409	794	1933	3279	1583	3432	2792	646	3432	3538	1579
Capacity Analysis Module:												
Vol/Sat:	0.41	0.41	0.41	0.13	0.13	0.14	0.07	0.46	0.46	0.11	0.56	0.21
Crit Moves:	***			***			***			***		
Green/Cycle:	0.32	0.32	0.32	0.11	0.11	0.11	0.06	0.40	0.40	0.09	0.43	0.54
Volume/Cap:	1.29	1.29	1.29	1.24	1.24	1.29	1.29	1.16	1.16	1.16	1.29	0.40
Uniform Del:	49.3	49.3	49.3	64.9	64.9	64.9	68.3	43.6	43.6	65.8	41.1	19.7
IncrcmntDel:	132.5	133	132.5	122.2	122	166.4	161.2	81.6	81.6	102.2	134	0.3
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay 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
Delay/Veh:	181.8	182	181.8	187.0	187	231.2	229.5	125	125.1	168.0	175	20.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	181.8	182	181.8	187.0	187	231.2	229.5	125	125.1	168.0	175	20.0
LOS by Move:	F	F	F	F	F	F	F	F	F	F	F	B
HCM2kAvgQ:	54	54	54	19	19	18	12	54	54	14	75	9
Note: Queue reported is the number of cars per lane.												