

**APPENDIX H**

**2030 PLUS PROJECT WITHOUT DOMINGUEZ ROAD  
LOS WORKSHEETS**

Rocklin Crossings  
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report  
Circular 212 Planning Method (Future Volume Alternative)

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Intersection #1 Rocklin Road/Pacific Street

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Cycle (sec): 100 Critical Vol./Cap.(X): 1.246  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	2	0	1	1	1	0	1	1	0	1

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Volume Module:

Base Vol:	63	678	796	195	690	24	48	182	117	805	260	169
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	678	796	195	690	24	48	182	117	805	260	169
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:	63	678	796	195	690	24	48	182	117	805	260	169
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	678	796	195	690	24	48	182	117	805	260	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	678	796	195	690	24	48	182	117	805	260	169
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	1.10	1.00	1.00
FinalVolume:	63	678	796	195	690	24	48	182	117	886	260	169

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Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
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:	1.00	2.00	1.00	1.00	1.93	0.07	1.00	1.22	0.78	1.55	0.45	1.00
Final Sat.:	1375	2750	1375	1375	2658	92	1375	1674	1076	2126	624	1375

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Capacity Analysis Module:

Vol/Sat:	0.05	0.25	0.58	0.14	0.26	0.26	0.03	0.11	0.11	0.42	0.42	0.12
Crit Volume:			796			195			150			573
Crit Moves:			****			****			****			****

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Rocklin Crossings  
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report  
Circular 212 Planning Method (Future Volume Alternative)

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Intersection #2 Rocklin Road/Granite Road

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	150	Level Of Service:	D

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
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
Lanes:	1	0	0	1	0	0	1	0	1	1	0	1

Volume Module:

Base Vol:	22	9	6	435	4	173	183	1109	9	10	1542	813
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:	22	9	6	435	4	173	183	1109	9	10	1542	813
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:	22	9	6	435	4	173	183	1109	9	10	1542	813
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	22	9	6	435	4	173	183	1109	9	10	1542	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	9	6	435	4	173	183	1109	9	10	1542	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	0.00
MLF Adj:	1.00	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	22	9	6	479	4	173	183	1109	9	10	1542	0

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
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:	1.00	0.60	0.40	1.98	0.02	1.00	1.00	1.98	0.02	1.00	2.00	1.00
Final Sat.:	1375	825	550	2727	23	1375	1375	2728	22	1375	2750	1375

Capacity Analysis Module:

Vol/Sat:	0.02	0.01	0.01	0.18	0.18	0.13	0.13	0.41	0.41	0.01	0.56	0.00
Crit Volume:	22				241				183			
Crit Moves:	****			****			****			****		

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report  
 2000 HCM Operations Method (Future Volume Alternative)

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Intersection #3 Rocklin Road/I-80 Westbound Ramp

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Cycle (sec): 100 Critical Vol./Cap.(X): 1.130  
 Loss Time (sec): 6 Average Delay (sec/veh): 56.4  
 Optimal Cycle: 180 Level Of Service: E

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	0	0	0	1	0	0	0	0	2	1	0	2

Volume Module:

Base Vol:	0	0	0	139	0	546	0	968	628	605	1878	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	139	0	546	0	968	628	605	1878	0
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	0	0	139	0	546	0	968	628	605	1878	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:	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 Volume:	0	0	0	139	0	546	0	968	628	605	1878	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	139	0	546	0	968	628	605	1878	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:	0	0	0	139	0	546	0	968	628	605	1878	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	0.95	1.00	0.85	1.00	0.95	0.85	0.95	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	1805	0	1615	0	3610	1615	1805	3610	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.08	0.00	0.34	0.00	0.27	0.39	0.34	0.52	0.00
Crit Moves:						****			****	****		
Green/Cycle:	0.00	0.00	0.00	0.30	0.00	0.30	0.00	0.34	0.34	0.30	0.64	0.00
Volume/Cap:	0.00	0.00	0.00	0.26	0.00	1.13	0.00	0.78	1.13	1.13	0.81	0.00
Delay/Veh:	0.0	0.0	0.0	26.9	0.0	116.7	0.0	32.6	112.1	115.1	15.7	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	26.9	0.0	116.7	0.0	32.6	112.1	115.1	15.7	0.0
LOS by Move:	A	A	A	C	A	F	A	C	F	F	B	A
HCM2kAvgQ:	0	0	0	3	0	28	0	14	29	26	21	0

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

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Rocklin Crossings  
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #4 Rocklin Road/I-80 Eastbound Ramp

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Cycle (sec): 100 Critical Vol./Cap.(X): 1.113  
 Loss Time (sec): 6 Average Delay (sec/veh): 70.4  
 Optimal Cycle: 180 Level Of Service: E

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	1! 0 1	0	0	0 0 0	1	0	2 0 0	0	0	1 1 0

Volume Module:

Base Vol:	916	0	1134	0	0	0	308	835	0	0	1520	81
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:	916	0	1134	0	0	0	308	835	0	0	1520	81
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:	916	0	1134	0	0	0	308	835	0	0	1520	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:	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 Volume:	916	0	1134	0	0	0	308	835	0	0	1520	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	916	0	1134	0	0	0	308	835	0	0	1520	81
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:	916	0	1134	0	0	0	308	835	0	0	1520	81

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	1.00	0.90	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.94	0.94
Lanes:	1.45	0.00	1.55	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.90	0.10
Final Sat.:	2465	0	2647	0	0	0	1805	3610	0	0	3400	181

Capacity Analysis Module:

Vol/Sat:	0.37	0.00	0.43	0.00	0.00	0.00	0.17	0.23	0.00	0.00	0.45	0.45
Crit Moves:			****				****				****	
Green/Cycle:	0.39	0.00	0.39	0.00	0.00	0.00	0.15	0.56	0.00	0.00	0.40	0.40
Volume/Cap:	0.97	0.00	1.11	0.00	0.00	0.00	1.11	0.42	0.00	0.00	1.11	1.11
Delay/Veh:	42.5	0.0	89.9	0.0	0.0	0.0	130.3	13.0	0.0	0.0	91.0	91.0
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:	42.5	0.0	89.9	0.0	0.0	0.0	130.3	13.0	0.0	0.0	91.0	91.0
LOS by Move:	D	A	F	A	A	A	F	B	A	A	F	F
HCM2kAvgQ:	25	0	36	0	0	0	14	7	0	0	40	40

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

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Rocklin Crossings  
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report  
Circular 212 Planning Method (Future Volume Alternative)

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Intersection #5 Dominguez Road/Pacific Street

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Cycle (sec):	100	Critical Vol./Cap.(X):	1.001
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	1	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	24	110	21	47	89	198	310	498	46	43	647	247
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:	24	110	21	47	89	198	310	498	46	43	647	247
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:	24	110	21	47	89	198	310	498	46	43	647	247
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	110	21	47	89	198	310	498	46	43	647	247
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	110	21	47	89	198	310	498	46	43	647	247
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:	24	110	21	47	89	198	310	498	46	43	647	247

Saturation Flow Module:

Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
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:	1.00	1.68	0.32	1.00	1.00	1.00	1.00	0.92	0.08	1.00	0.72	0.28
Final Sat.:	1425	2393	457	1425	1425	1425	1425	1305	120	1425	1031	394

Capacity Analysis Module:

Vol/Sat:	0.02	0.05	0.05	0.03	0.06	0.14	0.22	0.38	0.38	0.03	0.63	0.63	
Crit Volume:	24						198	310					
Crit Moves:	****						****		****		****		

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Rocklin Crossings
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #6 Dominguez Road/Granite Drive

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Average Delay (sec/veh): 5.2 Worst Case Level Of Service: B[ 12.2]

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Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control, Rights, and Lanes.

Volume Module:

Table with 13 columns representing traffic volumes and adjustments. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume.

Critical Gap Module:

Table with 13 columns for critical gap and follow-up times. Rows include Critical Gp and FollowUpTim.

Capacity Module:

Table with 13 columns for capacity metrics. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module:

Table with 13 columns for level of service metrics. Rows include 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

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Intersection #7 Sierra College Boulevard/Taylor Road

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Cycle (sec): 100 Critical Vol./Cap.(X): 1.037  
 Loss Time (sec): 8 Average Delay (sec/veh): 57.9  
 Optimal Cycle: 180 Level Of Service: E

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	2	0	1	1	1	0	1	0	1	1

Volume Module:

Base Vol:	326	783	248	53	1407	290	156	263	86	442	465	47
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:	326	783	248	53	1407	290	156	263	86	442	465	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:	326	783	248	53	1407	290	156	263	86	442	465	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:	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 Volume:	326	783	248	53	1407	290	156	263	86	442	465	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	326	783	248	53	1407	290	156	263	86	442	465	47
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:	326	783	248	53	1407	290	156	263	86	442	465	47

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	1900	1615	1805	1900	1615

Capacity Analysis Module:

Vol/Sat:	0.18	0.22	0.15	0.03	0.39	0.18	0.09	0.14	0.05	0.24	0.24	0.03
Crit Moves:	****			****			****			****		
Green/Cycle:	0.17	0.48	0.48	0.07	0.38	0.38	0.10	0.13	0.13	0.24	0.27	0.27
Volume/Cap:	1.04	0.45	0.32	0.45	1.04	0.48	0.90	1.04	0.40	1.04	0.90	0.11
Delay/Veh:	101.8	17.1	15.9	47.7	65.6	24.3	84.6	110	40.9	91.6	52.9	27.3
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:	101.8	17.1	15.9	47.7	65.6	24.3	84.6	110	40.9	91.6	52.9	27.3
LOS by Move:	F	B	B	D	E	C	F	F	D	F	D	C
HCM2kAvgQ:	13	8	4	2	32	7	8	14	3	21	17	1

\*\*\*\*\*

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

\*\*\*\*\*



Rocklin Crossings

2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report  
 2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #8 Sierra College Boulevard/Brace Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.711  
 Loss Time (sec): 8 Average Delay (sec/veh): 24.0  
 Optimal Cycle: 50 Level Of Service: C

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Permitted			Protected			Permitted			Permitted										
Rights:	Include			Include			Include			Include										
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								
Lanes:	0	0	2	1	0	1	0	2	1	0	0	0	0	0	1	1	0	0	0	1

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Volume Module:

Base Vol:	0	1039	143	327	1607	3	0	0	59	352	0	316
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	1039	143	327	1607	3	0	0	59	352	0	316
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	1039	143	327	1607	3	0	0	59	352	0	316
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1039	143	327	1607	3	0	0	59	352	0	316
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1039	143	327	1607	3	0	0	59	352	0	316
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	1039	143	327	1607	3	0	0	59	352	0	316

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Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	0.95	0.91	0.91	1.00	1.00	0.87	0.77	1.00	0.85
Lanes:	0.00	2.64	0.36	1.00	2.99	0.01	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	0	4477	616	1805	5177	10	0	0	1644	1461	0	1615

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Capacity Analysis Module:

Vol/Sat:	0.00	0.23	0.23	0.18	0.31	0.31	0.00	0.00	0.04	0.24	0.00	0.20
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.33	0.33	0.25	0.58	0.58	0.00	0.00	0.34	0.34	0.00	0.34
Volume/Cap:	0.00	0.71	0.71	0.71	0.53	0.53	0.00	0.00	0.11	0.71	0.00	0.58
Delay/Veh:	0.0	31.0	31.0	39.1	12.9	12.9	0.0	0.0	22.8	33.6	0.0	28.7
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:	0.0	31.0	31.0	39.1	12.9	12.9	0.0	0.0	22.8	33.6	0.0	28.7
LOS by Move:	A	C	C	D	B	B	A	A	C	C	A	C
HCM2kAvgQ:	0	12	12	8	10	10	0	0	1	11	0	9

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings

2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report

Circular 212 Planning Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #9 Sierra College Boulevard/Granite Drive

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.948  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: E

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	2	1	0	2	1	0	2	1	0	1

Volume Module:

Base Vol:	487	1164	93	81	1578	236	77	17	134	138	29	26
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:	487	1164	93	81	1578	236	77	17	134	138	29	26
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:	487	1164	93	81	1578	236	77	17	134	138	29	26
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	487	1164	93	81	1578	236	77	17	134	138	29	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	487	1164	93	81	1578	236	77	17	134	138	29	26
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	1.10	1.00	1.00	1.00
FinalVolume:	487	1164	93	81	1578	236	77	17	147	138	29	26

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
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:	1.00	2.78	0.22	1.00	2.61	0.39	1.00	1.00	2.00	1.00	1.00	1.00
Final Sat.:	1375	3820	305	1375	3588	537	1375	1375	2750	1375	1375	1375

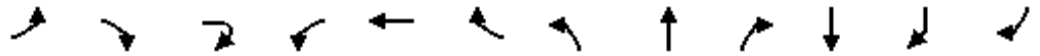
Capacity Analysis Module:

Vol/Sat:	0.35	0.30	0.30	0.06	0.44	0.44	0.06	0.01	0.05	0.10	0.02	0.02
Crit Volume:	487			605			74	138				
Crit Moves:	****			****			****	****				

\*\*\*\*\*

HCM Signalized Intersection Capacity Analysis  
 10: I-80 WB & Sierra College Blvd.

10/5/2010



Movement	EBL	EBR	EBR2	WBL2	WBT	WBR	NBL	NBT	NBR	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	17	61	19	1247	16	318	276	1424	37	1020	747	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		0.97	0.95	0.95	1.00	0.91	1.00	0.95	1.00	1.00
Frt	1.00	0.85		1.00	0.86	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583		3433	1529	1504	1770	5085	1583	3539	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583		3433	1529	1504	1770	5085	1583	3539	1863	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	17	61	19	1247	16	318	276	1424	37	1020	747	70
RTOR Reduction (vph)	0	7	0	0	49	28	0	0	0	0	0	15
Lane Group Flow (vph)	17	73	0	1247	120	137	276	1424	37	1020	747	55
Turn Type	Prot	custom		Prot		custom	Prot		Free		Prot	Perm
Protected Phases	7	4		3	8	8	5	2		6	6	
Permitted Phases		5 7				2			Free			6
Actuated Green, G (s)	12.1	35.1		49.4	41.3	115.9	19.0	74.6	140.0	51.6	51.6	51.6
Effective Green, g (s)	12.1	35.1		49.4	41.3	115.9	19.0	74.6	140.0	51.6	51.6	51.6
Actuated g/C Ratio	0.09	0.25		0.35	0.29	0.83	0.14	0.53	1.00	0.37	0.37	0.37
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	153	442		1211	451	1288	240	2710	1583	1304	687	583
v/s Ratio Prot	0.01	0.00		c0.36	c0.08	0.03	c0.16	0.28		0.29	c0.40	
v/s Ratio Perm		0.04				0.06			0.02			0.03
v/c Ratio	0.11	0.16		1.03	0.27	0.11	1.15	0.53	0.02	0.78	1.09	0.09
Uniform Delay, d1	59.0	41.0		45.3	37.8	2.3	60.5	21.2	0.0	39.2	44.2	28.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.84	0.38	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.2		33.8	0.3	0.0	98.6	0.6	0.0	4.7	60.5	0.3
Delay (s)	59.3	41.2		79.1	38.1	2.3	149.7	8.7	0.0	43.9	104.7	29.2
Level of Service	E	D		E	D	A	F	A	A	D	F	C
Approach Delay (s)					66.7			30.9		68.1		
Approach LOS					E			C		E		































Intersection Summary

HCM Average Control Delay	54.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	89.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

# HCM Signalized Intersection Capacity Analysis

## 11: I-80 EB & Rocklin Crossings

10/5/2010

												
Movement	EBL2	EBT	EBR	WBL	WBR	WBR2	NBT	NBR	NBR2	SBL	SBT	SBR
Lane Configurations	 	 					  			 	 	
Volume (vph)	856	305	238	47	195	35	686	457	99	283	1940	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.85	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	1583	1583	5085	1863	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.47	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	885	1583	1583	5085	1863	1583	3433	3539	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	856	305	238	47	195	35	686	457	99	283	1940	116
RTOR Reduction (vph)	0	0	15	0	0	0	0	0	51	0	0	0
Lane Group Flow (vph)	856	305	223	47	195	35	686	457	48	283	1940	116
Turn Type	Split		Perm	custom	custom	Free		Prot	Perm	Prot		Free
Protected Phases	4	4					2	2		1	6	
Permitted Phases			4	7	7	Free			2			Free
Actuated Green, G (s)	37.5	37.5	37.5	37.5	37.5	140.0	67.5	67.5	67.5	23.0	94.5	140.0
Effective Green, g (s)	37.5	37.5	37.5	37.5	37.5	140.0	67.5	67.5	67.5	23.0	94.5	140.0
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	1.00	0.48	0.48	0.48	0.16	0.68	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	920	948	424	237	424	1583	2452	898	763	564	2389	1583
v/s Ratio Prot	c0.25	0.09					0.13	0.25		0.08	c0.55	
v/s Ratio Perm			0.14	0.05	0.12	0.02			0.03			0.07
v/c Ratio	0.93	0.32	0.53	0.20	0.46	0.02	0.28	0.51	0.06	0.50	0.81	0.07
Uniform Delay, d1	50.0	41.1	43.7	39.6	42.8	0.0	21.7	24.9	19.4	53.3	16.4	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.85	0.87	0.59	0.80	0.35	1.00
Incremental Delay, d2	15.5	0.2	1.2	0.4	0.8	0.0	0.3	2.0	0.2	0.3	1.3	0.0
Delay (s)	65.5	41.3	44.8	40.0	43.6	0.0	18.8	23.6	11.6	43.1	7.1	0.0
Level of Service	E	D	D	D	D	A	B	C	B	D	A	A
Approach Delay (s)		56.7					20.0				11.1	
Approach LOS		E					B				B	
<b>Intersection Summary</b>												
HCM Average Control Delay			26.7				HCM Level of Service			C		
HCM Volume to Capacity ratio			0.85									
Actuated Cycle Length (s)			140.0				Sum of lost time (s)			8.0		
Intersection Capacity Utilization			84.7%				ICU Level of Service			E		
Analysis Period (min)			15									
c Critical Lane Group												

Rocklin Crossings

2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report

Circular 212 Planning Method (Future Volume Alternative)

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Intersection #12 Sierra College Boulevard/Dominguez Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.530  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 37 Level Of Service: A

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Protected			Protected			Protected			Protected										
Rights:	Include			Include			Include			Include										
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								
Lanes:	0	0	2	1	0	1	0	3	0	0	0	0	0	0	0	2	0	0	0	2

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Volume Module:

Base Vol:	0	1049	8	29	2181	0	0	0	0	52	0	12
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	1049	8	29	2181	0	0	0	0	52	0	12
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	1049	8	29	2181	0	0	0	0	52	0	12
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1049	8	29	2181	0	0	0	0	52	0	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1049	8	29	2181	0	0	0	0	52	0	12
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	1.10	1.00	1.10
FinalVolume:	0	1049	8	29	2181	0	0	0	0	57	0	13

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Saturation Flow Module:

Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
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:	0.00	2.98	0.02	1.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	4243	32	1425	4275	0	0	0	0	2850	0	2850

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Capacity Analysis Module:

Vol/Sat:	0.00	0.25	0.25	0.02	0.51	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Crit Volume:	0			727			0			29		
Crit Moves:	****			****						****		

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report

Circular 212 Planning Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #13 Sierra College Boulevard/Rocklin Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.443
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 sub-columns (L, T, R) for Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module:

Table with 13 columns for various volume and adjustment factors: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module:

Table with 13 columns for saturation flow factors: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 13 columns for capacity analysis factors: Vol/Sat, Crit Volume, Crit Moves.

\*\*\*\*\*

Rocklin Crossings

2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report  
 2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #14 Taylor Road/Horseshoe Bar Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.081  
 Loss Time (sec): 8 Average Delay (sec/veh): 57.0  
 Optimal Cycle: 180 Level Of Service: E

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
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
Lanes:	1	0	0	1	0	0	0	0	1	0	0	1

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Volume Module:

Base Vol:	4	375	72	573	751	15	9	52	26	131	27	604
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:	4	375	72	573	751	15	9	52	26	131	27	604
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:	4	375	72	573	751	15	9	52	26	131	27	604
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	375	72	573	751	15	9	52	26	131	27	604
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	375	72	573	751	15	9	52	26	131	27	604
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:	4	375	72	573	751	15	9	52	26	131	27	604

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.98	0.95	1.00	1.00	0.96	0.96	0.96	0.95	0.86	0.86
Lanes:	1.00	0.84	0.16	1.00	0.98	0.02	0.10	0.60	0.30	1.00	0.04	0.96
Final Sat.:	1805	1556	299	1805	1857	37	188	1085	542	1805	70	1557

Capacity Analysis Module:

Vol/Sat:	0.00	0.24	0.24	0.32	0.40	0.40	0.05	0.05	0.05	0.07	0.39	0.39
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.22	0.22	0.29	0.51	0.51	0.04	0.04	0.04	0.36	0.36	0.65
Volume/Cap:	0.79	1.08	1.08	1.08	0.79	0.79	1.08	1.08	1.08	0.20	1.08	0.59
Delay/Veh:	293.9	107	106.5	98.0	24.2	24.2	171.9	172	171.9	22.3	93.0	10.8
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:	293.9	107	106.5	98.0	24.2	24.2	171.9	172	171.9	22.3	93.0	10.8
LOS by Move:	F	F	F	F	C	C	F	F	F	C	F	B
HCM2kAvgQ:	1	22	22	27	21	21	6	6	6	3	30	11

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #15 Horseshoe Bar Road/I-80 Westbound Ramp

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.463
Loss Time (sec): 8 Average Delay (sec/veh): 19.0
Optimal Cycle: 30 Level Of Service: B

\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 rows: Movement (L, T, R), Control (Protected, Permitted), Rights (Include, Ignore), Min. Green, Y+R, Lanes.

Volume Module:

Table with 13 columns representing different volume metrics and 13 rows for various adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module:

Table with 13 columns for saturation flow metrics and 4 rows for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table with 13 columns for capacity analysis metrics and 10 rows for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, etc.

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

\*\*\*\*\*



Rocklin Crossings
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #16 Horseshoe Bar Road/I-80 Eastbound Ramp

\*\*\*\*\*

Average Delay (sec/veh): 30.8 Worst Case Level Of Service: F[ 71.9]

\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control, Rights, and Lanes.

Volume Module: Table with 12 columns for volume components like Base Vol, Growth Adj, Initial Bse, etc.

Critical Gap Module: Table with 3 columns for Critical Gp, FollowUpTim, and other metrics.

Capacity Module: Table with 4 columns for Capacity metrics like Cnflct Vol, Potent Cap., etc.

Level Of Service Module: Table with 4 columns for LOS metrics like 2Way95thQ, Control Del, etc.

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #17 Barton Road/Brace Road

\*\*\*\*\*

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: C [ 15.2]

\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign, Uncontrolled), Rights (Include), and Lanes (0 0 1! 0 0).

Volume Module table with 13 columns and 12 rows including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume.

Critical Gap Module table with 13 columns and 2 rows including Critical Gp and FollowUpTim.

Capacity Module table with 13 columns and 4 rows including Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module table with 13 columns and 10 rows including 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings  
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #18 Barton Road/Rocklin Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.924  
 Loss Time (sec): 0 Average Delay (sec/veh): 27.0  
 Optimal Cycle: 0 Level Of Service: D

\*\*\*\*\*

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		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	0	1	1	0	0	0	0	0

Volume Module:

Base Vol:	505	78	0	0	90	308	115	0	233	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:	505	78	0	0	90	308	115	0	233	0	0	0
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:	505	78	0	0	90	308	115	0	233	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:	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 Volume:	505	78	0	0	90	308	115	0	233	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	505	78	0	0	90	308	115	0	233	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:	505	78	0	0	90	308	115	0	233	0	0	0

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:	1.00	1.00	0.00	0.00	0.23	0.77	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	546	586	0	0	140	477	472	0	559	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.92	0.13	xxxx	xxxx	0.65	0.65	0.24	xxxx	0.42	xxxx	xxxx	xxxx
Crit Moves:	****				****				****			
Delay/Veh:	46.5	9.7	0.0	0.0	18.1	18.1	12.4	0.0	13.1	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
AdjDel/Veh:	46.5	9.7	0.0	0.0	18.1	18.1	12.4	0.0	13.1	0.0	0.0	0.0
LOS by Move:	E	A	*	*	C	C	B	*	B	*	*	*
ApproachDel:	41.6			18.1			12.8			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxxx		
ApprAdjDel:	41.6			18.1			12.8			xxxxxx		
LOS by Appr:	E			C			B			*		
AllWayAvgQ:	5.7	0.1	0.0	1.6	1.6	1.6	0.3	0.0	0.6	0.0	0.0	0.0

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

Rocklin Crossings

2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #19 Sierra College Boulevard/King Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.695
Loss Time (sec): 9 Average Delay (sec/veh): 20.3
Optimal Cycle: 51 Level Of Service: C

\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 rows: Movement (L, T, R), Control, Rights, Min. Green, Y+R, Lanes.

Volume Module:

Table with 13 columns representing different volume and adjustment factors and 13 rows of data.

Saturation Flow Module:

Table with 13 columns representing saturation flow and adjustment factors and 4 rows of data.

Capacity Analysis Module:

Table with 13 columns representing capacity analysis metrics and 10 rows of data.

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

\*\*\*\*\*

Rocklin Crossings
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #20 Sierra College Boulevard/English Colony Way

\*\*\*\*\*

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: C [ 17.7]

\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Uncontrolled/Stop Sign), Rights (Include), and Lanes.

Volume Module:

Table with 12 columns representing traffic volumes and adjustments. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume.

Critical Gap Module:

Table with 12 columns for critical gap and follow-up time. Rows include Critical Gp and FollowUpTim.

Capacity Module:

Table with 12 columns for capacity metrics. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module:

Table with 12 columns for level of service metrics. Rows include 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings

2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report  
 2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #21 Taylor Road/King Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.752  
 Loss Time (sec): 9 Average Delay (sec/veh): 37.2  
 Optimal Cycle: 59 Level Of Service: D

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	256	473	133	92	580	227	219	110	246	266	162	168
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:	256	473	133	92	580	227	219	110	246	266	162	168
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:	256	473	133	92	580	227	219	110	246	266	162	168
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	256	473	133	92	580	227	219	110	246	266	162	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	256	473	133	92	580	227	219	110	246	266	162	168
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:	256	473	133	92	580	227	219	110	246	266	162	168

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.92	0.92	0.95	0.91	0.91	0.95	1.00	0.85	0.95	0.92	0.92
Lanes:	1.00	1.56	0.44	1.00	1.44	0.56	1.00	1.00	1.00	1.00	0.49	0.51
Final Sat.:	1805	2725	766	1805	2486	973	1805	1900	1615	1805	862	894

Capacity Analysis Module:

Vol/Sat:	0.14	0.17	0.17	0.05	0.23	0.23	0.12	0.06	0.15	0.15	0.19	0.19
Crit Moves:	****			****			****			****		
Green/Cycle:	0.19	0.39	0.39	0.11	0.31	0.31	0.16	0.21	0.21	0.20	0.25	0.25
Volume/Cap:	0.75	0.45	0.45	0.45	0.75	0.75	0.75	0.28	0.73	0.73	0.75	0.75
Delay/Veh:	47.5	23.1	23.1	43.0	34.1	34.1	50.5	33.6	44.7	44.6	41.8	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:	47.5	23.1	23.1	43.0	34.1	34.1	50.5	33.6	44.7	44.6	41.8	41.8
LOS by Move:	D	C	C	D	C	C	D	C	D	D	D	D
HCM2kAvgQ:	9	7	7	3	13	13	8	3	9	9	11	11

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

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Rocklin Crossings  
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report  
Circular 212 Planning Method (Future Volume Alternative)

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Intersection #1 Rocklin Road/Pacific Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.213  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	2	0	1	1	1	0	1	1	0	1

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Volume Module:

Base Vol:	58	519	779	196	719	47	57	286	60	705	264	209
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:	58	519	779	196	719	47	57	286	60	705	264	209
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:	58	519	779	196	719	47	57	286	60	705	264	209
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	519	779	196	719	47	57	286	60	705	264	209
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	519	779	196	719	47	57	286	60	705	264	209
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	1.10	1.00	1.00
FinalVolume:	58	519	779	196	719	47	57	286	60	776	264	209

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Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
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:	1.00	2.00	1.00	1.00	1.88	0.12	1.00	1.65	0.35	1.49	0.51	1.00
Final Sat.:	1375	2750	1375	1375	2581	169	1375	2273	477	2052	698	1375

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Capacity Analysis Module:

Vol/Sat:	0.04	0.19	0.57	0.14	0.28	0.28	0.04	0.13	0.13	0.38	0.38	0.15
Crit Volume:			779		196				173		520	
Crit Moves:			****		****				****		****	

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Rocklin Crossings  
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report  
Circular 212 Planning Method (Future Volume Alternative)

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Intersection #2 Rocklin Road/Granite Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.864  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 126 Level Of Service: D

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
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
Lanes:	1	0	0	1	0	0	1	0	0	1	0	0

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Volume Module:

Base Vol:	34	15	12	626	9	197	280	1423	15	43	1050	621
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:	34	15	12	626	9	197	280	1423	15	43	1050	621
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:	34	15	12	626	9	197	280	1423	15	43	1050	621
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	34	15	12	626	9	197	280	1423	15	43	1050	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	15	12	626	9	197	280	1423	15	43	1050	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	0.00
MLF Adj:	1.00	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	34	15	12	689	9	197	280	1423	15	43	1050	0

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Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
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:	1.00	0.56	0.44	1.97	0.03	1.00	1.00	1.98	0.02	1.00	2.00	1.00
Final Sat.:	1375	764	611	2715	35	1375	1375	2721	29	1375	2750	1375

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Capacity Analysis Module:

Vol/Sat:	0.02	0.02	0.02	0.25	0.25	0.14	0.20	0.52	0.52	0.03	0.38	0.00
Crit Volume:	34			349			280			525		
Crit Moves:	****			****			****			****		

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report  
 2000 HCM Operations Method (Future Volume Alternative)

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Intersection #3 Rocklin Road/I-80 Westbound Ramp

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.973  
 Loss Time (sec): 6 Average Delay (sec/veh): 35.9  
 Optimal Cycle: 169 Level Of Service: D

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	0	0	0	1	0	0	0	0	2	1	0	2

Volume Module:

Base Vol:	0	0	0	97	0	310	0	1410	669	557	1453	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	97	0	310	0	1410	669	557	1453	0
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	0	0	97	0	310	0	1410	669	557	1453	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:	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 Volume:	0	0	0	97	0	310	0	1410	669	557	1453	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	97	0	310	0	1410	669	557	1453	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:	0	0	0	97	0	310	0	1410	669	557	1453	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	0.95	1.00	0.85	1.00	0.95	0.85	0.95	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	1805	0	1615	0	3610	1615	1805	3610	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.19	0.00	0.39	0.41	0.31	0.40	0.00
Crit Moves:						****			****	****		
Green/Cycle:	0.00	0.00	0.00	0.20	0.00	0.20	0.00	0.43	0.43	0.32	0.74	0.00
Volume/Cap:	0.00	0.00	0.00	0.27	0.00	0.97	0.00	0.92	0.97	0.97	0.54	0.00
Delay/Veh:	0.0	0.0	0.0	34.5	0.0	82.9	0.0	36.1	55.8	64.5	5.8	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	34.5	0.0	82.9	0.0	36.1	55.8	64.5	5.8	0.0
LOS by Move:	A	A	A	C	A	F	A	D	E	E	A	A
HCM2kAvgQ:	0	0	0	3	0	14	0	21	21	16	9	0

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

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Intersection #4 Rocklin Road/I-80 Eastbound Ramp

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.089  
 Loss Time (sec): 6 Average Delay (sec/veh): 53.0  
 Optimal Cycle: 180 Level Of Service: D

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	1! 0 1	0	0	0 0 0	1	0	2 0 0	0	0	1 1 0

Volume Module:

Base Vol:	484	2	551	0	0	0	445	1137	0	0	1498	133
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:	484	2	551	0	0	0	445	1137	0	0	1498	133
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:	484	2	551	0	0	0	445	1137	0	0	1498	133
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	484	2	551	0	0	0	445	1137	0	0	1498	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	484	2	551	0	0	0	445	1137	0	0	1498	133
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:	484	2	551	0	0	0	445	1137	0	0	1498	133

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.94	0.94
Lanes:	1.46	0.01	1.53	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.84	0.16
Final Sat.:	2383	6	2488	0	0	0	1805	3610	0	0	3276	291

Capacity Analysis Module:

Vol/Sat:	0.20	0.32	0.22	0.00	0.00	0.00	0.25	0.31	0.00	0.00	0.46	0.46
Crit Moves:	****						****			****		
Green/Cycle:	0.29	0.29	0.29	0.00	0.00	0.00	0.23	0.65	0.00	0.00	0.42	0.42
Volume/Cap:	0.69	1.09	0.75	0.00	0.00	0.00	1.09	0.49	0.00	0.00	1.09	1.09
Delay/Veh:	32.7	91.7	34.5	0.0	0.0	0.0	109.3	9.3	0.0	0.0	80.4	80.4
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:	32.7	91.7	34.5	0.0	0.0	0.0	109.3	9.3	0.0	0.0	80.4	80.4
LOS by Move:	C	F	C	A	A	A	F	A	A	A	F	F
HCM2kAvgQ:	10	26	12	0	0	0	18	9	0	0	39	39

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report

Circular 212 Planning Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #5 Dominguez Road/Pacific Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.872  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 134 Level Of Service: D

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	1	1	0	1	1	0	0	1	0	0

Volume Module:

Base Vol:	69	175	87	191	111	314	171	800	32	20	607	81
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:	69	175	87	191	111	314	171	800	32	20	607	81
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:	69	175	87	191	111	314	171	800	32	20	607	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:	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 Volume:	69	175	87	191	111	314	171	800	32	20	607	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	175	87	191	111	314	171	800	32	20	607	81
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:	69	175	87	191	111	314	171	800	32	20	607	81

Saturation Flow Module:

Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
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:	1.00	1.34	0.66	1.00	1.00	1.00	1.00	0.96	0.04	1.00	0.88	0.12
Final Sat.:	1425	1904	946	1425	1425	1425	1425	1370	55	1425	1257	168

Capacity Analysis Module:

Vol/Sat:	0.05	0.09	0.09	0.13	0.08	0.22	0.12	0.58	0.58	0.01	0.48	0.48
Crit Volume:	69			314			171			688		
Crit Moves:	****			****			****			****		

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Rocklin Crossings  
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #6 Dominguez Road/Granite Drive

\*\*\*\*\*

Average Delay (sec/veh): 6.1 Worst Case Level Of Service: C [ 16.8]

\*\*\*\*\*

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					
Rights:	Include			Include			Include			Include					
Lanes:	1	0	2	0	0	1	1	1	0	1	0	0	1	0	0

Volume Module:

Base Vol:	55	292	0	0	165	105	247	0	60	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:	55	292	0	0	165	105	247	0	60	0	0	0
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:	55	292	0	0	165	105	247	0	60	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:	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 Volume:	55	292	0	0	165	105	247	0	60	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	55	292	0	0	165	105	247	0	60	0	0	0

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	270	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	474	620	135	xxxx	xxxx	xxxxxx
Potent Cap.:	1305	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	525	407	895	xxxx	xxxx	xxxxxx
Move Cap.:	1305	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	508	390	895	xxxx	xxxx	xxxxxx
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.49	0.00	0.07	xxxx	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	0.1	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	2.6	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	7.9	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	18.6	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	C	*	*	*	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	895	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	0.2	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	9.3	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	A	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			16.8			xxxxxxx		
ApproachLOS:	*			*			C			*		

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

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Intersection #7 Sierra College Boulevard/Taylor Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.824  
 Loss Time (sec): 8 Average Delay (sec/veh): 37.6  
 Optimal Cycle: 71 Level Of Service: D

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	2	0	1	1	1	0	1	0	1	1

Volume Module:

Base Vol:	198	1284	322	34	953	191	333	398	348	303	298	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:	198	1284	322	34	953	191	333	398	348	303	298	57
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:	198	1284	322	34	953	191	333	398	348	303	298	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:	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 Volume:	198	1284	322	34	953	191	333	398	348	303	298	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	198	1284	322	34	953	191	333	398	348	303	298	57
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:	198	1284	322	34	953	191	333	398	348	303	298	57

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	1900	1615	1805	1900	1615

Capacity Analysis Module:

Vol/Sat:	0.11	0.36	0.20	0.02	0.26	0.12	0.18	0.21	0.22	0.17	0.16	0.04
Crit Moves:	****			****			****			****		
Green/Cycle:	0.13	0.43	0.43	0.02	0.32	0.32	0.25	0.26	0.26	0.20	0.21	0.21
Volume/Cap:	0.82	0.82	0.46	0.82	0.82	0.37	0.73	0.80	0.82	0.82	0.73	0.17
Delay/Veh:	62.0	28.8	20.7	123.8	36.1	26.6	40.4	43.5	47.1	52.1	43.4	32.3
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:	62.0	28.8	20.7	123.8	36.1	26.6	40.4	43.5	47.1	52.1	43.4	32.3
LOS by Move:	E	C	C	F	D	C	D	D	D	D	D	C
HCM2kAvgQ:	6	18	7	3	16	5	11	14	13	11	10	1

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #8 Sierra College Boulevard/Brace Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.869  
 Loss Time (sec): 8 Average Delay (sec/veh): 28.3  
 Optimal Cycle: 86 Level Of Service: C

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Permitted			Protected			Permitted			Permitted					
Rights:	Include			Include			Include			Include					
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			
Lanes:	0	0	2	1	0	1	0	2	1	0	0	0	0	0	1

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Volume Module:

Base Vol:	0	1503	326	409	1170	0	0	0	73	227	0	340
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	1503	326	409	1170	0	0	0	73	227	0	340
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	1503	326	409	1170	0	0	0	73	227	0	340
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1503	326	409	1170	0	0	0	73	227	0	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1503	326	409	1170	0	0	0	73	227	0	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:	0	1503	326	409	1170	0	0	0	73	227	0	340

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	0.95	0.91	0.91	1.00	1.00	0.87	0.77	1.00	0.85
Lanes:	0.00	2.47	0.53	1.00	3.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	0	4147	900	1805	5187	0	0	0	1644	1461	0	1615

Capacity Analysis Module:

Vol/Sat:	0.00	0.36	0.36	0.23	0.23	0.00	0.00	0.00	0.04	0.16	0.00	0.21
Crit Moves:	****			****								
Green/Cycle:	0.00	0.42	0.42	0.26	0.68	0.00	0.00	0.00	0.24	0.24	0.00	0.24
Volume/Cap:	0.00	0.87	0.87	0.87	0.33	0.00	0.00	0.00	0.18	0.64	0.00	0.87
Delay/Veh:	0.0	30.8	30.8	51.2	6.8	0.0	0.0	0.0	30.3	37.9	0.0	54.7
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:	0.0	30.8	30.8	51.2	6.8	0.0	0.0	0.0	30.3	37.9	0.0	54.7
LOS by Move:	A	C	C	D	A	A	A	A	C	D	A	D
HCM2kAvgQ:	0	19	19	12	5	0	0	0	2	7	0	13

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

\*\*\*\*\*

Rocklin Crossings  
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report  
Circular 212 Planning Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #9 Sierra College Boulevard/Granite Drive

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.784  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 80 Level Of Service: C

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	2	1	0	2	1	0	2	1	0	2

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Volume Module:

Base Vol:	206	1397	77	56	1316	129	222	26	462	136	14	23
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:	206	1397	77	56	1316	129	222	26	462	136	14	23
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:	206	1397	77	56	1316	129	222	26	462	136	14	23
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	206	1397	77	56	1316	129	222	26	462	136	14	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	206	1397	77	56	1316	129	222	26	462	136	14	23
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	1.10	1.00	1.00	1.00
FinalVolume:	206	1397	77	56	1316	129	222	26	508	136	14	23

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Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
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:	1.00	2.84	0.16	1.00	2.73	0.27	1.00	1.00	2.00	1.00	1.00	1.00
Final Sat.:	1375	3910	215	1375	3757	368	1375	1375	2750	1375	1375	1375

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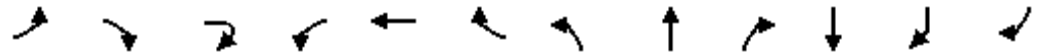
Capacity Analysis Module:

Vol/Sat:	0.15	0.36	0.36	0.04	0.35	0.35	0.16	0.02	0.18	0.10	0.01	0.02
Crit Volume:	206			482			254			136		
Crit Moves:	****			****			****			****		

\*\*\*\*\*

HCM Signalized Intersection Capacity Analysis  
 10: I-80 WB & Sierra College Blvd.

10/11/2010



Movement	EBL	EBR	EBR2	WBL2	WBT	WBR	NBL	NBT	NBR	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	120	270	97	636	13	223	193	1372	242	780	1052	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		0.97	0.95	0.95	1.00	0.91	1.00	0.95	1.00	1.00
Frt	1.00	0.85		1.00	0.87	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583		3433	1533	1504	1770	5085	1583	3539	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583		3433	1533	1504	1770	5085	1583	3539	1863	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	120	270	97	636	13	223	193	1372	242	780	1052	85
RTOR Reduction (vph)	0	12	0	0	87	24	0	0	0	0	0	13
Lane Group Flow (vph)	120	355	0	636	33	92	193	1372	242	780	1052	72
Turn Type	Prot	custom		Prot	custom		Prot		Free		Prot	Perm
Protected Phases	7	4		3	8	8	5	2		6	6	
Permitted Phases		5 7				2			Free			6
Actuated Green, G (s)	12.6	35.8		19.0	15.6	95.4	10.0	79.8	120.0	65.8	65.8	65.8
Effective Green, g (s)	12.6	35.8		19.0	15.6	95.4	10.0	79.8	120.0	65.8	65.8	65.8
Actuated g/C Ratio	0.10	0.30		0.16	0.13	0.80	0.08	0.66	1.00	0.55	0.55	0.55
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	186	472		544	199	1246	148	3382	1583	1941	1022	868
v/s Ratio Prot	0.07	c0.06		c0.19	0.02	0.01	c0.11	0.27		0.22	c0.56	
v/s Ratio Perm		0.17				0.05			0.15			0.05
v/c Ratio	0.65	0.75		1.17	0.17	0.07	1.30	0.41	0.15	0.40	1.03	0.08
Uniform Delay, d1	51.6	38.1		50.5	46.4	2.7	55.0	9.2	0.0	15.7	27.1	12.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.67	0.49	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.5	6.7		94.5	0.4	0.0	169.6	0.3	0.2	0.6	35.9	0.2
Delay (s)	59.0	44.8		145.0	46.8	2.7	206.5	4.8	0.2	16.3	63.0	13.0
Level of Service	E	D		F	D	A	F	A	A	B	E	B
Approach Delay (s)					112.6			25.7		41.8		
Approach LOS					F			C		D		

Intersection Summary































HCM Average Control Delay	48.8	HCM Level of Service	D
HCM Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



# HCM Signalized Intersection Capacity Analysis

## 11: I-80 EB & Rocklin Crossings

10/11/2010

												
Movement	EBL2	EBT	EBR	WBL	WBR	WBR2	NBT	NBR	NBR2	SBL	SBT	SBR
Lane Configurations	 	 					  			 	 	
Volume (vph)	621	135	28	133	542	111	644	1062	110	365	1220	198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.85	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	1583	1583	5085	1863	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.67	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1241	1583	1583	5085	1863	1583	3433	3539	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	621	135	28	133	542	111	644	1062	110	365	1220	198
RTOR Reduction (vph)	0	0	19	0	0	0	0	0	34	0	0	0
Lane Group Flow (vph)	621	135	9	133	542	111	644	1062	76	365	1220	198
Turn Type	Split		Perm	custom	custom	Free		Prot	Perm	Prot		Free
Protected Phases	4	4					2	2		1	6	
Permitted Phases			4	7	7	Free			2			Free
Actuated Green, G (s)	37.0	37.0	37.0	37.0	37.0	120.0	60.0	60.0	60.0	11.0	75.0	120.0
Effective Green, g (s)	37.0	37.0	37.0	37.0	37.0	120.0	60.0	60.0	60.0	11.0	75.0	120.0
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.31	1.00	0.50	0.50	0.50	0.09	0.62	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1059	1091	488	383	488	1583	2543	932	792	315	2212	1583
v/s Ratio Prot	0.18	0.04					0.13	c0.57		c0.11	0.34	
v/s Ratio Perm			0.01	0.11	c0.34	0.07			0.05			0.13
v/c Ratio	0.59	0.12	0.02	0.35	1.11	0.07	0.25	1.14	0.10	1.16	0.55	0.13
Uniform Delay, d1	35.0	29.8	28.9	32.1	41.5	0.0	17.2	30.0	15.8	54.5	12.9	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.73	0.80	0.58	0.78	0.82	1.00
Incremental Delay, d2	0.8	0.1	0.0	0.5	74.5	0.1	0.2	75.2	0.2	94.0	0.7	0.1
Delay (s)	35.9	29.9	28.9	32.7	116.0	0.1	12.7	99.2	9.4	136.6	11.2	0.1
Level of Service	D	C	C	C	F	A	B	F	A	F	B	A
Approach Delay (s)		34.6					63.1				35.6	
Approach LOS		C					E				D	
<b>Intersection Summary</b>												
HCM Average Control Delay			52.7				HCM Level of Service			D		
HCM Volume to Capacity ratio			1.13									
Actuated Cycle Length (s)			120.0				Sum of lost time (s)		12.0			
Intersection Capacity Utilization			106.0%				ICU Level of Service		G			
Analysis Period (min)			15									
c Critical Lane Group												

Rocklin Crossings

2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report

Circular 212 Planning Method (Future Volume Alternative)

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Intersection #12 Sierra College Boulevard/Dominguez Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.501  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 34 Level Of Service: A

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Protected			Protected			Protected			Protected										
Rights:	Include			Include			Include			Include										
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								
Lanes:	0	0	2	1	0	1	0	3	0	0	0	0	0	0	0	2	0	0	0	2

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Volume Module:

Base Vol:	0	1595	62	90	1272	0	0	0	0	130	0	28
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	1595	62	90	1272	0	0	0	0	130	0	28
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	1595	62	90	1272	0	0	0	0	130	0	28
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1595	62	90	1272	0	0	0	0	130	0	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1595	62	90	1272	0	0	0	0	130	0	28
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	1.10	1.00	1.10
FinalVolume:	0	1595	62	90	1272	0	0	0	0	143	0	31

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Saturation Flow Module:

Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
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:	0.00	2.89	0.11	1.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	4115	160	1425	4275	0	0	0	0	2850	0	2850

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Capacity Analysis Module:

Vol/Sat:	0.00	0.39	0.39	0.06	0.30	0.00	0.00	0.00	0.00	0.05	0.00	0.01
Crit Volume:			552		90			0			72	
Crit Moves:			****		****						****	

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Rocklin Crossings  
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report  
Circular 212 Planning Method (Future Volume Alternative)

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Intersection #13 Sierra College Boulevard/Rocklin Road

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Cycle (sec):	100	Critical Vol./Cap.(X):	1.248
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R				
Control:	Protected			Protected			Protected			Protected						
Rights:	Include			Include			Include			Include						
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				
Lanes:	1	0	2	0	1	1	0	3	0	1	1	0	2	0	1	0

Volume Module:

Base Vol:	578	1214	255	148	1031	77	168	462	686	108	204	52
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:	578	1214	255	148	1031	77	168	462	686	108	204	52
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:	578	1214	255	148	1031	77	168	462	686	108	204	52
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	578	1214	255	148	1031	77	168	462	686	108	204	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	578	1214	255	148	1031	77	168	462	686	108	204	52
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:	578	1214	255	148	1031	77	168	462	686	108	204	52

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
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:	1.00	2.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	0.80	0.20
Final Sat.:	1375	2750	1375	1375	4125	1375	1375	2750	1375	1375	1096	279

Capacity Analysis Module:

Vol/Sat:	0.42	0.44	0.19	0.11	0.25	0.06	0.12	0.17	0.50	0.08	0.19	0.19		
Crit Volume:	578						344						686	108
Crit Moves:	****						****			****			****	

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report  
 2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #14 Taylor Road/Horseshoe Bar Road

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Cycle (sec): 100 Critical Vol./Cap.(X): 1.062  
 Loss Time (sec): 8 Average Delay (sec/veh): 57.3  
 Optimal Cycle: 180 Level Of Service: E

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
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
Lanes:	1	0	0	1	0	0	0	0	1	0	0	1

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Volume Module:

Base Vol:	10	544	165	459	432	6	7	18	10	124	9	505
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:	10	544	165	459	432	6	7	18	10	124	9	505
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:	10	544	165	459	432	6	7	18	10	124	9	505
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	544	165	459	432	6	7	18	10	124	9	505
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	544	165	459	432	6	7	18	10	124	9	505
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:	10	544	165	459	432	6	7	18	10	124	9	505

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.97	0.97	0.95	1.00	1.00	0.95	0.95	0.95	0.95	0.85	0.85
Lanes:	1.00	0.77	0.23	1.00	0.99	0.01	0.20	0.51	0.29	1.00	0.02	0.98
Final Sat.:	1805	1407	427	1805	1870	26	362	930	516	1805	28	1592

Capacity Analysis Module:

Vol/Sat:	0.01	0.39	0.39	0.25	0.23	0.23	0.02	0.02	0.02	0.07	0.32	0.32
Crit Moves:	****			****			****			****		
Green/Cycle:	0.01	0.36	0.36	0.24	0.59	0.59	0.02	0.02	0.02	0.30	0.30	0.54
Volume/Cap:	0.39	1.06	1.06	1.06	0.39	0.39	1.06	1.06	1.06	0.23	1.06	0.59
Delay/Veh:	58.5	84.4	84.4	98.9	11.2	11.2	225.4	225	225.4	26.6	93.6	16.7
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:	58.5	84.4	84.4	98.9	11.2	11.2	225.4	225	225.4	26.6	93.6	16.7
LOS by Move:	E	F	F	F	B	B	F	F	F	C	F	B
HCM2kAvgQ:	1	32	32	22	7	7	3	3	3	3	24	11

\*\*\*\*\*

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #15 Horseshoe Bar Road/I-80 Westbound Ramp

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.384  
 Loss Time (sec): 8 Average Delay (sec/veh): 20.1  
 Optimal Cycle: 27 Level Of Service: C

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
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
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	184	621	164	29	278	469	60	49	138	126	61	39
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:	184	621	164	29	278	469	60	49	138	126	61	39
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:	184	621	164	29	278	469	60	49	138	126	61	39
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	184	621	164	29	278	0	60	49	138	126	61	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	621	164	29	278	0	60	49	138	126	61	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	621	164	29	278	0	60	49	138	126	61	39

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.92	0.92	0.95	1.00	1.00	0.81	0.81	0.85	0.63	0.94	0.94
Lanes:	1.00	1.58	0.42	1.00	1.00	1.00	0.55	0.45	1.00	1.00	0.61	0.39
Final Sat.:	1805	2767	731	1805	1900	1900	844	689	1615	1203	1092	698

Capacity Analysis Module:

Vol/Sat:	0.10	0.22	0.22	0.02	0.15	0.00	0.07	0.07	0.09	0.10	0.06	0.06
Crit Moves:	****			****						****		
Green/Cycle:	0.27	0.60	0.60	0.04	0.38	0.00	0.27	0.27	0.27	0.27	0.27	0.27
Volume/Cap:	0.38	0.37	0.37	0.37	0.38	0.00	0.26	0.26	0.31	0.38	0.20	0.20
Delay/Veh:	30.5	10.2	10.2	49.5	22.8	0.0	28.8	28.8	29.3	30.3	28.2	28.2
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:	30.5	10.2	10.2	49.5	22.8	0.0	28.8	28.8	29.3	30.3	28.2	28.2
LOS by Move:	C	B	B	D	C	A	C	C	C	C	C	C
HCM2kAvgQ:	5	6	6	1	6	0	3	3	3	3	2	2

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #16 Horseshoe Bar Road/I-80 Eastbound Ramp

\*\*\*\*\*

Average Delay (sec/veh): 49.7 Worst Case Level Of Service: F[141.9]

\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control, Rights, and Lanes.

Volume Module: Table with 13 columns for various volume metrics like Base Vol, Growth Adj, Initial Bse, etc.

Critical Gap Module: Table with 13 columns for gap metrics like Critical Gp, FollowUpTim.

Capacity Module: Table with 13 columns for capacity metrics like Cnflct Vol, Potent Cap., Move Cap., etc.

Level Of Service Module: Table with 13 columns for LOS metrics like 2Way95thQ, Control Del, LOS by Move, etc.

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #17 Barton Road/Brace Road

\*\*\*\*\*

Average Delay (sec/veh): 3.9 Worst Case Level Of Service: C [ 18.3]

\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign, Uncontrolled), Rights (Include), and Lanes (0 0 1! 0 0).

Volume Module: Table with 13 columns for volume components (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume) and 4 columns for directions (North, South, East, West).

Critical Gap Module: Table with 13 columns for gap components (Critical Gp, FollowUpTim) and 4 columns for directions (North, South, East, West).

Capacity Module: Table with 13 columns for capacity components (Cnflct Vol, Potent Cap., Move Cap., Volume/Cap) and 4 columns for directions (North, South, East, West).

Level Of Service Module: Table with 13 columns for LOS components (2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS) and 4 columns for directions (North, South, East, West).

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings  
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #18 Barton Road/Rocklin Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.656  
 Loss Time (sec): 0 Average Delay (sec/veh): 16.5  
 Optimal Cycle: 0 Level Of Service: C

\*\*\*\*\*

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		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	0	0	1	0	0	0	0	1

Volume Module:

Base Vol:	227	109	0	0	68	118	356	0	439	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:	227	109	0	0	68	118	356	0	439	0	0	0
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:	227	109	0	0	68	118	356	0	439	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:	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 Volume:	227	109	0	0	68	118	356	0	439	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	227	109	0	0	68	118	356	0	439	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:	227	109	0	0	68	118	356	0	439	0	0	0

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:	1.00	1.00	0.00	0.00	0.37	0.63	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	487	520	0	0	208	362	548	0	669	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.47	0.21	xxxx	xxxx	0.33	0.33	0.65	xxxx	0.66	xxxx	xxxx	xxxx
Crit Moves:	****			****			****			****		
Delay/Veh:	15.7	11.1	0.0	0.0	11.9	11.9	20.1	0.0	17.2	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
AdjDel/Veh:	15.7	11.1	0.0	0.0	11.9	11.9	20.1	0.0	17.2	0.0	0.0	0.0
LOS by Move:	C	B	*	*	B	B	C	*	C	*	*	*
ApproachDel:	14.2			11.9			18.5			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxxx		
ApprAdjDel:	14.2			11.9			18.5			xxxxxx		
LOS by Appr:	B			B			C			*		
AllWayAvgQ:	0.8	0.2	0.0	0.4	0.4	0.4	1.7	0.0	1.7	0.0	0.0	0.0

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #19 Sierra College Boulevard/King Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.695  
 Loss Time (sec): 9 Average Delay (sec/veh): 19.9  
 Optimal Cycle: 51 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	1	1	0	1	0	0	1	0	0	1

Volume Module:

Base Vol:	4	1282	27	281	783	22	51	65	44	21	9	116
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:	4	1282	27	281	783	22	51	65	44	21	9	116
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:	4	1282	27	281	783	22	51	65	44	21	9	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	1282	27	281	783	22	51	65	44	21	9	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	1282	27	281	783	22	51	65	44	21	9	116
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:	4	1282	27	281	783	22	51	65	44	21	9	116

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.95	0.75	0.75	0.75	0.84	0.84	0.84
Lanes:	1.00	1.96	0.04	1.00	1.95	0.05	0.32	0.41	0.27	0.14	0.06	0.80
Final Sat.:	1805	3525	74	1805	3497	98	452	576	390	229	98	1263

Capacity Analysis Module:

Vol/Sat:	0.00	0.36	0.36	0.16	0.22	0.22	0.11	0.11	0.11	0.09	0.09	0.09
Crit Moves:	****			****			****			****		
Green/Cycle:	0.01	0.52	0.52	0.22	0.74	0.74	0.16	0.16	0.16	0.16	0.16	0.16
Volume/Cap:	0.30	0.69	0.69	0.69	0.30	0.30	0.69	0.69	0.69	0.57	0.57	0.57
Delay/Veh:	61.9	19.0	19.0	40.8	4.4	4.4	48.4	48.4	48.4	41.5	41.5	41.5
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:	61.9	19.0	19.0	40.8	4.4	4.4	48.4	48.4	48.4	41.5	41.5	41.5
LOS by Move:	E	B	B	D	A	A	D	D	D	D	D	D
HCM2kAvgQ:	0	16	16	9	4	4	6	6	6	5	5	5

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

\*\*\*\*\*

Rocklin Crossings
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #20 Sierra College Boulevard/English Colony Way

\*\*\*\*\*

Average Delay (sec/veh): 11.8 Worst Case Level Of Service: F[105.3]

\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Uncontrolled/Stop Sign), Rights (Include), and Lanes (0 0 1 1 0).

Volume Module table with 12 columns and 12 rows including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume.

Critical Gap Module table with 12 columns and 2 rows including Critical Gp and FollowUpTim.

Capacity Module table with 12 columns and 4 rows including Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module table with 12 columns and 10 rows including 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings

2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report  
 2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #21 Taylor Road/King Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.590  
 Loss Time (sec): 9 Average Delay (sec/veh): 31.3  
 Optimal Cycle: 40 Level Of Service: C

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

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Volume Module:

Base Vol:	204	433	311	108	279	62	114	215	303	126	107	68
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:	204	433	311	108	279	62	114	215	303	126	107	68
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:	204	433	311	108	279	62	114	215	303	126	107	68
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	204	433	311	108	279	62	114	215	303	126	107	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	433	311	108	279	62	114	215	303	126	107	68
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:	204	433	311	108	279	62	114	215	303	126	107	68

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Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.89	0.89	0.95	0.92	0.92	0.95	1.00	0.85	0.95	0.94	0.94
Lanes:	1.00	1.16	0.84	1.00	1.64	0.36	1.00	1.00	1.00	1.00	0.61	0.39
Final Sat.:	1805	1969	1414	1805	2874	639	1805	1900	1615	1805	1094	695

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Capacity Analysis Module:

Vol/Sat:	0.11	0.22	0.22	0.06	0.10	0.10	0.06	0.11	0.19	0.07	0.10	0.10
Crit Moves:	****			****			****			****		
Green/Cycle:	0.25	0.37	0.37	0.10	0.22	0.22	0.17	0.32	0.32	0.12	0.26	0.26
Volume/Cap:	0.44	0.59	0.59	0.59	0.44	0.44	0.37	0.36	0.59	0.59	0.37	0.37
Delay/Veh:	32.0	26.0	26.0	48.0	34.2	34.2	37.4	26.6	30.5	46.1	30.4	30.4
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:	32.0	26.0	26.0	48.0	34.2	34.2	37.4	26.6	30.5	46.1	30.4	30.4
LOS by Move:	C	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	6	10	10	4	5	5	3	5	8	5	5	5

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report

Circular 212 Planning Method (Future Volume Alternative)

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Intersection #1 Rocklin Road/Pacific Street

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.942  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: E

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	2	0	1	1	1	0	1	1	0	1

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Volume Module:

Base Vol:	30	397	564	189	565	63	20	155	60	531	170	138
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:	30	397	564	189	565	63	20	155	60	531	170	138
Added Vol:	0	0	31	0	0	0	0	10	0	30	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	397	595	189	565	63	20	165	60	561	180	138
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	397	595	189	565	63	20	165	60	561	180	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	397	595	189	565	63	20	165	60	561	180	138
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	1.10	1.00	1.00
FinalVolume:	30	397	595	189	565	63	20	165	60	617	180	138

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Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
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:	1.00	2.00	1.00	1.00	1.80	0.20	1.00	1.47	0.53	1.55	0.45	1.00
Final Sat.:	1375	2750	1375	1375	2474	276	1375	2017	733	2129	621	1375

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Capacity Analysis Module:

Vol/Sat:	0.02	0.14	0.43	0.14	0.23	0.23	0.01	0.08	0.08	0.29	0.29	0.10
Crit Volume:	595			189			113			399		
Crit Moves:	****			****			****			****		

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report

Circular 212 Planning Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 Rocklin Road/Granite Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.678  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 53 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
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
Lanes:	1	0	0	1	0	0	1	0	0	1	0	0

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Volume Module:

Base Vol:	35	15	32	546	31	205	259	919	16	27	559	526
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:	35	15	32	546	31	205	259	919	16	27	559	526
Added Vol:	0	0	0	0	0	0	0	63	0	0	61	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	15	32	546	31	205	259	982	16	27	620	526
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	35	15	32	546	31	205	259	982	16	27	620	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	15	32	546	31	205	259	982	16	27	620	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	0.00
MLF Adj:	1.00	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	35	15	32	601	31	205	259	982	16	27	620	0

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Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
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:	1.00	0.32	0.68	1.90	0.10	1.00	1.00	1.97	0.03	1.00	2.00	1.00
Final Sat.:	1375	439	936	2615	135	1375	1375	2706	44	1375	2750	1375

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Capacity Analysis Module:

Vol/Sat:	0.03	0.03	0.03	0.23	0.23	0.15	0.19	0.36	0.36	0.02	0.23	0.00
Crit Volume:			47	316			259			310		
Crit Moves:			****	****			****			****		

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #3 Rocklin Road/I-80 Westbound Ramp

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.775  
 Loss Time (sec): 6 Average Delay (sec/veh): 26.9  
 Optimal Cycle: 53 Level Of Service: C

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	0	0	0	1	0	0	0	0	2	1	0	2

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Volume Module:

Base Vol:	0	0	0	40	8	170	0	1083	406	477	473	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	40	8	170	0	1083	406	477	473	0
Added Vol:	0	0	0	20	0	61	0	63	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	60	8	231	0	1146	406	477	473	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:	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 Volume:	0	0	0	60	8	231	0	1146	406	477	473	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	60	8	231	0	1146	406	477	473	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:	0	0	0	60	8	231	0	1146	406	477	473	0

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Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.85	0.86	0.86	1.00	0.95	0.85	0.95	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	0.03	0.97	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	1615	54	1570	0	3610	1615	1805	3610	0

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Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.04	0.15	0.15	0.00	0.32	0.25	0.26	0.13	0.00
Crit Moves:						****		****		****		
Green/Cycle:	0.00	0.00	0.00	0.19	0.19	0.19	0.00	0.41	0.41	0.34	0.75	0.00
Volume/Cap:	0.00	0.00	0.00	0.20	0.78	0.78	0.00	0.78	0.61	0.78	0.17	0.00
Delay/Veh:	0.0	0.0	0.0	34.4	50.2	50.2	0.0	28.2	25.0	35.7	3.6	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	34.4	50.2	50.2	0.0	28.2	25.0	35.7	3.6	0.0
LOS by Move:	A	A	A	C	D	D	A	C	C	D	A	A
HCM2kAvgQ:	0	0	0	2	9	9	0	16	10	13	2	0

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

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Intersection #4 Rocklin Road/I-80 Eastbound Ramp

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.766  
 Loss Time (sec): 6 Average Delay (sec/veh): 22.4  
 Optimal Cycle: 51 Level Of Service: C

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	1! 0 1	0	0	0 0 0	1	0	2 0 0	0	0	1 1 0

Volume Module:

Base Vol:	309	2	364	0	0	0	287	1464	0	0	1048	65
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:	309	2	364	0	0	0	287	1464	0	0	1048	65
Added Vol:	0	0	0	0	0	0	63	20	0	0	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	309	2	364	0	0	0	350	1484	0	0	1048	86
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	309	2	364	0	0	0	350	1484	0	0	1048	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	309	2	364	0	0	0	350	1484	0	0	1048	86
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:	309	2	364	0	0	0	350	1484	0	0	1048	86

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.94	0.94
Lanes:	1.45	0.01	1.54	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.85	0.15
Final Sat.:	2368	10	2500	0	0	0	1805	3610	0	0	3300	271

Capacity Analysis Module:

Vol/Sat:	0.13	0.21	0.15	0.00	0.00	0.00	0.19	0.41	0.00	0.00	0.32	0.32
Crit Moves:	****						****			****		
Green/Cycle:	0.27	0.27	0.27	0.00	0.00	0.00	0.25	0.67	0.00	0.00	0.41	0.41
Volume/Cap:	0.48	0.77	0.54	0.00	0.00	0.00	0.77	0.62	0.00	0.00	0.77	0.77
Delay/Veh:	30.7	37.5	31.5	0.0	0.0	0.0	42.2	9.8	0.0	0.0	27.5	27.5
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:	30.7	37.5	31.5	0.0	0.0	0.0	42.2	9.8	0.0	0.0	27.5	27.5
LOS by Move:	C	D	C	A	A	A	D	A	A	A	C	C
HCM2kAvgQ:	6	11	7	0	0	0	10	13	0	0	17	17

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report

Circular 212 Planning Method (Future Volume Alternative)

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Intersection #5 Dominguez Road/Pacific Street

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.619  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 45 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	1	1	0	1	1	0	0	1	0	0

Volume Module:

Base Vol:	46	120	103	29	10	82	105	601	37	47	525	72
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:	46	120	103	29	10	82	105	601	37	47	525	72
Added Vol:	0	0	0	10	0	0	0	21	0	0	20	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	120	103	39	10	82	105	622	37	47	545	82
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	46	120	103	39	10	82	105	622	37	47	545	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	120	103	39	10	82	105	622	37	47	545	82
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:	46	120	103	39	10	82	105	622	37	47	545	82

Saturation Flow Module:

Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
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:	1.00	1.08	0.92	1.00	1.00	1.00	1.00	0.94	0.06	1.00	0.87	0.13
Final Sat.:	1425	1534	1316	1425	1425	1425	1425	1345	80	1425	1239	186

Capacity Analysis Module:

Vol/Sat:	0.03	0.08	0.08	0.03	0.01	0.06	0.07	0.46	0.46	0.03	0.44	0.44
Crit Volume:	112			39			105			627		
Crit Moves:	****			****			****			****		

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Rocklin Crossings
2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #6 Dominguez Road/Granite Drive

\*\*\*\*\*

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: B[ 11.0]

\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Uncontrolled/Stop Sign), Rights (Include), and Lanes (1 0 2 0 0).

Volume Module table with 13 columns and 11 rows including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume.

Critical Gap Module table with 13 columns and 2 rows including Critical Gp and FollowUpTim.

Capacity Module table with 13 columns and 4 rows including Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module table with 13 columns and 10 rows including 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

\*\*\*\*\*

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #7 Sierra College Boulevard/Taylor Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.871
Loss Time (sec): 8 Average Delay (sec/veh): 37.7
Optimal Cycle: 87 Level Of Service: D

\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 rows: Movement (L, T, R), Control (Protected), Rights (Include), Min. Green, Y+R, Lanes.

Volume Module:

Table with 13 columns representing different volume metrics and 13 rows of data including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module:

Table with 13 columns representing saturation flow metrics and 4 rows of data including Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 13 columns representing capacity analysis metrics and 10 rows of data including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #8 Sierra College Boulevard/Brace Road

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.714  
 Loss Time (sec): 8 Average Delay (sec/veh): 22.1  
 Optimal Cycle: 50 Level Of Service: C

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Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Permitted			Protected			Permitted			Permitted					
Rights:	Include			Include			Include			Include					
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			
Lanes:	0	0	2	1	0	1	0	2	1	0	0	0	0	1	0

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Volume Module:

Base Vol:	0	1067	237	291	1057	1	0	1	36	260	0	255
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	1067	237	291	1057	1	0	1	36	260	0	255
Added Vol:	0	200	17	0	206	0	0	0	0	17	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1267	254	291	1263	1	0	1	36	277	0	255
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1267	254	291	1263	1	0	1	36	277	0	255
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1267	254	291	1263	1	0	1	36	277	0	255
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	1267	254	291	1263	1	0	1	36	277	0	255

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	0.95	0.91	0.91	1.00	0.87	0.87	0.75	1.00	0.85
Lanes:	0.00	2.50	0.50	1.00	2.99	0.01	0.00	0.03	0.97	1.00	0.00	1.00
Final Sat.:	0	4213	845	1805	5183	4	0	45	1606	1419	0	1615

Capacity Analysis Module:

Vol/Sat:	0.00	0.30	0.30	0.16	0.24	0.24	0.00	0.02	0.02	0.20	0.00	0.16
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.42	0.42	0.23	0.65	0.65	0.00	0.27	0.27	0.27	0.00	0.27
Volume/Cap:	0.00	0.71	0.71	0.71	0.37	0.37	0.00	0.08	0.08	0.73	0.00	0.59
Delay/Veh:	0.0	24.8	24.8	41.2	8.1	8.1	0.0	27.5	27.5	40.3	0.0	34.0
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	24.8	24.8	41.2	8.1	8.1	0.0	27.5	27.5	40.3	0.0	34.0
LOS by Move:	A	C	C	D	A	A	A	C	C	D	A	C
HCM2kAvgQ:	0	14	14	8	6	6	0	1	1	9	0	8

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report

Circular 212 Planning Method (Future Volume Alternative)

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Intersection #9 Sierra College Boulevard/Granite Drive

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.673  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 53 Level Of Service: B

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	2	1	0	2	1	0	2	1	0	2

Volume Module:

Base Vol:	220	1008	124	74	921	95	137	37	229	150	26	44
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:	220	1008	124	74	921	95	137	37	229	150	26	44
Added Vol:	10	217	0	0	224	0	0	0	10	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	230	1225	124	74	1145	95	137	37	239	150	26	44
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	230	1225	124	74	1145	95	137	37	239	150	26	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	230	1225	124	74	1145	95	137	37	239	150	26	44
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	1.10	1.00	1.00	1.00
FinalVolume:	230	1225	124	74	1145	95	137	37	263	150	26	44

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
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:	1.00	2.72	0.28	1.00	2.77	0.23	1.00	1.00	2.00	1.00	1.00	1.00
Final Sat.:	1375	3746	379	1375	3809	316	1375	1375	2750	1375	1375	1375

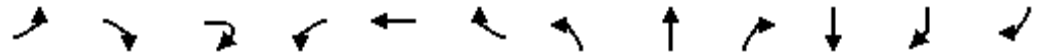
Capacity Analysis Module:

Vol/Sat:	0.17	0.33	0.33	0.05	0.30	0.30	0.10	0.03	0.10	0.11	0.02	0.03
Crit Volume:	230			413			131			150		
Crit Moves:	****			****			****			****		

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HCM Signalized Intersection Capacity Analysis  
 10: I-80 WB & Sierra College Blvd.

10/5/2010



Movement	EBL	EBR	EBR2	WBL2	WBT	WBR	NBL	NBT	NBR	SBT	SBR	SBR2
Lane Configurations	↖	↗		↖↗	↖	↗	↖	↖↗↘	↗	↖↗	↗	↖
Volume (vph)	81	181	65	569	24	149	129	1146	598	348	1114	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		0.97	0.95	0.95	1.00	0.91	1.00	0.95	1.00	1.00
Frt	1.00	0.85		1.00	0.89	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583		3433	1577	1504	1770	5085	1583	3539	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583		3433	1577	1504	1770	5085	1583	3539	1863	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	81	181	65	569	24	149	129	1146	598	348	1114	57
RTOR Reduction (vph)	0	9	0	0	53	13	0	0	0	0	0	7
Lane Group Flow (vph)	81	237	0	569	35	72	129	1146	598	348	1114	50
Turn Type	Prot	custom		Prot	custom		Prot		Free		Prot	Perm
Protected Phases	7	4		3	8	8	5	2		6	6	
Permitted Phases		5 7				2			Free			6
Actuated Green, G (s)	11.0	33.5		23.0	24.5	123.5	10.0	99.0	146.5	85.0	85.0	85.0
Effective Green, g (s)	11.0	33.5		23.0	24.5	123.5	10.0	99.0	146.5	85.0	85.0	85.0
Actuated g/C Ratio	0.08	0.23		0.16	0.17	0.84	0.07	0.68	1.00	0.58	0.58	0.58
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	133	405		539	264	1309	121	3436	1583	2053	1081	918
v/s Ratio Prot	0.05	c0.05		c0.17	0.02	0.01	c0.07	0.23		0.10	c0.60	
v/s Ratio Perm		0.10				0.04			0.38			0.03
v/c Ratio	0.61	0.58		1.06	0.13	0.05	1.07	0.33	0.38	0.17	1.03	0.05
Uniform Delay, d1	65.7	50.3		61.8	51.9	1.9	68.2	9.9	0.0	14.3	30.8	13.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.7	2.2		54.3	0.2	0.0	100.7	0.3	0.7	0.2	35.5	0.1
Delay (s)	73.3	52.5		116.0	52.2	1.9	168.9	10.2	0.7	14.5	66.2	13.4
Level of Service	E	D		F	D	A	F	B	A	B	E	B
Approach Delay (s)					95.4			18.1		52.4		
Approach LOS					F			B		D		
































Intersection Summary

HCM Average Control Delay	45.5	HCM Level of Service	D
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	146.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

# HCM Signalized Intersection Capacity Analysis

## 11: I-80 EB & Rocklin Crossings

10/5/2010

												
Movement	EBL2	EBT	EBR	WBL	WBR	WBR2	NBT	NBR	NBR2	SBL	SBT	SBR
Lane Configurations	 	 			 		  			 	 	
Volume (vph)	455	451	163	82	447	142	971	263	126	293	830	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.85	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	1583	1583	5085	1863	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.41	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	769	1583	1583	5085	1863	1583	3433	3539	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	455	451	163	82	447	142	971	263	126	293	830	40
RTOR Reduction (vph)	0	0	71	0	0	0	0	0	77	0	0	0
Lane Group Flow (vph)	455	451	92	82	447	142	971	263	49	293	830	40
Turn Type	Split		Perm	custom	custom	Free		Prot	Perm	Prot		Free
Protected Phases	4	4					2	2		1	6	
Permitted Phases			4	7	7	Free			2			Free
Actuated Green, G (s)	31.0	31.0	31.0	31.0	31.0	90.0	34.8	34.8	34.8	12.2	51.0	90.0
Effective Green, g (s)	31.0	31.0	31.0	31.0	31.0	90.0	34.8	34.8	34.8	12.2	51.0	90.0
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	1.00	0.39	0.39	0.39	0.14	0.57	1.00
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1182	1219	545	265	545	1583	1966	720	612	465	2005	1583
v/s Ratio Prot	0.13	0.13					c0.19	0.14		c0.09	0.23	
v/s Ratio Perm			0.06	0.11	c0.28	0.09			0.03			0.03
v/c Ratio	0.38	0.37	0.17	0.31	0.82	0.09	0.49	0.37	0.08	0.63	0.41	0.03
Uniform Delay, d1	22.3	22.2	20.5	21.6	27.0	0.0	20.9	19.7	17.5	36.8	11.0	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.72	0.70	0.38	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.2	0.1	0.7	9.6	0.1	0.9	1.4	0.2	2.8	0.6	0.0
Delay (s)	22.5	22.4	20.7	22.3	36.5	0.1	16.0	15.3	6.9	39.5	11.7	0.0
Level of Service	C	C	C	C	D	A	B	B	A	D	B	A
Approach Delay (s)		22.2					15.0				18.3	
Approach LOS		C					B				B	
<b>Intersection Summary</b>												
HCM Average Control Delay			19.6				HCM Level of Service			B		
HCM Volume to Capacity ratio			0.64									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)			12.0		
Intersection Capacity Utilization			69.4%				ICU Level of Service			C		
Analysis Period (min)			15									
c	Critical Lane Group											

Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report

Circular 212 Planning Method (Future Volume Alternative)

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Intersection #12 Sierra College Boulevard/Dominguez Road

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.424  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 30 Level Of Service: A

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Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Protected			Protected			Protected			Protected										
Rights:	Include			Include			Include			Include										
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								
Lanes:	0	0	2	1	0	1	0	3	0	0	0	0	0	0	0	2	0	0	0	2

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Volume Module:

Base Vol:	0	1106	22	19	843	0	0	0	0	45	0	6
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	1106	22	19	843	0	0	0	0	45	0	6
Added Vol:	0	136	31	84	82	0	0	0	0	81	0	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1242	53	103	925	0	0	0	0	126	0	26
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1242	53	103	925	0	0	0	0	126	0	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1242	53	103	925	0	0	0	0	126	0	26
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	1.10	1.00	1.10
FinalVolume:	0	1242	53	103	925	0	0	0	0	139	0	29

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Saturation Flow Module:

Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
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:	0.00	2.88	0.12	1.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	4100	175	1425	4275	0	0	0	0	2850	0	2850

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Capacity Analysis Module:

Vol/Sat:	0.00	0.30	0.30	0.07	0.22	0.00	0.00	0.00	0.00	0.05	0.00	0.01
Crit Volume:		432		103			0			69		
Crit Moves:	****			****						****		

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report

Circular 212 Planning Method (Future Volume Alternative)

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Intersection #13 Sierra College Boulevard/Rocklin Road

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Cycle (sec): 100 Critical Vol./Cap.(X): 1.036  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	2	0	1	1	1	0	2	0	1	0

Volume Module:

Base Vol:	489	820	128	77	778	93	81	315	517	118	278	75
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:	489	820	128	77	778	93	81	315	517	118	278	75
Added Vol:	0	126	0	41	122	0	0	0	0	0	0	42
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	489	946	128	118	900	93	81	315	517	118	278	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:	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 Volume:	489	946	128	118	900	93	81	315	517	118	278	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	489	946	128	118	900	93	81	315	517	118	278	117
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:	489	946	128	118	900	93	81	315	517	118	278	117

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
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:	1.00	2.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	0.70	0.30
Final Sat.:	1375	2750	1375	1375	4125	1375	1375	2750	1375	1375	968	407

Capacity Analysis Module:

Vol/Sat:	0.36	0.34	0.09	0.09	0.22	0.07	0.06	0.11	0.38	0.09	0.29	0.29
Crit Volume:	489				300				517	118		
Crit Moves:	****				****				****	****		

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

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Intersection #14 Taylor Road/Horseshoe Bar Road

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.922  
 Loss Time (sec): 8 Average Delay (sec/veh): 37.4  
 Optimal Cycle: 113 Level Of Service: D

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
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
Lanes:	1	0	0	1	0	0	0	0	1	0	0	1

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Volume Module:

Base Vol:	18	450	222	377	402	21	11	12	20	150	12	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:	18	450	222	377	402	21	11	12	20	150	12	365
Added Vol:	0	20	0	0	21	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	470	222	377	423	21	11	12	20	150	12	365
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	470	222	377	423	21	11	12	20	150	12	365
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	470	222	377	423	21	11	12	20	150	12	365
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:	18	470	222	377	423	21	11	12	20	150	12	365

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.99	0.99	0.92	0.92	0.92	0.95	0.86	0.86
Lanes:	1.00	0.68	0.32	1.00	0.95	0.05	0.26	0.28	0.46	1.00	0.03	0.97
Final Sat.:	1805	1229	580	1805	1797	89	450	490	817	1805	52	1573

Capacity Analysis Module:

Vol/Sat:	0.01	0.38	0.38	0.21	0.24	0.24	0.02	0.02	0.02	0.08	0.23	0.23
Crit Moves:	****			****			****			****		
Green/Cycle:	0.03	0.42	0.42	0.23	0.62	0.62	0.03	0.03	0.03	0.25	0.25	0.48
Volume/Cap:	0.38	0.92	0.92	0.92	0.38	0.38	0.92	0.92	0.92	0.33	0.92	0.49
Delay/Veh:	53.0	44.4	44.4	63.9	9.9	9.9	150.6	151	150.6	31.0	62.5	18.2
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:	53.0	44.4	44.4	63.9	9.9	9.9	150.6	151	150.6	31.0	62.5	18.2
LOS by Move:	D	D	D	E	A	A	F	F	F	C	E	B
HCM2kAvgQ:	1	25	25	15	7	7	3	3	3	4	15	8

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #15 Horseshoe Bar Road/I-80 Westbound Ramp

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.416  
 Loss Time (sec): 8 Average Delay (sec/veh): 21.6  
 Optimal Cycle: 28 Level Of Service: C

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
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
Lanes:	1	0	1	1	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	309	457	135	46	183	359	89	56	94	71	65	60
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:	309	457	135	46	183	359	89	56	94	71	65	60
Added Vol:	18	10	0	0	0	10	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	327	467	135	46	183	369	89	56	94	71	65	60
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	327	467	135	46	183	0	89	56	94	71	65	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	327	467	135	46	183	0	89	56	94	71	65	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	327	467	135	46	183	0	89	56	94	71	65	60

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.92	0.92	0.95	1.00	1.00	0.72	0.72	0.85	0.56	0.93	0.93
Lanes:	1.00	1.55	0.45	1.00	1.00	1.00	0.61	0.39	1.00	1.00	0.52	0.48
Final Sat.:	1805	2705	782	1805	1900	1900	842	530	1615	1060	917	846

Capacity Analysis Module:

Vol/Sat:	0.18	0.17	0.17	0.03	0.10	0.00	0.11	0.11	0.06	0.07	0.07	0.07
Crit Moves:	****			****			****			****		
Green/Cycle:	0.43	0.58	0.58	0.09	0.23	0.00	0.25	0.25	0.25	0.25	0.25	0.25
Volume/Cap:	0.42	0.30	0.30	0.30	0.42	0.00	0.42	0.42	0.23	0.26	0.28	0.28
Delay/Veh:	19.9	10.7	10.7	44.0	33.3	0.0	31.9	31.9	29.8	30.4	30.3	30.3
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:	19.9	10.7	10.7	44.0	33.3	0.0	31.9	31.9	29.8	30.4	30.3	30.3
LOS by Move:	B	B	B	D	C	A	C	C	C	C	C	C
HCM2kAvgQ:	7	5	5	2	5	0	4	4	2	2	3	3

\*\*\*\*\*

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

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Rocklin Crossings  
2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #16 Horseshoe Bar Road/I-80 Eastbound Ramp

\*\*\*\*\*

Average Delay (sec/veh): 11.5 Worst Case Level Of Service: E[ 38.5]

\*\*\*\*\*

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		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1	0	1	0	0	0	0	1	0	0

Volume Module:

Base Vol:	0	599	258	112	240	0	0	0	0	153	0	300
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	599	258	112	240	0	0	0	0	153	0	300
Added Vol:	0	18	0	0	0	0	0	0	0	17	0	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	617	258	112	240	0	0	0	0	170	0	310
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	617	258	112	240	0	0	0	0	170	0	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	617	258	112	240	0	0	0	0	170	0	310

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	875	xxxx	xxxxx	xxxx	xxxx	xxxxx	1081	xxxx	617
Potent Cap.:	xxxx	xxxx	xxxxx	780	xxxx	xxxxx	xxxx	xxxx	xxxxx	243	xxxx	494
Move Cap.:	xxxx	xxxx	xxxxx	780	xxxx	xxxxx	xxxx	xxxx	xxxxx	215	xxxx	494
Volume/Cap:	xxxx	xxxx	xxxx	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	0.79	xxxx	0.63

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	5.7	xxxx	4.3
Control Del:	xxxxx	xxxx	xxxxx	10.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	65.3	xxxx	23.8
LOS by Move:	*	*	*	B	*	*	*	*	*	F	*	C
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	10.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	B	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			38.5		
ApproachLOS:	*			*			*			E		

\*\*\*\*\*

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

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Rocklin Crossings
2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #17 Barton Road/Brace Road

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Average Delay (sec/veh): 3.6 Worst Case Level Of Service: C [ 15.1]

\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign, Uncontrolled), Rights (Include), and Lanes.

Volume Module:

Table with 13 columns representing traffic volumes and adjustments. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume.

Critical Gap Module:

Table with 13 columns for critical gap and follow-up time. Rows include Critical Gp and FollowUpTim.

Capacity Module:

Table with 13 columns for capacity metrics. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module:

Table with 13 columns for level of service metrics. Rows include 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

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

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Rocklin Crossings  
2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

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Intersection #18 Barton Road/Rocklin Road

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.576  
 Loss Time (sec): 0 Average Delay (sec/veh): 13.5  
 Optimal Cycle: 0 Level Of Service: B

\*\*\*\*\*

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		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	0	0	1	0	0	0	0	0

Volume Module:

Base Vol:	201	48	0	0	43	184	201	0	346	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:	201	48	0	0	43	184	201	0	346	0	0	0
Added Vol:	42	0	0	0	0	0	0	0	41	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	243	48	0	0	43	184	201	0	387	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:	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 Volume:	243	48	0	0	43	184	201	0	387	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	48	0	0	43	184	201	0	387	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:	243	48	0	0	43	184	201	0	387	0	0	0

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:	1.00	1.00	0.00	0.00	0.19	0.81	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	515	550	0	0	116	497	548	0	671	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.47	0.09	xxxx	xxxx	0.37	0.37	0.37	xxxx	0.58	xxxx	xxxx	xxxx
Crit Moves:	****			****			****			****		
Delay/Veh:	15.0	9.5	0.0	0.0	11.7	11.7	12.7	0.0	14.4	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
AdjDel/Veh:	15.0	9.5	0.0	0.0	11.7	11.7	12.7	0.0	14.4	0.0	0.0	0.0
LOS by Move:	C	A	*	*	B	B	B	*	B	*	*	*
ApproachDel:	14.1			11.7			13.8			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxxx		
ApprAdjDel:	14.1			11.7			13.8			xxxxxx		
LOS by Appr:	B			B			B			*		
AllWayAvgQ:	0.8	0.1	0.0	0.5	0.5	0.5	0.5	0.0	1.2	0.0	0.0	0.0

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

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report  
 2000 HCM Operations Method (Future Volume Alternative)

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Intersection #19 Sierra College Boulevard/King Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.500  
 Loss Time (sec): 9 Average Delay (sec/veh): 19.3  
 Optimal Cycle: 34 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
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
Lanes:	1	0	1	1	0	1	0	0	1	0	0	1

Volume Module:

Base Vol:	7	690	42	193	526	3	68	74	29	21	12	121
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:	7	690	42	193	526	3	68	74	29	21	12	121
Added Vol:	0	102	0	0	105	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	792	42	193	631	3	68	74	29	21	12	121
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	792	42	193	631	3	68	74	29	21	12	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	792	42	193	631	3	68	74	29	21	12	121
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:	7	792	42	193	631	3	68	74	29	21	12	121

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.95	0.95	0.78	0.78	0.78	0.85	0.85	0.85
Lanes:	1.00	1.90	0.10	1.00	1.99	0.01	0.40	0.43	0.17	0.14	0.08	0.78
Final Sat.:	1805	3404	181	1805	3589	17	587	639	250	220	126	1269

Capacity Analysis Module:

Vol/Sat:	0.00	0.23	0.23	0.11	0.18	0.18	0.12	0.12	0.12	0.10	0.10	0.10
Crit Moves:	****			****			****			****		
Green/Cycle:	0.01	0.46	0.46	0.21	0.66	0.66	0.23	0.23	0.23	0.23	0.23	0.23
Volume/Cap:	0.26	0.50	0.50	0.50	0.26	0.26	0.50	0.50	0.50	0.41	0.41	0.41
Delay/Veh:	54.0	18.9	18.9	35.6	6.9	6.9	34.6	34.6	34.6	33.4	33.4	33.4
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:	54.0	18.9	18.9	35.6	6.9	6.9	34.6	34.6	34.6	33.4	33.4	33.4
LOS by Move:	D	B	B	D	A	A	C	C	C	C	C	C
HCM2kAvgQ:	1	9	9	6	4	4	5	5	5	4	4	4

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #20 Sierra College Boulevard/English Colony Way

\*\*\*\*\*

Average Delay (sec/veh): 4.0 Worst Case Level Of Service: E[ 38.7]

\*\*\*\*\*

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
Rights: Include Include Include Include
Lanes: 0 0 1 1 0 1 0 2 0 0 0 0 0 0 0 1 0 0 0 1

Volume Module:
Base Vol: 0 876 35 215 919 0 0 0 0 29 0 151
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: 0 876 35 215 919 0 0 0 0 29 0 151
Added Vol: 0 81 0 0 84 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 957 35 215 1003 0 0 0 0 29 0 151
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 957 35 215 1003 0 0 0 0 29 0 151
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 957 35 215 1003 0 0 0 0 29 0 151

Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx 4.1 xxxxx xxxxxx xxxxxx xxxx xxxxxx 6.8 xxxxx 6.9
FollowUpTim:xxxxx xxxx xxxxxx 2.2 xxxxx xxxxxx xxxxxx xxxx xxxxxx 3.5 xxxxx 3.3

Capacity Module:
Cnflct Vol: xxxxx xxxxx xxxxxx 992 xxxxx xxxxxx xxxxx xxxxx xxxxxx 1906 xxxxx 496
Potent Cap.: xxxxx xxxxx xxxxxx 705 xxxxx xxxxxx xxxxx xxxxx xxxxxx 62 xxxxx 525
Move Cap.: xxxxx xxxxx xxxxxx 705 xxxxx xxxxxx xxxxx xxxxx xxxxxx 47 xxxxx 525
Volume/Cap: xxxxx xxxxx xxxxx 0.30 xxxxx xxxxx xxxxx xxxxx xxxxx 0.61 xxxxx 0.29

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxxx 1.3 xxxxx xxxxxx xxxxx xxxxx xxxxxx 2.4 xxxxx 1.2
Control Del:xxxxx xxxxx xxxxxx 12.3 xxxxx xxxxxx xxxxxx xxxxx xxxxxx 163.8 xxxxx 14.6
LOS by Move: \* \* \* B \* \* \* \* \* \* F \* B
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
SharedQueue:xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx
Shrd ConDel:xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx
Shared LOS: \*
ApproachDel: xxxxxxx xxxxxxx xxxxxxx xxxxxxx 38.7
ApproachLOS: \* E

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

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Rocklin Crossings

2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #21 Taylor Road/King Road

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.418
Loss Time (sec): 9 Average Delay (sec/veh): 28.5
Optimal Cycle: 30 Level Of Service: C

\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 rows: Movement (L, T, R), Control (Protected), Rights (Include), Min. Green, Y+R, Lanes.

Volume Module:

Table with 13 columns for volume metrics: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module:

Table with 13 columns for saturation flow metrics: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 13 columns for capacity analysis metrics: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

\*\*\*\*\*

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

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Rocklin Crossings
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #3 Rocklin Road/I-80 Westbound Ramp
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Cycle (sec): 100 Critical Vol./Cap.(X): 0.913
Loss Time (sec): 6 Average Delay (sec/veh): 24.4
Optimal Cycle: 102 Level Of Service: C
\*\*\*\*\*

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module:
Base Vol: 0 0 0 139 0 546 0 968 628 0 1878 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 0 139 0 546 0 968 628 0 1878 0
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 0 0 139 0 546 0 968 628 0 1878 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: 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 Volume: 0 0 0 139 0 546 0 968 628 0 1878 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 139 0 546 0 968 628 0 1878 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: 0 0 0 139 0 546 0 968 628 0 1878 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 0.95 1.00 0.85 1.00 0.95 0.85 1.00 0.95 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 0.00 2.00 1.00 0.00 2.00 0.00
Final Sat.: 0 0 0 1805 0 1615 0 3610 1615 0 3610 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.08 0.00 0.34 0.00 0.27 0.39 0.00 0.52 0.00
Crit Moves: \*\*\*\*
Green/Cycle: 0.00 0.00 0.00 0.37 0.00 0.37 0.00 0.57 0.57 0.00 0.57 0.00
Volume/Cap: 0.00 0.00 0.00 0.21 0.00 0.91 0.00 0.47 0.68 0.00 0.91 0.00
Delay/Veh: 0.0 0.0 0.0 21.6 0.0 48.4 0.0 12.8 17.3 0.0 26.0 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 21.6 0.0 48.4 0.0 12.8 17.3 0.0 26.0 0.0
LOS by Move: A A A C A D A B B A C A
HCM2kAvgQ: 0 0 0 3 0 20 0 9 13 0 25 0

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

Rocklin Crossings
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #3 Rocklin Road/I-80 Westbound Ramp
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.645
Loss Time (sec): 6 Average Delay (sec/veh): 13.5
Optimal Cycle: 37 Level Of Service: B
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Split Phase, Permitted), Rights (Include), and Lanes.

Volume Module: Table with 12 columns for different volume categories (Base Vol, Growth Adj, etc.) and 4 columns for the four directions.

Saturation Flow Module: Table with 12 columns for saturation flow factors (Sat/Lane, Adjustment, etc.) and 4 columns for directions.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics (Vol/Sat, Crit Moves, etc.) and 4 columns for directions.

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

Rocklin Crossings
2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #3 Rocklin Road/I-80 Westbound Ramp
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.494
Loss Time (sec): 6 Average Delay (sec/veh): 11.5
Optimal Cycle: 27 Level Of Service: B
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Split Phase, Permitted), Rights (Include), and Min. Green values.

Volume Module: Table with 12 columns for volume adjustments. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table with 12 columns for saturation flow. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis. Rows include Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

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

Rocklin Crossings
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #4 Rocklin Road/I-80 Eastbound Ramp
\*\*\*\*\*
Cycle (sec): 100 Critical Vol./Cap.(X): 0.934
Loss Time (sec): 6 Average Delay (sec/veh): 35.2
Optimal Cycle: 118 Level Of Service: D
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

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

Rocklin Crossings
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #4 Rocklin Road/I-80 Eastbound Ramp
\*\*\*\*\*
Cycle (sec): 100 Critical Vol./Cap.(X): 0.925
Loss Time (sec): 6 Average Delay (sec/veh): 31.8
Optimal Cycle: 110 Level Of Service: C
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Split Phase, Protected, Permitted), Rights (Include), and Lanes.

Volume Module: Table showing various volume adjustments like Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values.

Capacity Analysis Module: Table showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

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

Rocklin Crossings
2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #4 Rocklin Road/I-80 Eastbound Ramp
\*\*\*\*\*
Cycle (sec): 100 Critical Vol./Cap.(X): 0.659
Loss Time (sec): 6 Average Delay (sec/veh): 22.7
Optimal Cycle: 74 Level Of Service: C
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume categories and 13 rows of data including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table with 13 columns and 5 rows of data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns and 11 rows of data including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

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

Rocklin Crossings
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #7 Sierra College Boulevard/Taylor Road
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.011
Loss Time (sec): 8 Average Delay (sec/veh): 50.5
Optimal Cycle: 180 Level Of Service: D
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

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

Rocklin Crossings
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #7 Sierra College Boulevard/Taylor Road
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.816
Loss Time (sec): 8 Average Delay (sec/veh): 34.5
Optimal Cycle: 69 Level Of Service: C
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

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



Rocklin Crossings  
2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #7 Sierra College Boulevard/Taylor Road  
\*\*\*\*\*  
Cycle (sec): 100 Critical Vol./Cap.(X): 0.774  
Loss Time (sec): 8 Average Delay (sec/veh): 32.2  
Optimal Cycle: 60 Level Of Service: C  
\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
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
Lanes:	1	0	2	0	1	0	1	0	1	0	2	0

Volume Module:

Base Vol:	166	742	305	83	944	181	164	397	183	294	315	43
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:	166	742	305	83	944	181	164	397	183	294	315	43
Added Vol:	31	132	37	0	136	0	0	0	32	39	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	197	874	342	83	1080	181	164	397	215	333	315	43
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	197	874	342	83	1080	181	164	397	215	333	315	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	197	874	342	83	1080	181	164	397	215	333	315	43
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:	197	874	342	83	1080	181	164	397	215	333	315	43

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	1.00	0.85	0.92	0.98	0.98
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	0.88	0.12
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	1900	1615	3502	1642	224

Capacity Analysis Module:

Vol/Sat:	0.11	0.24	0.21	0.05	0.30	0.11	0.09	0.21	0.13	0.10	0.19	0.19
Crit Moves:	****			****			****			****		
Green/Cycle:	0.14	0.44	0.44	0.08	0.39	0.39	0.13	0.27	0.41	0.12	0.27	0.27
Volume/Cap:	0.77	0.55	0.48	0.55	0.77	0.29	0.72	0.77	0.32	0.77	0.72	0.72
Delay/Veh:	55.2	20.9	20.2	48.1	29.6	21.5	52.6	40.9	20.3	51.0	38.4	38.4
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:	55.2	20.9	20.2	48.1	29.6	21.5	52.6	40.9	20.3	51.0	38.4	38.4
LOS by Move:	E	C	C	D	C	C	D	D	C	D	D	D
HCM2kAvgQ:	6	10	7	3	17	4	6	13	5	7	11	11

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

Rocklin Crossings
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #18 Barton Road/Rocklin Road
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.700
Loss Time (sec): 6 Average Delay (sec/veh): 31.3
Optimal Cycle: 42 Level Of Service: C
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors for each bound.

Saturation Flow Module: Table with 13 columns representing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 13 columns representing capacity analysis metrics like Vol/Sat, Crit Moves, Green/Cycle, etc.

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

Rocklin Crossings
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #18 Barton Road/Rocklin Road
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.537
Loss Time (sec): 6 Average Delay (sec/veh): 22.7
Optimal Cycle: 29 Level Of Service: C
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Protected), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

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

Rocklin Crossings
2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #18 Barton Road/Rocklin Road
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.541
Loss Time (sec): 6 Average Delay (sec/veh): 25.6
Optimal Cycle: 29 Level Of Service: C
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Protected), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for different volume categories (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume).

Saturation Flow Module: Table with 13 columns for saturation flow parameters (Sat/Lane, Adjustment, Lanes, Final Sat.).

Capacity Analysis Module: Table with 13 columns for capacity analysis parameters (Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ).

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

Rocklin Crossings  
2030 + Project without Dominguez Road Condition - AM Peak Hour

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

```
*****
Intersection #20 Sierra College Boulevard/English Colony Way
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.677
Loss Time (sec):      6           Average Delay (sec/veh):        16.3
Optimal Cycle:        40          Level Of Service:                B
*****
```

Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Protected			Protected			Protected			Protected										
Rights:	Include			Include			Include			Include										
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								
Lanes:	0	0	1	1	0	1	0	2	0	0	0	0	0	0	0	1	0	0	0	1

Volume Module:

Base Vol:	0	576	0	335	1766	0	0	0	0	9	0	237
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	576	0	335	1766	0	0	0	0	9	0	237
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	576	0	335	1766	0	0	0	0	9	0	237
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	576	0	335	1766	0	0	0	0	9	0	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	576	0	335	1766	0	0	0	0	9	0	237
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	576	0	335	1766	0	0	0	0	9	0	237

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	2.00	0.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3610	0	1805	3610	0	0	0	0	1805	0	1615

Capacity Analysis Module:

Vol/Sat:	0.00	0.16	0.00	0.19	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.15
Crit Moves:	****				****							****
Green/Cycle:	0.00	0.33	0.00	0.39	0.72	0.00	0.00	0.00	0.00	0.22	0.00	0.22
Volume/Cap:	0.00	0.48	0.00	0.48	0.68	0.00	0.00	0.00	0.00	0.02	0.00	0.68
Delay/Veh:	0.0	26.7	0.0	23.4	8.2	0.0	0.0	0.0	0.0	30.8	0.0	41.1
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:	0.0	26.7	0.0	23.4	8.2	0.0	0.0	0.0	0.0	30.8	0.0	41.1
LOS by Move:	A	C	A	C	A	A	A	A	A	C	A	D
HCM2kAvgQ:	0	8	0	8	16	0	0	0	0	0	0	8

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

Rocklin Crossings  
2030 + Project without Dominguez Road Condition - PM Peak Hour

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

```
*****
Intersection #20 Sierra College Boulevard/English Colony Way
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.752
Loss Time (sec):      6           Average Delay (sec/veh):          18.0
Optimal Cycle:        49          Level Of Service:                B
*****
```

Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	T	R	L	T	R	L	T	R	L	T	R									
Control:	Protected			Protected			Protected			Protected											
Rights:	Include			Include			Include			Include											
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									
Lanes:	0	0	1	1	0	0	1	0	2	0	0	0	0	0	0	0	1	0	0	0	1

Volume Module:

Base Vol:	0	1571	35	161	916	0	0	0	0	29	0	277
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	1571	35	161	916	0	0	0	0	29	0	277
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	1571	35	161	916	0	0	0	0	29	0	277
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1571	35	161	916	0	0	0	0	29	0	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1571	35	161	916	0	0	0	0	29	0	277
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	1571	35	161	916	0	0	0	0	29	0	277

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	1.96	0.04	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3521	78	1805	3610	0	0	0	0	1805	0	1615

Capacity Analysis Module:

Vol/Sat:	0.00	0.45	0.45	0.09	0.25	0.00	0.00	0.00	0.00	0.02	0.00	0.17
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.59	0.59	0.12	0.71	0.00	0.00	0.00	0.00	0.23	0.00	0.23
Volume/Cap:	0.00	0.75	0.75	0.75	0.36	0.00	0.00	0.00	0.00	0.07	0.00	0.75
Delay/Veh:	0.0	16.5	16.5	56.5	5.6	0.0	0.0	0.0	0.0	30.4	0.0	44.4
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:	0.0	16.5	16.5	56.5	5.6	0.0	0.0	0.0	0.0	30.4	0.0	44.4
LOS by Move:	A	B	B	E	A	A	A	A	A	C	A	D
HCM2kAvgQ:	0	20	20	7	6	0	0	0	0	1	0	10

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

Rocklin Crossings
2030 + Project without Dominguez Road Condition - Saturday

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #20 Sierra College Boulevard/English Colony Way
\*\*\*\*\*
Cycle (sec): 100 Critical Vol./Cap.(X): 0.520
Loss Time (sec): 6 Average Delay (sec/veh): 14.1
Optimal Cycle: 28 Level Of Service: B
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

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