

**APPENDIX F**

**EXISTING PLUS APPROVED PROJECTS PLUS PROJECT  
LOS WORKSHEETS**

Rocklin Crossings  
Existing + Approved + Project Conditions - 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
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.822
Loss Time (sec):      8           Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        97          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      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 0 1 1 0     1 0 1 1 0     1 1 0 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:             24 296 437     174 326 15     31 149 51     309 132 98
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:          24 296 437     174 326 15     31 149 51     309 132 98
Added Vol:            0 40 105        9 37 0          0 3 0          122 2 5
PasserByVol:          0 0 0           0 0 0           0 0 0           0 0 0
Initial Fut:          24 336 542     183 363 15     31 152 51     431 134 103
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:           24 336 542     183 363 15     31 152 51     431 134 103
Reduct Vol:           0 0 0           0 0 0           0 0 0           0 0 0
Reduced Vol:          24 336 542     183 363 15     31 152 51     431 134 103
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:          24 336 542     183 363 15     31 152 51     474 134 103
-----|-----|-----|-----|
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 1.92 0.08 1.00 1.50 0.50 1.56 0.44 1.00
Final Sat.:           1375 2750 1375 1375 2641 109 1375 2059 691 2144 606 1375
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.02 0.12 0.39 0.13 0.14 0.14 0.02 0.07 0.07 0.22 0.22 0.07
Crit Volume:          542 183          102          304
Crit Moves:          ****  ****          ****          ****
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Rocklin Crossings  
Existing + Approved + Project Conditions - 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
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.545
Loss Time (sec):      8           Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        38          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:              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      1 1 0 0 1      1 0 1 1 0      1 0 2 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:             20  10   7   289  5   88   100 667   9   9 657  410
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:          20  10   7   289  5   88   100 667   9   9 657  410
Added Vol:            0   0   0    40  0   20    25 185   0   0 184   58
PasserByVol:         0   0   0     0  0   0     0  0   0   0  0   0
Initial Fut:          20  10   7   329  5  108   125 852   9   9 841  468
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:           20  10   7   329  5  108   125 852   9   9 841   0
Reduct Vol:           0   0   0     0  0   0     0  0   0   0  0   0
Reduced Vol:          20  10   7   329  5  108   125 852   9   9 841   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:          20  10   7   362  5  108   125 852   9   9 841   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 0.59 0.41 1.97 0.03 1.00 1.00 1.98 0.02 1.00 2.00 1.00
Final Sat.:           1375 809 566 2713 37 1375 1375 2721 29 1375 2750 1375
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.01 0.01 0.01 0.13 0.13 0.08 0.09 0.31 0.31 0.01 0.31 0.00
Crit Volume:          20           183           125           421
Crit Moves:          ****           ****           ****           ****
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Rocklin Crossings  
Existing + Approved + Project Conditions - 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): 0.823  
 Loss Time (sec): 6 Average Delay (sec/veh): 22.7  
 Optimal Cycle: 64 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:	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	47	0	201	0	553	455	356	944	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	47	0	201	0	553	455	356	944	0
Added Vol:	0	0	0	17	0	37	0	147	77	80	205	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	64	0	238	0	700	532	436	1149	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	0	0	69	0	256	0	754	573	470	1238	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	69	0	256	0	754	573	470	1238	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	69	0	256	0	754	573	470	1238	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	0.04	0.00	0.16	0.00	0.21	0.35	0.26	0.34	0.00
Crit Moves:						****			****	****		
Green/Cycle:	0.00	0.00	0.00	0.19	0.00	0.19	0.00	0.43	0.43	0.32	0.75	0.00
Volume/Cap:	0.00	0.00	0.00	0.20	0.00	0.82	0.00	0.48	0.82	0.82	0.46	0.00
Delay/Veh:	0.0	0.0	0.0	34.2	0.0	54.8	0.0	20.7	33.0	41.1	5.0	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	34.2	0.0	54.8	0.0	20.7	33.0	41.1	5.0	0.0
LOS by Move:	A	A	A	C	A	D	A	C	C	D	A	A
HCM2kAvgQ:	0	0	0	2	0	10	0	8	16	13	7	0

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

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Rocklin Crossings  
Existing + Approved + Project Conditions - 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): 0.847  
 Loss Time (sec): 6 Average Delay (sec/veh): 29.4  
 Optimal Cycle: 71 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:	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:	590	0	757	0	0	0	163	472	0	0	664	35
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:	590	0	757	0	0	0	163	472	0	0	664	35
Added Vol:	70	0	52	0	0	0	38	127	0	0	215	19
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	660	0	809	0	0	0	201	599	0	0	879	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	775	0	950	0	0	0	236	703	0	0	1032	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	775	0	950	0	0	0	236	703	0	0	1032	63
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:	775	0	950	0	0	0	236	703	0	0	1032	63

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	1.88	0.12
Final Sat.:	2470	0	2642	0	0	0	1805	3610	0	0	3370	207

Capacity Analysis Module:

Vol/Sat:	0.31	0.00	0.36	0.00	0.00	0.00	0.13	0.19	0.00	0.00	0.31	0.31
Crit Moves:			****				****				****	
Green/Cycle:	0.42	0.00	0.42	0.00	0.00	0.00	0.15	0.52	0.00	0.00	0.36	0.36
Volume/Cap:	0.74	0.00	0.85	0.00	0.00	0.00	0.85	0.38	0.00	0.00	0.85	0.85
Delay/Veh:	25.4	0.0	29.4	0.0	0.0	0.0	61.9	14.7	0.0	0.0	34.8	34.8
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:	25.4	0.0	29.4	0.0	0.0	0.0	61.9	14.7	0.0	0.0	34.8	34.8
LOS by Move:	C	A	C	A	A	A	E	B	A	A	C	C
HCM2kAvgQ:	15	0	20	0	0	0	8	7	0	0	19	19

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

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Rocklin Crossings  
Existing + Approved + Project Conditions - 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
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.445
Loss Time (sec):      8           Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        31          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:              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:               0 1 0 0 1      0 1 0 0 1      1 0 0 1 0      1 0 0 1 0
-----|-----|-----|-----|
Volume Module:
Base Vol:             26   62   22      9   23   41      87 260   32      23 269   53
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:          26   62   22      9   23   41      87 260   32      23 269   53
Added Vol:            3   32    0      9   9    4      12 34    4       0 48   24
PasserByVol:         0   0    0      0   0    0      0   0    0       0   0    0
Initial Fut:         29   94   22      18  32   45      99 294   36      23 317   77
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:          29   94   22      18  32   45      99 294   36      23 317   77
Reduct Vol:          0   0    0      0   0    0      0   0    0       0   0    0
Reduced Vol:         29   94   22      18  32   45      99 294   36      23 317   77
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:         29   94   22      18  32   45      99 294   36      23 317   77
-----|-----|-----|-----|
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:              0.24 0.76 1.00    0.36 0.64 1.00    1.00 0.89 0.11    1.00 0.80 0.20
Final Sat.:         336 1089 1425    513 912 1425    1425 1270 155    1425 1147 278
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:             0.09 0.09 0.02    0.04 0.04 0.03    0.07 0.23 0.23    0.02 0.28 0.28
Crit Volume:         123          18          99          394
Crit Moves:          ****          ****          ****          ****
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Rocklin Crossings
Existing + Approved + Project Conditions - 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): 2.8 Worst Case Level Of Service: B[ 13.1]

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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 for volume metrics (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume) across four directions.

Critical Gap Module: Table with 13 columns for critical gap metrics (Critical Gp, FollowUpTim) across four directions.

Capacity Module: Table with 13 columns for capacity metrics (Cnflct Vol, Potent Cap., Move Cap., Volume/Cap) across four directions.

Level Of Service Module: Table with 13 columns for LOS metrics (2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS) across four directions.

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

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Rocklin Crossings  
Existing + Approved + Project Conditions - 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): 0.607  
 Loss Time (sec): 8 Average Delay (sec/veh): 28.0  
 Optimal Cycle: 39 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:	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:	123	184	123	20	419	82	44	159	42	175	175	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	184	123	20	419	82	44	159	42	175	175	11
Added Vol:	23	143	30	2	276	23	16	9	18	41	24	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	146	327	153	22	695	105	60	168	60	216	199	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:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	158	354	166	24	753	114	65	182	65	234	216	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	158	354	166	24	753	114	65	182	65	234	216	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	158	354	166	24	753	114	65	182	65	234	216	13

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Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.90	0.90	0.95	0.93	0.93	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	1.36	0.64	1.00	1.74	0.26	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	2341	1095	1805	3073	464	1805	1900	1615	1805	1900	1615

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Capacity Analysis Module:

Vol/Sat:	0.09	0.15	0.15	0.01	0.24	0.24	0.04	0.10	0.04	0.13	0.11	0.01
Crit Moves:	****			****			****			****		
Green/Cycle:	0.14	0.50	0.50	0.04	0.40	0.40	0.09	0.16	0.16	0.21	0.28	0.28
Volume/Cap:	0.61	0.30	0.30	0.30	0.61	0.61	0.40	0.61	0.25	0.61	0.40	0.03
Delay/Veh:	44.2	14.6	14.6	48.4	24.3	24.3	44.6	42.8	37.5	38.3	29.6	26.0
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:	44.2	14.6	14.6	48.4	24.3	24.3	44.6	42.8	37.5	38.3	29.6	26.0
LOS by Move:	D	B	B	D	C	C	D	D	D	D	C	C
HCM2kAvgQ:	5	5	5	1	11	11	2	6	2	7	6	0

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

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Rocklin Crossings  
Existing + Approved + Project Conditions - AM Peak Hour

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

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Intersection #8 Sierra College Boulevard/Brace Road

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.374
Loss Time (sec):	8	Average Delay (sec/veh):	18.1
Optimal Cycle:	36	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:	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	1	1	0	1	0	1	1	0	0	1

Volume Module:

Base Vol:	0	357	34	82	551	3	0	0	59	73	0	69
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	357	34	82	551	3	0	0	59	73	0	69
Added Vol:	0	171	29	16	320	0	0	0	0	49	0	25
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	528	63	98	871	3	0	0	59	122	0	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	558	67	103	920	3	0	0	62	129	0	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	558	67	103	920	3	0	0	62	129	0	99
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	558	67	103	920	3	0	0	62	129	0	99

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	0.95	1.00	1.00	0.87	0.77	1.00	0.85
Lanes:	0.00	1.79	0.21	1.00	1.99	0.01	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	0	3174	379	1805	3598	12	0	0	1644	1461	0	1615

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.18	0.06	0.26	0.26	0.00	0.00	0.04	0.09	0.00	0.06
Crit Moves:							****			****		
Green/Cycle:	0.00	0.31	0.31	0.45	0.76	0.76	0.00	0.00	0.16	0.16	0.00	0.16
Volume/Cap:	0.00	0.56	0.56	0.13	0.33	0.33	0.00	0.00	0.24	0.56	0.00	0.39
Delay/Veh:	0.0	29.5	29.5	16.0	3.8	3.8	0.0	0.0	37.5	42.3	0.0	39.0
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	29.5	29.5	16.0	3.8	3.8	0.0	0.0	37.5	42.3	0.0	39.0
LOS by Move:	A	C	C	B	A	A	A	A	D	D	A	D
HCM2kAvgQ:	0	8	8	2	5	5	0	0	2	4	0	3

\*\*\*\*\*

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

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Rocklin Crossings  
Existing + Approved + Project Conditions - AM Peak Hour

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

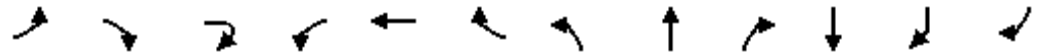
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*****
Intersection #9 Sierra College Boulevard/Granite Drive
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.606
Loss Time (sec):      8            Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        44          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:                1  0  2  0  1    1  0  2  0  1    1  0  1  0  2    1  0  1  0  1
-----|-----|-----|-----|
Volume Module:
Base Vol:             161 394  91    78 515  76    34 21  57    140 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:          161 394  91    78 515  76    34 21  57    140 29  26
Added Vol:            22 176  50    13 351  6     16 25  10    31 16  8
PasserByVol:          0  0  0        0  0  0        0  0  0        0  0  0
Initial Fut:          183 570 141    91 866  82    50 46  67    171 45  34
User Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:              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:           183 570 141    91 866  82    50 46  67    171 45  34
Reduct Vol:           0  0  0        0  0  0        0  0  0        0  0  0
Reduced Vol:          183 570 141    91 866  82    50 46  67    171 45  34
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:          183 570 141    91 866  82    50 46  74    171 45  34
-----|-----|-----|-----|
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 2.00 1.00 1.00 1.00 2.00 1.00 1.00 1.00
Final Sat.:           1375 2750 1375 1375 2750 1375 1375 1375 2750 1375 1375 1375
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.13 0.21 0.10 0.07 0.31 0.06 0.04 0.03 0.03 0.12 0.03 0.02
Crit Volume:          183                    433                    46                    171
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)	44	53	24	622	18	230	103	615	185	793	166	106
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	1543	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	1543	1504	1770	5085	1583	3539	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	58	26	676	20	250	112	668	201	862	180	115
RTOR Reduction (vph)	0	18	0	0	98	37	0	0	0	0	0	68
Lane Group Flow (vph)	48	66	0	676	40	95	112	668	201	862	180	47
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)	13.1	26.6		23.9	15.3	64.9	9.0	49.6	90.0	36.6	36.6	36.6
Effective Green, g (s)	13.1	26.6		23.9	15.3	64.9	9.0	49.6	90.0	36.6	36.6	36.6
Actuated g/C Ratio	0.15	0.30		0.27	0.17	0.72	0.10	0.55	1.00	0.41	0.41	0.41
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)	258	538		912	262	1151	177	2802	1583	1439	758	644
v/s Ratio Prot	0.03	0.01		c0.20	0.03	0.01	c0.06	0.13		c0.24	0.10	
v/s Ratio Perm		0.04				0.05			c0.13			0.03
v/c Ratio	0.19	0.12		0.74	0.15	0.08	0.63	0.24	0.13	0.60	0.24	0.07
Uniform Delay, d1	33.8	23.2		30.2	31.8	3.7	38.9	10.4	0.0	20.9	17.5	16.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.86	0.53	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.1		3.3	0.3	0.0	7.0	0.2	0.2	1.8	0.7	0.2
Delay (s)	34.1	23.3		33.5	32.1	3.8	40.5	5.8	0.2	22.8	18.3	16.5
Level of Service	C	C		C	C	A	D	A	A	C	B	B
Approach Delay (s)					29.1			8.6		21.5		
Approach LOS					C			A		C		































**Intersection Summary**

HCM Average Control Delay	20.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
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)	299	161	125	22	182	35	422	267	46	142	1163	163
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	0.64	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1195	1583	1583	5085	1863	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	325	175	136	24	198	38	459	290	50	154	1264	177
RTOR Reduction (vph)	0	0	60	0	0	0	0	0	21	0	0	0
Lane Group Flow (vph)	325	175	76	24	198	38	459	290	29	154	1264	177
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)	16.5	16.5	16.5	16.5	16.5	90.0	52.1	52.1	52.1	9.4	65.5	90.0
Effective Green, g (s)	16.5	16.5	16.5	16.5	16.5	90.0	52.1	52.1	52.1	9.4	65.5	90.0
Actuated g/C Ratio	0.18	0.18	0.18	0.18	0.18	1.00	0.58	0.58	0.58	0.10	0.73	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)	629	649	290	219	290	1583	2944	1078	916	359	2576	1583
v/s Ratio Prot	0.09	0.05					0.09	0.16		0.04	c0.36	
v/s Ratio Perm			0.05	0.02	c0.13	0.02			0.02			0.11
v/c Ratio	0.52	0.27	0.26	0.11	0.68	0.02	0.16	0.27	0.03	0.43	0.49	0.11
Uniform Delay, d1	33.2	31.6	31.5	30.6	34.3	0.0	8.8	9.5	8.1	37.8	5.2	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.59	0.63	0.71	1.09	0.23	1.00
Incremental Delay, d2	0.7	0.2	0.5	0.2	6.5	0.0	0.1	0.6	0.1	0.6	0.5	0.1
Delay (s)	33.9	31.8	32.0	30.9	40.8	0.0	5.3	6.6	5.9	41.7	1.7	0.1
Level of Service	C	C	C	C	D	A	A	A	A	D	A	A
Approach Delay (s)		32.9					5.8				5.4	
Approach LOS		C					A				A	
<b>Intersection Summary</b>												
HCM Average Control Delay			13.1				HCM Level of Service			B		
HCM Volume to Capacity ratio			0.53									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)			8.0		
Intersection Capacity Utilization			53.2%				ICU Level of Service			A		
Analysis Period (min)			15									
c	Critical Lane Group											

Rocklin Crossings  
Existing + Approved + Project Conditions - AM Peak Hour

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

```

*****
Intersection #12 Sierra College Boulevard/Dominguez Road
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.312
Loss Time (sec):      8            Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        25           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
-----|-----|-----|-----|
Volume Module:
Base Vol:             0 512  0        0 1140  0        0  0  0        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:          0 512  0        0 1140  0        0  0  0        0  0  0
Added Vol:            0 142  16       52 113  0        0  0  0        47  0  34
PasserByVol:         0  5  1        3  2  0        0  0  0        2  0  1
Initial Fut:         0 659  17       55 1255  0        0  0  0        49  0  35
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:          0 659  17       55 1255  0        0  0  0        49  0  35
Reduct Vol:          0  0  0        0  0  0        0  0  0        0  0  0
Reduced Vol:         0 659  17       55 1255  0        0  0  0        49  0  35
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:         0 659  17       55 1255  0        0  0  0        54  0  39
-----|-----|-----|-----|
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 2.92 0.08  1.00 3.00 0.00  0.00 0.00 0.00  2.00 0.00 2.00
Final Sat.:          0 4167  108  1425 4275  0        0  0  0        2850  0  2850
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.00 0.16 0.16  0.04 0.29 0.00  0.00 0.00 0.00  0.02 0.00 0.01
Crit Volume:          0                418                0                27
Crit Moves:          ****                ****                ****
*****

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Rocklin Crossings  
Existing + Approved + Project Conditions - 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): 0.791  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 82 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	0	1	1	1	0	2	0	1	0

-----|-----|-----|-----|

Volume Module:

Base Vol:	329	376	54	37	546	46	51	139	199	76	269	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:	329	376	54	37	546	46	51	139	199	76	269	81
Added Vol:	43	96	3	25	95	35	26	20	46	8	43	32
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	372	472	57	62	641	81	77	159	245	84	312	113
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:	372	472	57	62	641	81	77	159	245	84	312	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	372	472	57	62	641	81	77	159	245	84	312	113
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:	372	472	57	62	641	81	77	159	245	84	312	113

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	0.73	0.27
Final Sat.:	1375	2750	1375	1375	4125	1375	1375	2750	1375	1375	1009	366

Capacity Analysis Module:

Vol/Sat:	0.27	0.17	0.04	0.05	0.16	0.06	0.06	0.06	0.18	0.06	0.31	0.31
Crit Volume:	372			214			77			425		
Crit Moves:	****			****			****			****		

\*\*\*\*\*

Rocklin Crossings  
Existing + Approved + Project Conditions - 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): 0.904  
 Loss Time (sec): 8 Average Delay (sec/veh): 37.2  
 Optimal Cycle: 102 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			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

Volume Module:

Base Vol:	4	249	41	404	313	18	12	58	17	40	24	368
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	249	41	404	313	18	12	58	17	40	24	368
Added Vol:	0	31	5	32	41	0	0	0	0	11	0	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	280	46	436	354	18	12	58	17	51	24	408
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	5	319	52	497	404	21	14	66	19	58	27	465
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	319	52	497	404	21	14	66	19	58	27	465
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:	5	319	52	497	404	21	14	66	19	58	27	465

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	0.99	0.99	0.97	0.97	0.97	0.95	0.86	0.86
Lanes:	1.00	0.86	0.14	1.00	0.95	0.05	0.14	0.67	0.19	1.00	0.06	0.94
Final Sat.:	1805	1598	262	1805	1795	91	253	1225	359	1805	91	1540

Capacity Analysis Module:

Vol/Sat:	0.00	0.20	0.20	0.28	0.22	0.22	0.05	0.05	0.05	0.03	0.30	0.30
Crit Moves:	****			****			****			****		
Green/Cycle:	0.01	0.22	0.22	0.30	0.52	0.52	0.06	0.06	0.06	0.33	0.33	0.64
Volume/Cap:	0.43	0.90	0.90	0.90	0.43	0.43	0.90	0.90	0.90	0.10	0.90	0.47
Delay/Veh:	75.5	60.7	60.7	51.6	15.2	15.2	103.2	103	103.2	23.0	50.1	9.7
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:	75.5	60.7	60.7	51.6	15.2	15.2	103.2	103	103.2	23.0	50.1	9.7
LOS by Move:	E	E	E	D	B	B	F	F	F	C	D	A
HCM2kAvgQ:	1	15	15	18	8	8	6	6	6	1	18	8

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

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Rocklin Crossings  
Existing + Approved + Project Conditions - AM Peak Hour

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

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

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.354  
 Loss Time (sec): 8 Average Delay (sec/veh): 19.1  
 Optimal Cycle: 25 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			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

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Volume Module:

Base Vol:	152	458	70	13	189	377	52	44	64	30	71	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	458	70	13	189	377	52	44	64	30	71	24
Added Vol:	21	34	0	0	29	12	19	0	5	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	173	492	70	13	218	389	71	44	69	30	71	24
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:	0.89	0.89	0.89	0.89	0.89	0.00	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	194	553	79	15	245	0	80	49	78	34	80	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	194	553	79	15	245	0	80	49	78	34	80	27
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:	194	553	79	15	245	0	80	49	78	34	80	27

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	1.00	1.00	0.77	0.77	0.85	0.59	0.96	0.96
Lanes:	1.00	1.75	0.25	1.00	1.00	1.00	0.62	0.38	1.00	1.00	0.75	0.25
Final Sat.:	1805	3100	441	1805	1900	1900	899	557	1615	1113	1366	462

Capacity Analysis Module:

Vol/Sat:	0.11	0.18	0.18	0.01	0.13	0.00	0.09	0.09	0.05	0.03	0.06	0.06
Crit Moves:	****			****			****			****		
Green/Cycle:	0.30	0.64	0.64	0.03	0.36	0.00	0.25	0.25	0.25	0.25	0.25	0.25
Volume/Cap:	0.35	0.28	0.28	0.28	0.35	0.00	0.35	0.35	0.19	0.12	0.23	0.23
Delay/Veh:	27.5	8.0	8.0	50.4	23.5	0.0	31.4	31.4	29.7	29.1	30.0	30.0
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:	27.5	8.0	8.0	50.4	23.5	0.0	31.4	31.4	29.7	29.1	30.0	30.0
LOS by Move:	C	A	A	D	C	A	C	C	C	C	C	C
HCM2kAvgQ:	5	4	4	1	6	0	3	3	2	1	3	3

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Note: Queue reported is the number of cars per lane.  
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Rocklin Crossings
Existing + Approved + Project Conditions - AM Peak Hour

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): 6.9 Worst Case Level Of Service: C [ 18.7]

\*\*\*\*\*

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 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., 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
Existing + Approved + Project Conditions - AM Peak Hour

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: B[ 10.7]

\*\*\*\*\*

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 different volume metrics like Base Vol, Growth Adj, Initial Bse, etc., and 4 rows for North, South, East, and West bounds.

Critical Gap Module:

Table with 13 columns for critical gap and follow-up time metrics across four directions.

Capacity Module:

Table with 13 columns for capacity metrics like Conflict Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module:

Table with 13 columns for level of service metrics like 2Way95thQ, Control Del, LOS by Move, Shared Cap., etc.

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

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Rocklin Crossings  
Existing + Approved + Project Conditions - AM Peak Hour

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): 0.472  
 Loss Time (sec): 0 Average Delay (sec/veh): 11.0  
 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	1	1	0	0	0	0	0

Volume Module:

Base Vol:	214	39	0	0	32	62	56	0	168	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:	214	39	0	0	32	62	56	0	168	0	0	0
Added Vol:	43	4	0	0	6	33	13	0	35	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	257	43	0	0	38	95	69	0	203	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	281	47	0	0	41	104	75	0	222	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	281	47	0	0	41	104	75	0	222	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:	281	47	0	0	41	104	75	0	222	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	0.29	0.71	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	595	644	0	0	195	487	557	0	685	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.47	0.07	xxxx	xxxx	0.21	0.21	0.14	xxxx	0.32	xxxx	xxxx	xxxx
Crit Moves:	****				****				****			
Delay/Veh:	13.6	8.5	0.0	0.0	9.4	9.4	9.8	0.0	9.9	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:	13.6	8.5	0.0	0.0	9.4	9.4	9.8	0.0	9.9	0.0	0.0	0.0
LOS by Move:	B	A	*	*	A	A	A	*	A	*	*	*
ApproachDel:		12.8			9.4			9.9		xxxxxx		
Delay Adj:		1.00			1.00			1.00		xxxxxx		
ApprAdjDel:		12.8			9.4			9.9		xxxxxx		
LOS by Appr:		B			A			A			*	
AllWayAvgQ:	0.8	0.1	0.0	0.2	0.2	0.2	0.1	0.0	0.4	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.  
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Rocklin Crossings  
Existing + Approved + Project Conditions - AM Peak Hour

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

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Intersection #19 Sierra College Boulevard/King Road

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.740  
 Loss Time (sec): 9 Average Delay (sec/veh): 23.1  
 Optimal Cycle: 57 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			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	0	1	0	0	0	0	1	0	0	1

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Volume Module:

Base Vol:	6	149	24	132	446	21	1	19	5	70	24	99
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:	6	149	24	132	446	21	1	19	5	70	24	99
Added Vol:	0	142	11	70	287	0	0	0	0	3	0	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	291	35	202	733	21	1	19	5	73	24	123
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	7	360	43	250	907	26	1	24	6	90	30	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	360	43	250	907	26	1	24	6	90	30	152
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	360	43	250	907	26	1	24	6	90	30	152

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Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.98	0.95	1.00	1.00	0.96	0.96	0.96	0.81	0.81	0.81
Lanes:	1.00	0.89	0.11	1.00	0.97	0.03	0.04	0.76	0.20	0.33	0.11	0.56
Final Sat.:	1805	1669	201	1805	1840	53	73	1392	366	514	169	866

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Capacity Analysis Module:

Vol/Sat:	0.00	0.22	0.22	0.14	0.49	0.49	0.02	0.02	0.02	0.18	0.18	0.18
Crit Moves:	****			****						****		
Green/Cycle:	0.01	0.41	0.41	0.26	0.67	0.67	0.24	0.24	0.24	0.24	0.24	0.24
Volume/Cap:	0.74	0.53	0.53	0.53	0.74	0.74	0.07	0.07	0.07	0.74	0.74	0.74
Delay/Veh:	188.5	22.9	22.9	32.6	13.3	13.3	29.6	29.6	29.6	43.0	43.0	43.0
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:	188.5	22.9	22.9	32.6	13.3	13.3	29.6	29.6	29.6	43.0	43.0	43.0
LOS by Move:	F	C	C	C	B	B	C	C	C	D	D	D
HCM2kAvgQ:	1	10	10	7	20	20	1	1	1	9	9	9

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

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Rocklin Crossings  
Existing + Approved + Project Conditions - AM 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

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Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B [ 11.7]

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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:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1	0	0	1	0	0	0	0	0	1

Volume Module:												
Base Vol:	0	213	0	98	560	0	0	0	0	4	0	64
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	213	0	98	560	0	0	0	0	4	0	64
Added Vol:	0	114	0	0	95	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	327	0	98	655	0	0	0	0	4	0	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	357	0	107	715	0	0	0	0	4	0	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	357	0	107	715	0	0	0	0	4	0	70

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	357	xxxx	xxxxx	xxxx	xxxx	xxxxx	1286	xxxx	357
Potent Cap.:	xxxx	xxxx	xxxxx	1213	xxxx	xxxxx	xxxx	xxxx	xxxxx	183	xxxx	692
Move Cap.:	xxxx	xxxx	xxxxx	1213	xxxx	xxxxx	xxxx	xxxx	xxxxx	171	xxxx	692
Volume/Cap:	xxxx	xxxx	xxxx	0.09	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	0.10

Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	0.3
Control Del:	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	26.6	xxxx	10.8
LOS by Move:	*	*	*	A	*	*	*	*	*	D	*	B
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	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			11.7		
ApproachLOS:		*			*			*			B	

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

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Rocklin Crossings  
Existing + Approved + Project Conditions - AM Peak Hour

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):	0.691
Loss Time (sec):	9	Average Delay (sec/veh):	35.2
Optimal Cycle:	50	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			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	0	1	0	1	0	1	0	1	0

Volume Module:

Base Vol:	180	347	113	65	315	132	191	111	191	148	97	105
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:	180	347	113	65	315	132	191	111	191	148	97	105
Added Vol:	36	32	2	0	39	25	51	0	28	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	216	379	115	65	354	157	242	111	219	151	97	105
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	262	461	140	79	430	191	294	135	266	183	118	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	262	461	140	79	430	191	294	135	266	183	118	128
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:	262	461	140	79	430	191	294	135	266	183	118	128

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.91	0.91	0.95	1.00	0.85	0.95	0.92	0.92
Lanes:	1.00	1.00	1.00	1.00	1.39	0.61	1.00	1.00	1.00	1.00	0.48	0.52
Final Sat.:	1805	1900	1615	1805	2386	1058	1805	1900	1615	1805	841	911

Capacity Analysis Module:

Vol/Sat:	0.15	0.24	0.09	0.04	0.18	0.18	0.16	0.07	0.16	0.10	0.14	0.14
Crit Moves:	****			****			****			****		
Green/Cycle:	0.21	0.40	0.40	0.07	0.26	0.26	0.24	0.27	0.27	0.17	0.20	0.20
Volume/Cap:	0.69	0.61	0.22	0.61	0.69	0.69	0.69	0.26	0.61	0.61	0.69	0.69
Delay/Veh:	41.8	25.2	19.9	53.0	35.6	35.6	39.7	28.9	34.2	42.1	42.7	42.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.8	25.2	19.9	53.0	35.6	35.6	39.7	28.9	34.2	42.1	42.7	42.7
LOS by Move:	D	C	B	D	D	D	D	C	C	D	D	D
HCM2kAvgQ:	9	12	3	3	10	10	9	3	8	6	8	8

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

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Rocklin Crossings  
Existing + Approved + Project Conditions - PM Peak Hour

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

\*\*\*\*\*

Intersection #1 Rocklin Road/Pacific Street

\*\*\*\*\*

Cycle (sec):	100	Critical Vol./Cap.(X):	1.061
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	0	1	1

Volume Module:

Base Vol:	71	457	456	101	487	51	31	102	28	455	271	154
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:	71	457	456	101	487	51	31	102	28	455	271	154
Added Vol:	0	74	283	11	78	0	0	8	0	272	8	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	531	739	112	565	51	31	110	28	727	279	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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:	71	531	739	112	565	51	31	110	28	727	279	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	531	739	112	565	51	31	110	28	727	279	170
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:	71	531	739	112	565	51	31	110	28	800	279	170

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	1.83	0.17	1.00	1.59	0.41	1.48	0.52	1.00
Final Sat.:	1375	2750	1375	1375	2522	228	1375	2192	558	2039	711	1375

Capacity Analysis Module:

Vol/Sat:	0.05	0.19	0.54	0.08	0.22	0.22	0.02	0.05	0.05	0.39	0.39	0.12
Crit Volume:			739			112			69			539
Crit Moves:			****			****			****			****

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Rocklin Crossings  
Existing + Approved + Project Conditions - 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):          0.822
Loss Time (sec):      8           Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        97          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      1 1 0 0 1      1 0 1 1 0      1 0 2 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:             34  18   9   465  14  195  213  646  14   40  640  475
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  18   9   465  14  195  213  646  14   40  640  475
Added Vol:            0   0   0   102  0   69   70  383  0    0  350  73
PasserByVol:         0   0   0    0   0   0    0   0   0    0   0   0
Initial Fut:          34  18   9   567  14  264  283 1029  14   40  990  548
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  18   9   567  14  264  283 1029  14   40  990  0
Reduct Vol:           0   0   0    0   0   0    0   0   0    0   0   0
Reduced Vol:          34  18   9   567  14  264  283 1029  14   40  990  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  18   9   624  14  264  283 1029  14   40  990  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 0.67 0.33 1.96 0.04 1.00 1.00 1.97 0.03 1.00 2.00 1.00
Final Sat.:           1375 917 458 2690 60 1375 1375 2713 37 1375 2750 1375
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.02 0.02 0.02 0.23 0.23 0.19 0.21 0.38 0.38 0.03 0.36 0.00
Crit Volume:          34          319          283          495
Crit Moves:          ****          ****          ****          ****
*****

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Rocklin Crossings  
Existing + Approved + Project Conditions - 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

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.986
Loss Time (sec):	6	Average Delay (sec/veh):	33.9
Optimal Cycle:	180	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	0	0	0	0	0	1	1	0	0

Volume Module:

Base Vol:	0	0	0	33	0	189	0	571	556	439	1007	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	33	0	189	0	571	556	439	1007	0
Added Vol:	0	0	0	42	0	89	0	349	135	103	334	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	75	0	278	0	920	691	542	1341	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	0	0	77	0	286	0	947	712	558	1381	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	77	0	286	0	947	712	558	1381	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	77	0	286	0	947	712	558	1381	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	0.04	0.00	0.18	0.00	0.26	0.44	0.31	0.38	0.00
Crit Moves:						****			****	****		
Green/Cycle:	0.00	0.00	0.00	0.18	0.00	0.18	0.00	0.45	0.45	0.31	0.76	0.00
Volume/Cap:	0.00	0.00	0.00	0.24	0.00	0.99	0.00	0.59	0.99	0.99	0.50	0.00
Delay/Veh:	0.0	0.0	0.0	35.5	0.0	89.9	0.0	21.3	57.4	68.4	4.8	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	35.5	0.0	89.9	0.0	21.3	57.4	68.4	4.8	0.0
LOS by Move:	A	A	A	D	A	F	A	C	E	E	A	A
HCM2kAvgQ:	0	0	0	2	0	14	0	11	25	17	8	0

\*\*\*\*\*

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

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Rocklin Crossings  
Existing + Approved + Project Conditions - 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): 1.050  
 Loss Time (sec): 6 Average Delay (sec/veh): 45.8  
 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:	480	2	544	0	0	0	191	488	0	0	930	82
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:	480	2	544	0	0	0	191	488	0	0	930	82
Added Vol:	113	0	133	0	0	0	92	300	0	0	324	42
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	593	2	677	0	0	0	283	788	0	0	1254	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	626	2	714	0	0	0	299	831	0	0	1323	131
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	626	2	714	0	0	0	299	831	0	0	1323	131
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:	626	2	714	0	0	0	299	831	0	0	1323	131

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	1.82	0.18
Final Sat.:	2382	5	2490	0	0	0	1805	3610	0	0	3242	321

Capacity Analysis Module:

Vol/Sat:	0.26	0.41	0.29	0.00	0.00	0.00	0.17	0.23	0.00	0.00	0.41	0.41
Crit Moves:	****						****			****		
Green/Cycle:	0.39	0.39	0.39	0.00	0.00	0.00	0.16	0.55	0.00	0.00	0.39	0.39
Volume/Cap:	0.67	1.05	0.73	0.00	0.00	0.00	1.05	0.42	0.00	0.00	1.05	1.05
Delay/Veh:	25.8	69.6	27.3	0.0	0.0	0.0	109.0	13.5	0.0	0.0	68.9	68.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.8	69.6	27.3	0.0	0.0	0.0	109.0	13.5	0.0	0.0	68.9	68.9
LOS by Move:	C	E	C	A	A	A	F	B	A	A	E	E
HCM2kAvgQ:	12	30	13	0	0	0	12	8	0	0	34	34

\*\*\*\*\*

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

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Rocklin Crossings
Existing + Approved + Project Conditions - 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): 0.547
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: A

\*\*\*\*\*

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. 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 13 columns representing saturation flow and adjustment factors. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table with 13 columns representing capacity analysis factors. Rows include Vol/Sat, Crit Volume, and Crit Moves.

\*\*\*\*\*

Rocklin Crossings
Existing + Approved + Project Conditions - PM Peak Hour

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

\*\*\*\*\*

Intersection #6 Dominguez Road/Granite Drive

\*\*\*\*\*

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: C [ 16.3]

\*\*\*\*\*

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 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., Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

\*\*\*\*\*

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

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Rocklin Crossings  
Existing + Approved + Project Conditions - 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): 0.803  
 Loss Time (sec): 8 Average Delay (sec/veh): 32.8  
 Optimal Cycle: 66 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

-----|-----|-----|-----|

Volume Module:

Base Vol:	72	441	194	22	243	72	126	266	94	150	218	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:	72	441	194	22	243	72	126	266	94	150	218	39
Added Vol:	44	438	132	2	349	27	33	28	48	124	15	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	879	326	24	592	99	159	294	142	274	233	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	128	972	361	27	655	110	176	325	157	303	258	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	972	361	27	655	110	176	325	157	303	258	46
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:	128	972	361	27	655	110	176	325	157	303	258	46

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Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	0.93	0.93	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	1.46	0.54	1.00	1.71	0.29	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	2525	937	1805	3028	506	1805	1900	1615	1805	1900	1615

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Capacity Analysis Module:

Vol/Sat:	0.07	0.39	0.39	0.01	0.22	0.22	0.10	0.17	0.10	0.17	0.14	0.03
Crit Moves:	****			****			****			****		
Green/Cycle:	0.12	0.48	0.48	0.02	0.37	0.37	0.18	0.21	0.21	0.21	0.25	0.25
Volume/Cap:	0.58	0.80	0.80	0.80	0.58	0.58	0.55	0.80	0.46	0.80	0.55	0.12
Delay/Veh:	45.1	25.0	25.0	128.9	25.6	25.6	39.7	48.4	35.3	49.3	34.3	29.4
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:	45.1	25.0	25.0	128.9	25.6	25.6	39.7	48.4	35.3	49.3	34.3	29.4
LOS by Move:	D	C	C	F	C	C	D	D	D	D	C	C
HCM2kAvgQ:	4	18	18	2	10	10	6	12	5	11	7	1

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings  
Existing + Approved + Project Conditions - 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):	0.748
Loss Time (sec):	8	Average Delay (sec/veh):	16.7
Optimal Cycle:	55	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			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	1 1 0	1	0	1 1 0	0	0	0 0 1	1	0	0 0 1

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Volume Module:

Base Vol:	0	674	106	80	387	0	0	0	73	61	0	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:	0	674	106	80	387	0	0	0	73	61	0	75
Added Vol:	0	588	137	34	488	0	0	0	0	123	0	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1262	243	114	875	0	0	0	73	184	0	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	1410	272	127	978	0	0	0	82	206	0	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1410	272	127	978	0	0	0	82	206	0	113
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	1410	272	127	978	0	0	0	82	206	0	113

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Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	0.95	1.00	1.00	0.87	0.77	1.00	0.85
Lanes:	0.00	1.68	0.32	1.00	2.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	0	2954	569	1805	3610	0	0	0	1644	1461	0	1615

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Capacity Analysis Module:

Vol/Sat:	0.00	0.48	0.48	0.07	0.27	0.00	0.00	0.00	0.05	0.14	0.00	0.07
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.64	0.64	0.09	0.73	0.00	0.00	0.00	0.19	0.19	0.00	0.19
Volume/Cap:	0.00	0.75	0.75	0.75	0.37	0.00	0.00	0.00	0.26	0.75	0.00	0.37
Delay/Veh:	0.0	14.0	14.0	60.8	5.0	0.0	0.0	0.0	35.1	49.2	0.0	36.2
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:	0.0	14.0	14.0	60.8	5.0	0.0	0.0	0.0	35.1	49.2	0.0	36.2
LOS by Move:	A	B	B	E	A	A	A	A	D	D	A	D
HCM2kAvgQ:	0	18	18	4	6	0	0	0	2	8	0	3

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings  
Existing + Approved + Project Conditions - 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): 0.763  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 73 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	0	1	1	1	0	2	1	0	1

Volume Module:

Base Vol:	105	543	63	62	403	89	132	32	160	112	25	32
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:	105	543	63	62	403	89	132	32	160	112	25	32
Added Vol:	22	618	142	36	562	13	68	70	31	154	76	39
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	127	1161	205	98	965	102	200	102	191	266	101	71
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:	127	1161	205	98	965	102	200	102	191	266	101	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	127	1161	205	98	965	102	200	102	191	266	101	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00	1.00
FinalVolume:	127	1161	205	98	965	102	200	102	210	266	101	71

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	2.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00
Final Sat.:	1375	2750	1375	1375	2750	1375	1375	1375	2750	1375	1375	1375

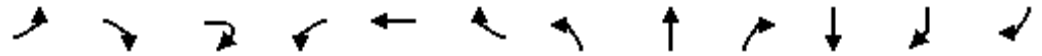
Capacity Analysis Module:

Vol/Sat:	0.09	0.42	0.15	0.07	0.35	0.07	0.15	0.07	0.08	0.19	0.07	0.05
Crit Volume:	581			98			105			266		
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)	237	299	133	406	48	189	358	1104	427	929	219	258
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	0.91	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	1609	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	1609	1504	1770	5085	1583	3539	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	258	325	145	441	52	205	389	1200	464	1010	238	280
RTOR Reduction (vph)	0	19	0	0	60	31	0	0	0	0	0	190
Lane Group Flow (vph)	258	451	0	441	72	94	389	1200	464	1010	238	90
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)	15.0	51.1		15.6	10.4	73.0	26.3	62.6	100.0	32.3	32.3	32.3
Effective Green, g (s)	15.0	51.1		15.6	10.4	73.0	26.3	62.6	100.0	32.3	32.3	32.3
Actuated g/C Ratio	0.15	0.51		0.16	0.10	0.73	0.26	0.63	1.00	0.32	0.32	0.32
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)	266	872		536	167	1158	466	3183	1583	1143	602	511
v/s Ratio Prot	c0.15	c0.05		0.13	0.04	0.01	c0.22	0.24		c0.29	0.13	
v/s Ratio Perm		0.23				0.05			c0.29			0.06
v/c Ratio	0.97	0.52		0.82	0.43	0.08	0.83	0.38	0.29	0.88	0.40	0.18
Uniform Delay, d1	42.3	16.3		40.9	42.0	3.9	34.8	9.2	0.0	32.1	26.3	24.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.23	0.69	1.00	1.00	1.00	1.00
Incremental Delay, d2	46.2	0.5		9.9	1.8	0.0	10.1	0.3	0.4	10.0	1.9	0.8
Delay (s)	88.5	16.8		50.7	43.8	3.9	53.0	6.5	0.4	42.1	28.2	25.1
Level of Service	F	B		D	D	A	D	A	A	D	C	C
Approach Delay (s)					41.0			14.0		36.8		
Approach LOS					D			B		D		































Intersection Summary		
HCM Average Control Delay	28.8	HCM Level of Service C
HCM Volume to Capacity ratio	0.85	
Actuated Cycle Length (s)	100.0	Sum of lost time (s) 16.0
Intersection Capacity Utilization	75.3%	ICU Level of Service D
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)	584	407	89	79	647	111	598	506	115	326	987	454
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	0.45	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	838	1583	1583	5085	1863	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	635	442	97	86	703	121	650	550	125	354	1073	493
RTOR Reduction (vph)	0	0	28	0	0	0	0	0	85	0	0	0
Lane Group Flow (vph)	635	442	69	86	703	121	650	550	40	354	1073	493
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)	45.0	45.0	45.0	45.0	45.0	100.0	32.0	32.0	32.0	11.0	47.0	100.0
Effective Green, g (s)	45.0	45.0	45.0	45.0	45.0	100.0	32.0	32.0	32.0	11.0	47.0	100.0
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45	1.00	0.32	0.32	0.32	0.11	0.47	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)	1545	1593	712	377	712	1583	1627	596	507	378	1663	1583
v/s Ratio Prot	0.18	0.12					0.13	c0.30		c0.10	0.30	
v/s Ratio Perm			0.04	0.10	c0.44	0.08			0.03			0.31
v/c Ratio	0.41	0.28	0.10	0.23	0.99	0.08	0.40	0.92	0.08	0.94	0.65	0.31
Uniform Delay, d1	18.6	17.3	15.8	16.9	27.2	0.0	26.5	32.8	23.7	44.2	20.2	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.73	0.79	1.29	1.09	0.32	1.00
Incremental Delay, d2	0.2	0.1	0.1	0.3	30.3	0.1	0.7	21.3	0.3	22.7	1.3	0.3
Delay (s)	18.7	17.4	15.9	17.2	57.5	0.1	20.1	47.3	30.9	70.9	7.7	0.3
Level of Service	B	B	B	B	E	A	C	D	C	E	A	A
Approach Delay (s)		18.0					32.4				17.5	
Approach LOS		B					C				B	
<b>Intersection Summary</b>												
HCM Average Control Delay			26.2				HCM Level of Service			C		
HCM Volume to Capacity ratio			0.96									
Actuated Cycle Length (s)			100.0				Sum of lost time (s)			12.0		
Intersection Capacity Utilization			78.3%				ICU Level of Service			D		
Analysis Period (min)			15									
c Critical Lane Group												

Rocklin Crossings  
Existing + Approved + Project Conditions - PM Peak Hour

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

\*\*\*\*\*

Intersection #12 Sierra College Boulevard/Dominguez Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.444  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 31 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	756	0	0	620	0	0	0	0	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:	0	756	0	0	620	0	0	0	0	0	0	0
Added Vol:	0	389	42	158	347	0	0	0	0	81	0	49
PasserByVol:	0	25	5	16	15	0	0	0	0	16	0	4
Initial Fut:	0	1170	47	174	982	0	0	0	0	97	0	53
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	1170	47	174	982	0	0	0	0	97	0	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1170	47	174	982	0	0	0	0	97	0	53
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	1170	47	174	982	0	0	0	0	107	0	58

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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	4110	165	1425	4275	0	0	0	0	2850	0	2850

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Capacity Analysis Module:

Vol/Sat:	0.00	0.28	0.28	0.12	0.23	0.00	0.00	0.00	0.00	0.04	0.00	0.02
Crit Volume:			406	174				0		53		
Crit Moves:			****	****						****		

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Rocklin Crossings  
Existing + Approved + Project Conditions - 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
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.836
Loss Time (sec):      8           Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        105          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 0 3 0 1      1 0 2 0 1      1 0 0 1 0
-----|-----|-----|-----|
Volume Module:
Base Vol:             253 627   68   71 484   61   166 236 341   43 136 41
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:          253 627   68   71 484   61   166 236 341   43 136 41
Added Vol:            89 254   9    92 252   70    76 55 88    6 39 88
PasserByVol:          0   0   0     0   0   0     0   0   0     0   0   0
Initial Fut:          342 881   77   163 736 131   242 291 429   49 175 129
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:           342 881   77   163 736 131   242 291 429   49 175 129
Reduct Vol:           0   0   0     0   0   0     0   0   0     0   0   0
Reduced Vol:          342 881   77   163 736 131   242 291 429   49 175 129
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:          342 881   77   163 736 131   242 291 429   49 175 129
-----|-----|-----|-----|
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 0.58 0.42
Final Sat.:           1375 2750 1375 1375 4125 1375 1375 2750 1375 1375 792 583
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.25 0.32 0.06 0.12 0.18 0.10 0.18 0.11 0.31 0.04 0.22 0.22
Crit Volume:          441          163          242          304
Crit Moves:           ****          ****          ****          ****
*****

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Rocklin Crossings  
Existing + Approved + Project Conditions - 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): 0.978  
 Loss Time (sec): 8 Average Delay (sec/veh): 44.5  
 Optimal Cycle: 172 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			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:	9	397	101	377	311	7	8	18	9	74	9	408
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:	9	397	101	377	311	7	8	18	9	74	9	408
Added Vol:	0	102	20	51	94	0	0	0	0	15	0	45
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	499	121	428	405	7	8	18	9	89	9	453
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	9	512	124	439	415	7	8	18	9	91	9	465
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	512	124	439	415	7	8	18	9	91	9	465
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:	9	512	124	439	415	7	8	18	9	91	9	465

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Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.97	0.97	0.95	1.00	1.00	0.95	0.95	0.95	0.95	0.85	0.85
Lanes:	1.00	0.80	0.20	1.00	0.98	0.02	0.23	0.51	0.26	1.00	0.02	0.98
Final Sat.:	1805	1485	360	1805	1862	32	414	933	466	1805	32	1589

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat:	0.01	0.34	0.34	0.24	0.22	0.22	0.02	0.02	0.02	0.05	0.29	0.29
Crit Moves:	****			****			****			****		
Green/Cycle:	0.01	0.35	0.35	0.25	0.59	0.59	0.02	0.02	0.02	0.30	0.30	0.55
Volume/Cap:	0.38	0.98	0.98	0.98	0.38	0.38	0.98	0.98	0.98	0.17	0.98	0.53
Delay/Veh:	58.6	61.8	61.8	74.0	11.2	11.2	188.6	189	188.6	26.0	69.9	15.1
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:	58.6	61.8	61.8	74.0	11.2	11.2	188.6	189	188.6	26.0	69.9	15.1
LOS by Move:	E	E	E	E	B	B	F	F	F	C	E	B
HCM2kAvgQ:	1	26	26	19	7	7	3	3	3	2	20	10

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

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Rocklin Crossings
Existing + Approved + Project Conditions - PM Peak Hour

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

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

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.324
Loss Time (sec): 8 Average Delay (sec/veh): 21.2
Optimal Cycle: 25 Level Of Service: C

\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 rows: Movement, Control, Rights, Min. Green, Y+R, 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 saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 13 columns for capacity analysis factors like 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  
Existing + Approved + Project Conditions - 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): 11.9 Worst Case Level Of Service: C [ 24.6]

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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:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign										
Rights:	Include			Include			Include			Include										
Lanes:	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	

Volume Module:

Base Vol:	0	190	46	141	246	0	0	0	0	130	0	402
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	190	46	141	246	0	0	0	0	130	0	402
Added Vol:	0	54	11	25	41	0	0	0	0	41	0	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	244	57	166	287	0	0	0	0	171	0	422
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	263	62	179	310	0	0	0	0	185	0	456
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	263	62	179	310	0	0	0	0	185	0	456

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	325	xxxx	xxxxx	xxxx	xxxx	xxxxx	932	xxxx	263
Potent Cap.:	xxxx	xxxx	xxxxx	1246	xxxx	xxxxx	xxxx	xxxx	xxxxx	298	xxxx	780
Move Cap.:	xxxx	xxxx	xxxxx	1246	xxxx	xxxxx	xxxx	xxxx	xxxxx	262	xxxx	780
Volume/Cap:	xxxx	xxxx	xxxx	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	0.71	xxxx	0.58

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	4.8	xxxx	3.9			
Control Del:	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	46.1	xxxx	15.9			
LOS by Move:	*	*	*	A	*	*	*	*	*	E	*	C			
Movement:	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	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*			
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			24.6					
ApproachLOS:		*			*			*				C			

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
Existing + Approved + Project Conditions - 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): 3.4 Worst Case Level Of Service: B[ 11.2]

\*\*\*\*\*

Table with columns: Approach, Movement, Control, Rights, Lanes. Rows: North Bound, South Bound, East Bound, West Bound. Sub-rows: L - T - R.

Volume Module: Table with columns: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume. Rows: 12 columns of data.

Critical Gap Module: Table with columns: Critical Gp, FollowUpTim. Rows: 2 columns of data.

Capacity Module: Table with columns: Cnflct Vol, Potent Cap., Move Cap., Volume/Cap. Rows: 4 columns of data.

Level Of Service Module: Table with columns: 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS. Rows: 9 columns of data.

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings  
Existing + Approved + Project Conditions - PM Peak Hour

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):	0.545
Loss Time (sec):	0	Average Delay (sec/veh):	13.2
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:	162	52	0	0	36	36	69	0	219	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:	162	52	0	0	36	36	69	0	219	0	0	0
Added Vol:	104	10	0	0	9	27	40	0	110	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	266	62	0	0	45	63	109	0	329	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	299	70	0	0	51	71	122	0	369	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	299	70	0	0	51	71	122	0	369	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:	299	70	0	0	51	71	122	0	369	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	0.42	0.58	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	548	586	0	0	251	351	551	0	678	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.55	0.12	xxxx	xxxx	0.20	0.20	0.22	xxxx	0.54	xxxx	xxxx	xxxx
Crit Moves:	****			****			****			****		
Delay/Veh:	16.1	9.4	0.0	0.0	10.0	10.0	10.8	0.0	13.5	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:	16.1	9.4	0.0	0.0	10.0	10.0	10.8	0.0	13.5	0.0	0.0	0.0
LOS by Move:	C	A	*	*	B	B	B	*	B	*	*	*
ApproachDel:	14.8			10.0			12.8			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxxx		
ApprAdjDel:	14.8			10.0			12.8			xxxxxx		
LOS by Appr:	B			B			B			*		
AllWayAvgQ:	1.1	0.1	0.0	0.2	0.2	0.2	0.3	0.0	1.1	0.0	0.0	0.0

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

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Rocklin Crossings  
Existing + Approved + Project Conditions - PM Peak Hour

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

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Intersection #19 Sierra College Boulevard/King Road

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.967  
 Loss Time (sec): 9 Average Delay (sec/veh): 41.7  
 Optimal Cycle: 155 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			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	0	1	0	0	0	0	1	0	0	1

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Volume Module:

Base Vol:	2	483	51	174	358	4	1	4	2	94	16	139
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:	2	483	51	174	358	4	1	4	2	94	16	139
Added Vol:	0	446	4	45	346	0	0	0	0	9	0	78
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	929	55	219	704	4	1	4	2	103	16	217
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	2	950	56	224	720	4	1	4	2	105	16	222
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	950	56	224	720	4	1	4	2	105	16	222
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:	2	950	56	224	720	4	1	4	2	105	16	222

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Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	1.00	1.00	0.94	0.94	0.94	0.82	0.82	0.82
Lanes:	1.00	0.94	0.06	1.00	0.99	0.01	0.14	0.57	0.29	0.31	0.05	0.64
Final Sat.:	1805	1779	105	1805	1887	11	254	1015	508	475	74	1000

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Capacity Analysis Module:

Vol/Sat:	0.00	0.53	0.53	0.12	0.38	0.38	0.00	0.00	0.00	0.22	0.22	0.22
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.55	0.55	0.13	0.68	0.68	0.23	0.23	0.23	0.23	0.23	0.23
Volume/Cap:	0.56	0.97	0.97	0.97	0.56	0.56	0.02	0.02	0.02	0.97	0.97	0.97
Delay/Veh:	174.2	41.7	41.7	92.9	8.9	8.9	29.8	29.8	29.8	76.9	76.9	76.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	174.2	41.7	41.7	92.9	8.9	8.9	29.8	29.8	29.8	76.9	76.9	76.9
LOS by Move:	F	D	D	F	A	A	C	C	C	E	E	E
HCM2kAvgQ:	0	36	36	11	12	12	0	0	0	15	15	15

\*\*\*\*\*

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

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Rocklin Crossings
Existing + Approved + Project Conditions - 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

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Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C [ 24.0]

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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 for 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 gap and follow-up times. Rows include Critical Gp and FollowUpTim.

Capacity Module: Table with 13 columns for capacity and volume. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module: Table with 13 columns for LOS and delay. 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  
Existing + Approved + Project Conditions - PM Peak Hour

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): 0.626  
 Loss Time (sec): 9 Average Delay (sec/veh): 32.1  
 Optimal Cycle: 43 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:	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	0	1	0	1	0	1	0	1	0

Volume Module:

Base Vol:	219	310	177	50	222	54	84	126	305	122	113	48
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:	219	310	177	50	222	54	84	126	305	122	113	48
Added Vol:	36	100	8	0	93	58	40	0	43	8	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	255	410	185	50	315	112	124	126	348	130	113	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	263	424	191	52	325	116	128	130	360	134	117	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	263	424	191	52	325	116	128	130	360	134	117	50
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:	263	424	191	52	325	116	128	130	360	134	117	50

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.91	0.91	0.95	1.00	0.85	0.95	0.96	0.96
Lanes:	1.00	1.00	1.00	1.00	1.48	0.52	1.00	1.00	1.00	1.00	0.70	0.30
Final Sat.:	1805	1900	1615	1805	2559	910	1805	1900	1615	1805	1274	541

Capacity Analysis Module:

Vol/Sat:	0.15	0.22	0.12	0.03	0.13	0.13	0.07	0.07	0.22	0.07	0.09	0.09
Crit Moves:	****				****				****	****		
Green/Cycle:	0.23	0.39	0.39	0.05	0.20	0.20	0.21	0.36	0.36	0.12	0.27	0.27
Volume/Cap:	0.63	0.58	0.31	0.58	0.63	0.63	0.34	0.19	0.63	0.63	0.34	0.34
Delay/Veh:	37.4	25.4	21.6	55.5	38.2	38.2	34.4	22.4	28.9	47.7	30.0	30.0
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:	37.4	25.4	21.6	55.5	38.2	38.2	34.4	22.4	28.9	47.7	30.0	30.0
LOS by Move:	D	C	C	E	D	D	C	C	C	D	C	C
HCM2kAvgQ:	8	11	4	3	7	7	4	3	10	5	4	4

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings  
Existing + Approved + Project Saturday

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

```

*****
Intersection #1 Rocklin Road/Pacific Street
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.838
Loss Time (sec):      8           Average Delay (sec/veh):          xxxxxx
Optimal Cycle:        106          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      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 0 1 1 0       1 0 1 1 0       1 1 0 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:             37 349 339     95 375 66      10 55 28      352 176 100
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:          37 349 339     95 375 66      10 55 28      352 176 100
Added Vol:            0 51 248      14 50 0         0 10 0        225 10 16
PasserByVol:         0 0 0          0 0 0           0 0 0          0 0 0
Initial Fut:         37 400 587    109 425 66      10 65 28      577 186 116
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:           37 400 587    109 425 66      10 65 28      577 186 116
Reduct Vol:           0 0 0          0 0 0           0 0 0          0 0 0
Reduced Vol:         37 400 587    109 425 66      10 65 28      577 186 116
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 1.10 1.00 1.00
FinalVolume:         37 400 587    109 425 66      10 65 28      635 186 116
-----|-----|-----|-----|
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 1.73 0.27 1.00 1.40 0.60 1.55 0.45 1.00
Final Sat.:          1375 2750 1375 1375 2380 370 1375 1922 828 2127 623 1375
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.03 0.15 0.43 0.08 0.18 0.18 0.01 0.03 0.03 0.30 0.30 0.08
Crit Volume:          587 109          47          410
Crit Moves:          ****  ****          ****          ****
*****
    
```

Rocklin Crossings  
Existing + Approved + Project 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):          0.687
Loss Time (sec):      8           Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        55          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        1 1 0 0 1        1 0 1 1 0        1 0 2 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:             35  15  24  406  31  203  197  420  15  25  343  402
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  24  406  31  203  197  420  15  25  343  402
Added Vol:           0   0   0   56   0   80   85  304   0   0  338   43
PasserByVol:         0   0   0   0   0   0   0   0   0   0   0   0
Initial Fut:         35  15  24  462  31  283  282  724  15  25  681  445
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  24  462  31  283  282  724  15  25  681   0
Reduct Vol:          0   0   0   0   0   0   0   0   0   0   0   0
Reduced Vol:         35  15  24  462  31  283  282  724  15  25  681   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  24  508  31  283  282  724  15  25  681   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 0.38 0.62 1.89 0.11 1.00 1.00 1.96 0.04 1.00 2.00 1.00
Final Sat.:         1375 529 846 2592 158 1375 1375 2694 56 1375 2750 1375
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:             0.03 0.03 0.03 0.20 0.20 0.21 0.21 0.27 0.27 0.02 0.25 0.00
Crit Volume:         39          283  282          341
Crit Moves:          ****          ****  ****          ****
*****

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Rocklin Crossings  
Existing + Approved + Project 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): 0.779  
 Loss Time (sec): 6 Average Delay (sec/veh): 23.4  
 Optimal Cycle: 54 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	0	0	0	1	0	0	2	0	1
	1	0	2	0	0	0	1	0	2	0	0	0

-----|-----|-----|-----|

Volume Module:

Base Vol:	0	0	0	14	7	108	0	441	338	376	580	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	14	7	108	0	441	338	376	580	0
Added Vol:	0	0	0	33	0	102	0	268	91	56	279	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	47	7	210	0	709	429	432	859	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	0	0	0	54	8	241	0	813	492	495	985	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	54	8	241	0	813	492	495	985	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	54	8	241	0	813	492	495	985	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	0.85	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	52	1572	0	3610	1615	1805	3610	0

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.03	0.15	0.15	0.00	0.23	0.30	0.27	0.27	0.00
Crit Moves:						****			****	****		
Green/Cycle:	0.00	0.00	0.00	0.20	0.20	0.20	0.00	0.39	0.39	0.35	0.74	0.00
Volume/Cap:	0.00	0.00	0.00	0.17	0.78	0.78	0.00	0.58	0.78	0.78	0.37	0.00
Delay/Veh:	0.0	0.0	0.0	33.6	49.7	49.7	0.0	24.5	32.8	35.0	4.6	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	33.6	49.7	49.7	0.0	24.5	32.8	35.0	4.6	0.0
LOS by Move:	A	A	A	C	D	D	A	C	C	D	A	A
HCM2kAvgQ:	0	0	0	1	9	9	0	10	14	13	5	0

\*\*\*\*\*

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

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Rocklin Crossings  
Existing + Approved + Project 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): 0.752  
 Loss Time (sec): 6 Average Delay (sec/veh): 25.5  
 Optimal Cycle: 49 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:	307	2	359	0	0	0	127	333	0	0	650	42
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:	307	2	359	0	0	0	127	333	0	0	650	42
Added Vol:	114	0	65	0	0	0	101	199	0	0	220	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	421	2	424	0	0	0	228	532	0	0	870	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	456	2	459	0	0	0	247	576	0	0	943	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	456	2	459	0	0	0	247	576	0	0	943	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:	456	2	459	0	0	0	247	576	0	0	943	81

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:	1.49	0.01	1.50	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.84	0.16
Final Sat.:	2432	8	2438	0	0	0	1805	3610	0	0	3284	283

Capacity Analysis Module:

Vol/Sat:	0.19	0.28	0.19	0.00	0.00	0.00	0.14	0.16	0.00	0.00	0.29	0.29
Crit Moves:	****						****			****		
Green/Cycle:	0.38	0.38	0.38	0.00	0.00	0.00	0.18	0.56	0.00	0.00	0.38	0.38
Volume/Cap:	0.50	0.75	0.50	0.00	0.00	0.00	0.75	0.28	0.00	0.00	0.75	0.75
Delay/Veh:	24.2	29.8	24.2	0.0	0.0	0.0	48.1	11.4	0.0	0.0	29.2	29.2
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:	24.2	29.8	24.2	0.0	0.0	0.0	48.1	11.4	0.0	0.0	29.2	29.2
LOS by Move:	C	C	C	A	A	A	D	B	A	A	C	C
HCM2kAvgQ:	7	14	8	0	0	0	7	5	0	0	16	16

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings  
Existing + Approved + Project 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):          0.399
Loss Time (sec):      8           Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        29          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:              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:                0 1 0 0 1      0 1 0 0 1      1 0 0 1 0      1 0 0 1 0
-----|-----|-----|-----|
Volume Module:
Base Vol:             21   10   37      9   5   34      13 332  28      31 317   8
Growth Adj:           1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
Initial Bse:          21   10   37      9   5   34      13 332  28      31 317   8
Added Vol:            16  18   0       22  18   7       7  63  18       0  66  22
PasserByVol:          0   0   0       0   0   0       0   0   0       0   0   0
Initial Fut:          37  28   37      31  23   41      20 395  46      31 383  30
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:           37  28   37      31  23   41      20 395  46      31 383  30
Reduct Vol:           0   0   0       0   0   0       0   0   0       0   0   0
Reduced Vol:          37  28   37      31  23   41      20 395  46      31 383  30
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:          37  28   37      31  23   41      20 395  46      31 383  30
-----|-----|-----|-----|
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:                0.57 0.43 1.00      0.57 0.43 1.00      1.00 0.90 0.10      1.00 0.93 0.07
Final Sat.:           811  614 1425      818  607 1425      1425 1276  149      1425 1321  104
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.05 0.05 0.03      0.04 0.04 0.03      0.01 0.31 0.31      0.02 0.29 0.29
Crit Volume:          65          31          441          31
Crit Moves:           ****          ****          ****          ****
*****

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Rocklin Crossings
Existing + Approved + Project Saturday

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

\*\*\*\*\*

Intersection #6 Dominguez Road/Granite Drive

\*\*\*\*\*

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: B[ 14.6]

\*\*\*\*\*

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 traffic flow metrics. 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 gap metrics. 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 LOS metrics. Rows include 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
Existing + Approved + Project 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): 0.755
Loss Time (sec): 8 Average Delay (sec/veh): 32.7
Optimal Cycle: 56 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 representing different 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 representing saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 13 columns representing capacity analysis factors like 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  
Existing + Approved + Project Saturday

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): 0.696  
 Loss Time (sec): 8 Average Delay (sec/veh): 16.8  
 Optimal Cycle: 48 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			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	1 1 0	1	0	1 1 0	0	0	0 1 0	1	0	0 0 1

-----|-----|-----|-----|

Volume Module:

Base Vol:	0	491	78	57	361	1	0	1	36	71	0	56
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	491	78	57	361	1	0	1	36	71	0	56
Added Vol:	0	627	161	26	630	0	0	0	0	170	0	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1118	239	83	991	1	0	1	36	241	0	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:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1191	255	88	1055	1	0	1	38	257	0	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1191	255	88	1055	1	0	1	38	257	0	87
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	1191	255	88	1055	1	0	1	38	257	0	87

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Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	0.95	1.00	0.87	0.87	0.75	1.00	0.85
Lanes:	0.00	1.65	0.35	1.00	1.99	0.01	0.00	0.03	0.97	1.00	0.00	1.00
Final Sat.:	0	2897	619	1805	3606	4	0	45	1606	1421	0	1615

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Capacity Analysis Module:

Vol/Sat:	0.00	0.41	0.41	0.05	0.29	0.29	0.00	0.02	0.02	0.18	0.00	0.05
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.59	0.59	0.07	0.66	0.66	0.00	0.26	0.26	0.26	0.00	0.26
Volume/Cap:	0.00	0.70	0.70	0.70	0.44	0.44	0.00	0.09	0.09	0.69	0.00	0.21
Delay/Veh:	0.0	15.3	15.3	61.1	8.3	8.3	0.0	28.2	28.2	39.1	0.0	29.2
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:	0.0	15.3	15.3	61.1	8.3	8.3	0.0	28.2	28.2	39.1	0.0	29.2
LOS by Move:	A	B	B	E	A	A	A	C	C	D	A	C
HCM2kAvgQ:	0	15	15	3	8	8	0	1	1	8	0	2

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

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Rocklin Crossings
Existing + Approved + Project Saturday

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

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Intersection #9 Sierra College Boulevard/Granite Drive

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.807
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 89 Level Of Service: D

\*\*\*\*\*

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

Volume Module:

Table with 13 columns and 13 rows showing volume calculations: 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 and 4 rows showing saturation flow: Sat/Lane, Adjustment, Lanes, Final Sat.

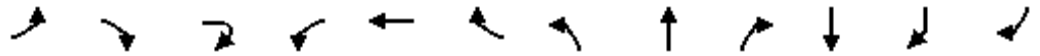
Capacity Analysis Module:

Table with 13 columns and 3 rows showing capacity analysis: Vol/Sat, Crit Volume, 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)	276	369	161	325	62	170	524	1053	512	805	250	363
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	0.93	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	1639	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	1639	1504	1770	5085	1583	3539	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	300	401	175	353	67	185	570	1145	557	875	272	395
RTOR Reduction (vph)	0	17	0	0	31	30	0	0	0	0	0	272
Lane Group Flow (vph)	300	559	0	353	101	90	570	1145	557	875	272	123
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)	22.9	65.8		26.8	11.8	80.1	35.0	68.3	115.0	29.3	29.3	29.3
Effective Green, g (s)	22.9	65.8		26.8	11.8	80.1	35.0	68.3	115.0	29.3	29.3	29.3
Actuated g/C Ratio	0.20	0.57		0.23	0.10	0.70	0.30	0.59	1.00	0.25	0.25	0.25
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)	352	961		800	168	1100	539	3020	1583	902	475	403
v/s Ratio Prot	c0.17	c0.04		0.10	0.06	0.01	c0.32	0.23		c0.25	0.15	
v/s Ratio Perm		0.31				0.05			c0.35			0.08
v/c Ratio	0.85	0.58		0.44	0.60	0.08	1.06	0.38	0.35	0.97	0.57	0.31
Uniform Delay, d1	44.4	15.8		37.7	49.3	5.6	40.0	12.2	0.0	42.4	37.4	34.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.72	0.44	1.00	1.00	1.00	1.00
Incremental Delay, d2	17.7	0.9		0.4	5.6	0.0	48.1	0.2	0.4	23.5	5.0	1.9
Delay (s)	62.1	16.7		38.1	55.0	5.6	76.8	5.6	0.4	66.0	42.3	36.6
Level of Service	E	B		D	D	A	E	A	A	E	D	D
Approach Delay (s)					35.3			22.2		54.3		
Approach LOS					D			C		D		

Intersection Summary		
HCM Average Control Delay	34.7	HCM Level of Service C
HCM Volume to Capacity ratio	0.90	
Actuated Cycle Length (s)	115.0	Sum of lost time (s) 12.0
Intersection Capacity Utilization	83.2%	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)	584	567	204	106	817	142	688	378	158	445	863	352
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	0.37	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	683	1583	1583	5085	1863	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	635	616	222	115	888	154	748	411	172	484	938	383
RTOR Reduction (vph)	0	0	20	0	0	0	0	0	135	0	0	0
Lane Group Flow (vph)	635	616	202	115	888	154	748	411	37	484	938	383
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)	62.0	62.0	62.0	62.0	62.0	115.0	25.0	25.0	25.0	16.0	45.0	115.0
Effective Green, g (s)	62.0	62.0	62.0	62.0	62.0	115.0	25.0	25.0	25.0	16.0	45.0	115.0
Actuated g/C Ratio	0.54	0.54	0.54	0.54	0.54	1.00	0.22	0.22	0.22	0.14	0.39	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)	1851	1908	853	368	853	1583	1105	405	344	478	1385	1583
v/s Ratio Prot	0.18	0.17					0.15	c0.22		c0.14	0.27	
v/s Ratio Perm			0.13	0.17	c0.56	0.10			0.02			0.24
v/c Ratio	0.34	0.32	0.24	0.31	1.04	0.10	0.68	1.01	0.11	1.01	0.68	0.24
Uniform Delay, d1	15.0	14.8	14.0	14.7	26.5	0.0	41.3	45.0	36.1	49.5	29.0	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.78	0.80	0.65	0.82	0.68	1.00
Incremental Delay, d2	0.1	0.1	0.1	0.5	42.0	0.1	3.2	47.7	0.6	38.3	2.0	0.3
Delay (s)	15.1	14.9	14.1	15.2	68.5	0.1	35.4	83.6	24.0	78.7	21.6	0.3
Level of Service	B	B	B	B	E	A	D	F	C	E	C	A
Approach Delay (s)		14.9					48.8				32.4	
Approach LOS		B					D				C	

### Intersection Summary

HCM Average Control Delay	36.1	HCM Level of Service	D
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Rocklin Crossings  
Existing + Approved + Project 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):	0.449
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	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	2

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Volume Module:

Base Vol:	0	532	0	0	541	0	0	0	0	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:	0	532	0	0	541	0	0	0	0	0	0	0
Added Vol:	0	509	47	175	416	0	0	0	0	102	0	65
PasserByVol:	0	34	8	21	20	0	0	0	0	20	0	5
Initial Fut:	0	1075	55	196	977	0	0	0	0	122	0	70
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	1075	55	196	977	0	0	0	0	122	0	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1075	55	196	977	0	0	0	0	122	0	70
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
Final Volume:	0	1075	55	196	977	0	0	0	0	134	0	77

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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	2.85	0.15	1.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	4067	208	1425	4275	0	0	0	0	2850	0	2850

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Capacity Analysis Module:

Vol/Sat:	0.00	0.26	0.26	0.14	0.23	0.00	0.00	0.00	0.00	0.05	0.00	0.03
Crit Volume:			377	196				0		67		
Crit Moves:			****	****						****		

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Rocklin Crossings  
Existing + Approved + Project 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):	0.809
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	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			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:	214	432	34	39	374	74	80	160	257	47	185	70
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:	214	432	34	39	374	74	80	160	257	47	185	70
Added Vol:	62	332	8	115	309	77	83	38	52	7	36	123
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	276	764	42	154	683	151	163	198	309	54	221	193
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:	276	764	42	154	683	151	163	198	309	54	221	193
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	276	764	42	154	683	151	163	198	309	54	221	193
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	276	764	42	154	683	151	163	198	309	54	221	193

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	0.53	0.47
Final Sat.:	1375	2750	1375	1375	4125	1375	1375	2750	1375	1375	734	641

Capacity Analysis Module:

Vol/Sat:	0.20	0.28	0.03	0.11	0.17	0.11	0.12	0.07	0.22	0.04	0.30	0.30
Crit Volume:	382			154			163			414		
Crit Moves:	****			****			****			****		

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Rocklin Crossings  
Existing + Approved + Project 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): 0.843  
 Loss Time (sec): 8 Average Delay (sec/veh): 31.1  
 Optimal Cycle: 77 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:	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:	16	330	138	308	292	21	11	12	18	91	11	294
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	330	138	308	292	21	11	12	18	91	11	294
Added Vol:	0	115	18	37	123	0	0	0	0	19	0	38
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	445	156	345	415	21	11	12	18	110	11	332
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	16	457	160	355	427	22	11	12	18	113	11	341
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	457	160	355	427	22	11	12	18	113	11	341
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:	16	457	160	355	427	22	11	12	18	113	11	341

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.96	0.96	0.95	0.99	0.99	0.93	0.93	0.93	0.95	0.86	0.86
Lanes:	1.00	0.74	0.26	1.00	0.95	0.05	0.27	0.29	0.44	1.00	0.03	0.97
Final Sat.:	1805	1352	474	1805	1796	91	473	516	775	1805	52	1572

Capacity Analysis Module:

Vol/Sat:	0.01	0.34	0.34	0.20	0.24	0.24	0.02	0.02	0.02	0.06	0.22	0.22
Crit Moves:	****			****			****			****		
Green/Cycle:	0.02	0.40	0.40	0.23	0.61	0.61	0.03	0.03	0.03	0.26	0.26	0.49
Volume/Cap:	0.39	0.84	0.84	0.84	0.39	0.39	0.84	0.84	0.84	0.24	0.84	0.44
Delay/Veh:	54.0	35.9	35.9	50.9	10.1	10.1	120.2	120	120.2	29.7	49.6	17.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.0	35.9	35.9	50.9	10.1	10.1	120.2	120	120.2	29.7	49.6	17.0
LOS by Move:	D	D	D	D	B	B	F	F	F	C	D	B
HCM2kAvgQ:	1	20	20	13	7	7	3	3	3	3	13	7

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings  
Existing + Approved + Project 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): 0.313  
 Loss Time (sec): 8 Average Delay (sec/veh): 22.4  
 Optimal Cycle: 24 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:	96	292	115	46	144	240	65	55	38	65	50	58
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:	96	292	115	46	144	240	65	55	38	65	50	58
Added Vol:	45	45	0	0	44	21	22	0	15	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	141	337	115	46	188	261	87	55	53	65	50	58
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:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	148	354	121	48	197	0	91	58	56	68	52	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	354	121	48	197	0	91	58	56	68	52	61
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:	148	354	121	48	197	0	91	58	56	68	52	61

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	1.00	1.00	0.77	0.77	0.85	0.59	0.92	0.92
Lanes:	1.00	1.49	0.51	1.00	1.00	1.00	0.61	0.39	1.00	1.00	0.46	0.54
Final Sat.:	1805	2589	884	1805	1900	1900	892	564	1615	1117	808	938

Capacity Analysis Module:

Vol/Sat:	0.08	0.14	0.14	0.03	0.10	0.00	0.10	0.10	0.03	0.06	0.06	0.06
Crit Moves:	****				****			****				
Green/Cycle:	0.26	0.50	0.50	0.10	0.33	0.00	0.33	0.33	0.33	0.33	0.33	0.33
Volume/Cap:	0.31	0.28	0.28	0.28	0.31	0.00	0.31	0.31	0.11	0.19	0.20	0.20
Delay/Veh:	30.1	14.8	14.8	42.7	25.2	0.0	25.6	25.6	23.6	24.4	24.4	24.4
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:	30.1	14.8	14.8	42.7	25.2	0.0	25.6	25.6	23.6	24.4	24.4	24.4
LOS by Move:	C	B	B	D	C	A	C	C	C	C	C	C
HCM2kAvgQ:	4	4	4	2	5	0	4	4	1	2	3	3

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
Existing + Approved + Project Saturday

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): 7.4 Worst Case Level Of Service: C [ 16.9]

\*\*\*\*\*

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 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., Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
Existing + Approved + Project Saturday

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

\*\*\*\*\*

Intersection #17 Barton Road/Brace Road

\*\*\*\*\*

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: B [ 11.5]

\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, 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 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., Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
Existing + Approved + Project Saturday

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): 0.545
Loss Time (sec): 0 Average Delay (sec/veh): 12.7
Optimal Cycle: 0 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 (Stop Sign), Rights (Include), Min. Green (0), Lanes (1 0 1 0 0).

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: Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 13 columns for capacity analysis metrics: Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, AllWayAvgQ.

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

\*\*\*\*\*

Rocklin Crossings  
Existing + Approved + Project Saturday

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): 0.818  
 Loss Time (sec): 9 Average Delay (sec/veh): 26.8  
 Optimal Cycle: 73 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			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	0	1	0	0	0	0	1	0	0	1

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Volume Module:

Base Vol:	3	228	82	118	238	0	1	4	1	72	17	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	228	82	118	238	0	1	4	1	72	17	139
Added Vol:	0	428	3	51	420	0	0	0	0	3	0	60
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	656	85	169	658	0	1	4	1	75	17	199
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	3	723	94	186	725	0	1	4	1	83	19	219
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	723	94	186	725	0	1	4	1	83	19	219
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:	3	723	94	186	725	0	1	4	1	83	19	219

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Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.98	0.95	1.00	1.00	0.94	0.94	0.94	0.83	0.83	0.83
Lanes:	1.00	0.89	0.11	1.00	1.00	0.00	0.17	0.66	0.17	0.26	0.06	0.68
Final Sat.:	1805	1653	214	1805	1900	0	299	1195	299	406	92	1078

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat:	0.00	0.44	0.44	0.10	0.38	0.00	0.00	0.00	0.00	0.20	0.20	0.20
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.53	0.53	0.13	0.66	0.00	0.25	0.25	0.25	0.25	0.25	0.25
Volume/Cap:	0.58	0.82	0.82	0.82	0.58	0.00	0.01	0.01	0.01	0.82	0.82	0.82
Delay/Veh:	149.4	24.6	24.6	62.7	10.2	0.0	28.3	28.3	28.3	48.1	48.1	48.1
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:	149.4	24.6	24.6	62.7	10.2	0.0	28.3	28.3	28.3	48.1	48.1	48.1
LOS by Move:	F	C	C	E	B	A	C	C	C	D	D	D
HCM2kAvgQ:	1	23	23	8	13	0	0	0	0	12	12	12

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings  
Existing + Approved + Project Saturday

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

\*\*\*\*\*

Intersection #20 Sierra College Boulevard/English Colony Way

\*\*\*\*\*

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C [ 18.8]

\*\*\*\*\*

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:	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1

Volume Module:

Base Vol:	0	371	15	46	373	0	0	0	0	12	0	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	371	15	46	373	0	0	0	0	12	0	33
Added Vol:	0	258	0	0	282	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	629	15	46	655	0	0	0	0	12	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	661	16	48	689	0	0	0	0	13	0	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	661	16	48	689	0	0	0	0	13	0	35

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	677	xxxx	xxxxx	xxxx	xxxx	xxxxx	1455	xxxx	669
Potent Cap.:	xxxx	xxxx	xxxxx	924	xxxx	xxxxx	xxxx	xxxx	xxxxx	145	xxxx	461
Move Cap.:	xxxx	xxxx	xxxxx	924	xxxx	xxxxx	xxxx	xxxx	xxxxx	139	xxxx	461
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	xxxx	0.08

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.3	xxxx	0.2			
Control Del:	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	33.5	xxxx	13.4			
LOS by Move:	*	*	*	A	*	*	*	*	*	D	*	B			
Movement:	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	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*			
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			18.8					
ApproachLOS:		*			*			*				C			

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

Rocklin Crossings
Existing + Approved + Project Saturday

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): 0.480
Loss Time (sec): 9 Average Delay (sec/veh): 27.9
Optimal Cycle: 33 Level Of Service: C

\*\*\*\*\*

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

Volume Module:

Table with 13 columns representing different volume and adjustment factors. 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 13 columns representing saturation flow factors. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table with 13 columns representing capacity analysis factors. 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  
Existing + Approved + Project Conditions - AM Peak Hour

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

```

*****
Intersection #1 Rocklin Road/Pacific Street
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.601
Loss Time (sec):      8            Average Delay (sec/veh):          xxxxxx
Optimal Cycle:        43           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        Split Phase      Split Phase
Rights:        Ovl                    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  1  1  0        1  0  1  1  0        1  1  0  0  1
-----|-----|-----|-----|
Volume Module:
Base Vol:      24 296 437 174 326 15 31 149 51 309 132 98
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:  24 296 437 174 326 15 31 149 51 309 132 98
Added Vol:    0  40 105 9 37 0 0 3 0 122 2 5
PasserByVol:  0  0  0  0  0  0  0  0  0  0  0  0
Initial Fut:  24 336 542 183 363 15 31 152 51 431 134 103
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:   24 336 542 183 363 15 31 152 51 431 134 103
Reduct Vol:   0  0  0  0  0  0  0  0  0  0  0  0
Reduced Vol:  24 336 542 183 363 15 31 152 51 431 134 103
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:  24 336 542 183 363 15 31 152 51 474 134 103
-----|-----|-----|-----|
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 1.92 0.08 1.00 1.50 0.50 1.56 0.44 1.00
Final Sat.:   1375 2750 1375 1375 2641 109 1375 2059 691 2144 606 1375
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:      0.02 0.12 0.39 0.13 0.14 0.14 0.02 0.07 0.07 0.22 0.22 0.07
Crit Volume:           542 183 102 0
Crit Moves:          ****  ****  ****  ****
*****

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Rocklin Crossings
Existing + Approved + Project Conditions - PM Peak Hour

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

\*\*\*\*\*
Intersection #1 Rocklin Road/Pacific Street
\*\*\*\*\*
Cycle (sec): 100 Critical Vol./Cap.(X): 0.718
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level Of Service: C
\*\*\*\*\*

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

Volume Module:
Base Vol: 71 457 456 101 487 51 31 102 28 455 271 154
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: 71 457 456 101 487 51 31 102 28 455 271 154
Added Vol: 0 74 283 11 78 0 0 8 0 272 8 16
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 71 531 739 112 565 51 31 110 28 727 279 170
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 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: 71 531 739 112 565 51 31 110 28 727 279 170
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 71 531 739 112 565 51 31 110 28 727 279 170
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: 71 531 739 112 565 51 31 110 28 800 279 170

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 1.83 0.17 1.00 1.59 0.41 1.48 0.52 1.00
Final Sat.: 1375 2750 1375 1375 2522 228 1375 2192 558 2039 711 1375

Capacity Analysis Module:
Vol/Sat: 0.05 0.19 0.54 0.08 0.22 0.22 0.02 0.05 0.05 0.39 0.39 0.12
Crit Volume: 71 308 69 539
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*

Rocklin Crossings  
Existing + Approved + Project Saturday

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

```

*****
Intersection #1 Rocklin Road/Pacific Street
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.557
Loss Time (sec):      8           Average Delay (sec/veh):          xxxxxx
Optimal Cycle:        39          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        Split Phase      Split Phase
Rights:        Ovl                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 1 1 0          1 0 1 1 0          1 1 0 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:      37 349 339      95 375 66      10 55 28      352 176 100
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:   37 349 339      95 375 66      10 55 28      352 176 100
Added Vol:     0  51 248      14  50  0       0 10  0      225  10  16
PasserByVol:  0  0  0           0  0  0           0  0  0           0  0  0
Initial Fut:   37 400 587     109 425 66      10 65 28      577 186 116
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:    37 400 587     109 425 66      10 65 28      577 186 116
Reduct Vol:    0  0  0           0  0  0           0  0  0           0  0  0
Reduced Vol:   37 400 587     109 425 66      10 65 28      577 186 116
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 1.10 1.00 1.00
FinalVolume:   37 400 587     109 425 66      10 65 28      635 186 116
-----|-----|-----|-----|
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 1.73 0.27 1.00 1.40 0.60 1.55 0.45 1.00
Final Sat.:   1375 2750 1375   1375 2380 370 1375 1922 828 2127 623 1375
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:      0.03 0.15 0.43   0.08 0.18 0.18 0.01 0.03 0.03 0.30 0.30 0.08
Crit Volume:   200           109           47           410
Crit Moves:    ****          ****          ****          ****
*****

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Rocklin Crossings  
Existing + Approved + Project Conditions - AM 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

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.665  
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
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			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	1

Volume Module:

Base Vol:	329	376	54	37	546	46	51	139	199	76	269	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:	329	376	54	37	546	46	51	139	199	76	269	81
Added Vol:	43	96	3	25	95	35	26	20	46	8	43	32
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	372	472	57	62	641	81	77	159	245	84	312	113
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:	372	472	57	62	641	81	77	159	245	84	312	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	372	472	57	62	641	81	77	159	245	84	312	113
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:	372	472	57	62	641	81	77	159	245	84	312	113

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	1.47	0.53
Final Sat.:	1375	2750	1375	1375	4125	1375	1375	2750	1375	1375	2019	731

Capacity Analysis Module:

Vol/Sat:	0.27	0.17	0.04	0.05	0.16	0.06	0.06	0.06	0.18	0.06	0.15	0.15
Crit Volume:	372			214			245	84				
Crit Moves:	****			****			****	****				

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Rocklin Crossings  
Existing + Approved + Project Conditions - PM 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):	0.787
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	81	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	0	1	1	0	3	0	1	1	0	1	0	1	1	0

Volume Module:

Base Vol:	253	627	68	71	484	61	166	236	341	43	136	41
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:	253	627	68	71	484	61	166	236	341	43	136	41
Added Vol:	89	254	9	92	252	70	76	55	88	6	39	88
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	342	881	77	163	736	131	242	291	429	49	175	129
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:	342	881	77	163	736	131	242	291	429	49	175	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	342	881	77	163	736	131	242	291	429	49	175	129
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:	342	881	77	163	736	131	242	291	429	49	175	129

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	1.15	0.85
Final Sat.:	1375	2750	1375	1375	4125	1375	1375	2750	1375	1375	1583	1167

Capacity Analysis Module:

Vol/Sat:	0.25	0.32	0.06	0.12	0.18	0.10	0.18	0.11	0.31	0.04	0.11	0.11	
Crit Volume:				441				163				429	49
Crit Moves:	****			****			****			****			

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Rocklin Crossings
Existing + Approved + Project Saturday

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): 0.659
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 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 categories and 12 rows of adjustment factors.

Saturation Flow Module: Table with 12 columns representing saturation flow and 4 rows of adjustment factors.

Capacity Analysis Module: Table with 12 columns representing capacity analysis and 4 rows of critical values.

Rocklin Crossings  
Existing + Approved + Project Conditions - 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): 0.650  
Loss Time (sec): 9 Average Delay (sec/veh): 18.8  
Optimal Cycle: 46 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	0	1	0	0	0	0	1	0	1	0

Volume Module:

Base Vol:	6	149	24	132	446	21	1	19	5	70	24	99
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:	6	149	24	132	446	21	1	19	5	70	24	99
Added Vol:	0	142	11	70	287	0	0	0	0	3	0	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	291	35	202	733	21	1	19	5	73	24	123
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	7	360	43	250	907	26	1	24	6	90	30	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	360	43	250	907	26	1	24	6	90	30	152
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	360	43	250	907	26	1	24	6	90	30	152

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	0.97	0.97	0.97	0.76	0.76	0.85
Lanes:	1.00	0.89	0.11	1.00	0.97	0.03	0.04	0.76	0.20	0.75	0.25	1.00
Final Sat.:	1805	1669	201	1805	1840	53	73	1394	367	1090	358	1615

Capacity Analysis Module:

Vol/Sat:	0.00	0.22	0.22	0.14	0.49	0.49	0.02	0.02	0.02	0.08	0.08	0.09
Crit Moves:	****				****							****
Green/Cycle:	0.01	0.47	0.47	0.30	0.76	0.76	0.15	0.15	0.15	0.15	0.15	0.15
Volume/Cap:	0.65	0.46	0.46	0.46	0.65	0.65	0.12	0.12	0.12	0.57	0.57	0.65
Delay/Veh:	136.3	18.6	18.6	29.1	6.8	6.8	37.4	37.4	37.4	43.6	43.6	46.7
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:	136.3	18.6	18.6	29.1	6.8	6.8	37.4	37.4	37.4	43.6	43.6	46.7
LOS by Move:	F	B	B	C	A	A	D	D	D	D	D	D
HCM2kAvgQ:	1	8	8	6	14	14	1	1	1	4	4	6

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

Rocklin Crossings
Existing + Approved + Project Conditions - 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): 0.874
Loss Time (sec): 9 Average Delay (sec/veh): 27.7
Optimal Cycle: 91 Level Of Service: C
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), 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, Added Vol, 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
Existing + Approved + Project Saturday

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): 0.743
Loss Time (sec): 9 Average Delay (sec/veh): 21.4
Optimal Cycle: 57 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 traffic movements and 13 rows of volume-related metrics like Base Vol, Growth Adj, etc.

Saturation Flow Module: Table with 13 columns and 4 rows showing saturation flow rates and adjustment factors.

Capacity Analysis Module: Table with 13 columns and 10 rows showing capacity analysis metrics like Vol/Sat, Crit Moves, Green/Cycle, etc.

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