

**APPENDIX I**

**2030 NO PROJECT WITH DOMINGUEZ ROAD  
TRAFFIC VOLUME DEVELOPMENT AND LOS WORKSHEETS**

**Rocklin Crossings Traffic Impact Study  
With Dominguez Road Extension - 2030 Link Volume Adjustments**

Blue Areas = Input areas

2008 AM Peak Hour (38% of the Peak Period)									
NODE NUMBER	APPROACH				DEPARTURE				
	NL	EL	SL	WL	NL	EL	SL	WL	
1	368	275	394	52	207	304	552	26	
2	182	736	0	521	409	601	0	430	
3	172	921	0	601	0	340	618	736	
4	0	574	653	340	116	530	0	921	
5	35	269	9	214	134	129	37	228	
6	14	111	0	60	60	27	0	98	
7	383	342	332	113	94	258	467	351	
8	467	108	279	0	332	28	492	0	
9	488	0	332	18	290	0	430	116	
10	430	410	281	0	332	216	573	0	
11	555	0	252	166	281	0	572	138	
12	572	0	252	0	252	0	572	0	
13	448	359	402	224	252	153	589	438	
14	571	117	222	0	293	302	316	0	
15	348	0	285	76	193	0	76	413	
16	76	132	203	0	285	50	75	0	
17	0	100	15	20	0	28	49	58	
18	62	0	299	117	24	0	134	319	
19	348	30	74	9	103	29	315	14	
20	380	93	99	0	191	60	322	0	
21	239	157	278	251	164	79	390	291	
22	0	0	0	0	0	0	0	0	

2030 AM Peak Hour (38% of the Peak Period)									
NODE NUMBER	APPROACH				DEPARTURE				
	NL	EL	SL	WL	NL	EL	SL	WL	
1	822	1,098	1,223	171	692	738	1,646	237	
2	473	2,024	0	1,066	804	1,164	0	1,591	
3	667	2,133	0	1,164	0	804	1,135	2,024	
4	0	1,551	1,448	804	284	1,387	0	2,133	
5	340	836	344	671	701	405	272	812	
6	236	405	808	180	429	528	235	436	
7	1,880	1,038	1,292	338	997	534	1,996	1,021	
8	1,996	713	1,099	0	1,292	450	2,064	0	
9	1,956	0	1,300	108	1,136	0	1,726	440	
10	1,726	1,319	1,411	110	1,300	112	2,737	418	
11	1,889	256	972	1,541	1,758	674	2,167	24	
12	2,167	141	1,142	235	870	51	1,956	808	
13	1,488	1,065	1,393	515	1,041	330	1,860	1,231	
14	1,248	490	371	0	688	485	936	0	
15	890	0	670	216	619	0	346	764	
16	346	663	376	0	670	187	529	0	
17	0	626	108	190	0	247	110	567	
18	422	0	744	279	143	0	287	1,013	
19	1,675	268	413	25	677	88	1,408	207	
20	2,126	337	625	0	860	378	1,851	0	
21	721	455	521	361	418	176	878	585	
22	0	0	0	0	0	0	0	0	

2008 PM Peak Hour (28% of the Peak Period)									
NODE NUMBER	APPROACH				DEPARTURE				
	NL	EL	SL	WL	NL	EL	SL	WL	
1	392	532	1,191	35	697	596	786	35	
2	817	1,163	0	902	516	1,429	0	937	
3	233	1,435	0	1,429	0	769	1,167	1,163	
4	0	927	1,130	769	271	1,119	0	1,435	
5	218	243	84	522	124	537	30	376	
6	101	125	0	240	54	246	0	165	
7	277	362	890	655	675	705	576	230	
8	576	107	885	0	890	214	464	0	
9	483	0	761	251	883	0	504	110	
10	504	326	731	1	761	194	605	0	
11	605	0	847	434	731	0	538	618	
12	538	0	847	0	847	0	538	0	
13	580	291	856	839	848	547	767	403	
14	550	364	641	0	904	363	287	0	
15	514	0	486	70	465	0	186	459	
16	186	482	187	0	486	144	225	0	
17	0	102	87	139	0	209	35	85	
18	48	0	308	513	109	0	487	274	
19	273	12	526	61	582	51	224	15	
20	411	140	545	0	684	150	263	0	
21	189	117	622	450	365	196	473	344	
22									

2030 PM Peak Hour (28% of the Peak Period)									
NODE NUMBER	APPROACH				DEPARTURE				
	NL	EL	SL	WL	NL	EL	SL	WL	
1	809	944	1,686	326	819	1,311	1,391	244	
2	940	1,690	0	1,857	702	2,370	0	1,415	
3	412	2,029	0	2,370	0	1,686	1,435	1,690	
4	0	1,589	1,135	1,686	616	1,765	0	2,029	
5	712	574	463	1,066	574	1,007	353	880	
6	414	494	372	562	427	447	688	280	
7	1,290	629	2,172	1,131	1,922	1,033	1,768	499	
8	1,768	608	2,111	0	2,172	858	1,456	0	
9	1,444	0	1,719	606	1,976	0	1,645	196	
10	1,645	799	2,037	478	1,719	353	2,563	325	
11	1,489	680	2,018	936	3,016	537	1,305	153	
12	1,305	233	2,131	688	1,985	226	1,775	372	
13	1,496	476	2,186	1,390	1,596	1,167	1,962	823	
14	759	487	894	0	1,159	523	459	0	
15	730	0	884	190	666	0	362	814	
16	362	572	803	0	884	332	520	0	
17	0	312	214	643	0	748	135	286	
18	194	0	466	1,152	530	0	819	463	
19	1,056	74	1,307	241	1,570	361	715	30	
20	1,236	436	1,845	0	2,133	338	1,046	0	
21	306	159	868	587	580	528	502	309	
22									

**Rocklin Crossings Traffic Impact Study  
With Dominguez Road Extension - 2030 Link Volume Adjustments**

Project Driveway don't apply factor

AM Peak Hour DIFFERENCE (2030-2008)								
NODE NUMBER	APPROACH				DEPARTURE			
	NL	EL	SL	WL	NL	EL	SL	WL
1	454	823	829	119	486	434	1,094	211
2	290	1,289	0	545	395	563	0	1,161
3	495	1,211	0	563	0	464	517	1,289
4	0	977	795	464	167	857	0	1,211
5	306	567	335	457	568	277	235	584
6	221	294	808	120	369	501	235	338
7	1,497	697	960	225	903	276	1,529	671
8	1,529	605	820	0	960	422	1,572	0
9	1,468	0	969	90	846	0	1,296	323
10	1,296	909	1,129	110	969	0	2,164	418
11	1,334	256	721	1,375	1,477	674	1,595	0
12	1,595	141	890	235	618	51	1,384	808
13	1,040	705	991	291	788	177	1,271	793
14	677	372	150	0	395	183	620	0
15	543	0	384	140	427	0	270	351
16	270	530	173	0	384	136	454	0
17	0	527	93	170	0	220	62	509
18	361	0	445	162	119	0	153	694
19	1,327	237	339	16	575	59	1,093	193
20	1,745	244	526	0	669	318	1,529	0
21	481	299	243	110	254	97	488	294
22	0	0	0	0	0	0	0	0

Take 83% of difference to bring up to 2010								
NODE NUMBER	APPROACH				DEPARTURE			
	NL	EL	SL	WL	NL	EL	SL	WL
1	377	683	688	99	403	360	908	175
2	241	1,070	0	452	328	467	0	963
3	411	1,005	0	467	0	385	429	1,070
4	0	811	660	385	139	711	0	1,005
5	254	471	278	379	471	230	195	485
6	184	244	671	100	306	416	195	280
7	1,242	578	797	187	749	229	1,269	557
8	1,269	502	681	0	797	350	1,305	0
9	1,218	0	804	75	702	0	1,076	268
10	1,076	754	937	92	804	0	1,796	347
11	1,107	256	598	1,141	1,226	674	1,324	0
12	1,324	141	739	195	513	51	1,149	671
13	863	585	822	242	654	147	1,055	658
14	562	309	124	0	328	152	515	0
15	451	0	319	116	354	0	224	291
16	224	440	144	0	319	113	377	0
17	0	437	77	141	0	182	51	422
18	299	0	369	135	99	0	127	576
19	1,102	197	282	13	477	49	907	161
20	1,449	202	437	0	555	264	1,269	0
21	400	248	202	91	211	81	405	244
22	0	0	0	0	0	0	0	0

PM Peak Hour DIFFERENCE (2030-2008)								
NODE NUMBER	APPROACH				DEPARTURE			
	NL	EL	SL	WL	NL	EL	SL	WL
1	417	412	495	291	122	715	605	209
2	123	527	0	955	186	941	0	478
3	179	594	0	941	0	917	268	527
4	0	662	5	917	345	646	0	594
5	494	331	379	544	450	470	323	504
6	313	369	372	322	373	201	688	115
7	1,013	267	1,282	476	1,247	328	1,192	269
8	1,192	501	1,226	0	1,282	644	992	0
9	961	0	958	355	1,093	0	1,141	86
10	1,141	473	1,306	477	958	159	1,958	325
11	884	680	1,171	502	2,285	537	767	0
12	767	233	1,284	688	1,138	226	1,237	372
13	916	185	1,330	551	748	620	1,195	420
14	209	123	253	0	255	160	172	0
15	216	0	398	120	201	0	176	355
16	176	90	616	0	398	188	295	0
17	0	210	127	504	0	539	100	201
18	146	0	158	639	421	0	332	189
19	783	62	781	180	988	310	491	15
20	825	296	1,300	0	1,449	188	783	0
21	117	42	246	137	215	332	29	0
22	0	0	0	0	0	0	0	0

Take 83% of difference to bring up to 2010								
NODE NUMBER	APPROACH				DEPARTURE			
	NL	EL	SL	WL	NL	EL	SL	WL
1	346	342	411	242	101	593	502	173
2	102	437	0	793	154	781	0	397
3	149	493	0	781	0	761	222	437
4	0	549	4	761	286	536	0	493
5	410	275	315	452	374	390	268	418
6	260	306	309	267	310	167	571	95
7	841	222	1,064	395	1,035	272	989	223
8	989	416	1,018	0	1,064	535	823	0
9	798	0	795	295	907	0	947	71
10	947	393	1,084	396	795	132	1,625	270
11	734	680	972	417	1,897	537	637	0
12	637	233	1,066	571	945	226	1,027	309
13	760	154	1,104	457	621	515	992	349
14	173	102	210	0	212	133	143	0
15	179	0	330	100	167	0	146	295
16	146	75	511	0	330	156	245	0
17	0	174	105	418	0	447	83	167
18	121	0	131	530	349	0	276	157
19	650	51	648	149	820	257	408	12
20	685	246	1,079	0	1,203	156	650	0
21	97	35	204	114	178	276	24	0
22	0	0	0	0	0	0	0	0

**Rocklin Crossings Traffic Impact Study  
With Dominguez Road Extension - 2030 Link Volume Adjustments**

Intersection <small>*Unsignalized Intersection</small>	AM APRIL 2010 RAW VEHICLE TURNING MOVEMENT COUNTS												AM 2010 RAW LINK VEHICLE VOLUMES							
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			APPROACH				DEPARTURE			
	L	T	R	L	T	R	L	T	R	L	T	R	NL	EL	SL	WL	NL	EL	SL	WL
1. Rocklin Road/Pacific Street	24	298	444	31	149	51	177	333	15	317	132	99	525	548	766	231	428	770	701	171
2. Rocklin Road/Granite Road	20	10	7	103	679	9	288	5	90	9	664	409	383	1,082	37	791	522	974	23	774
3. Rocklin Road/I-80 Westbound Ramps	0	0	0	0	569	451	48	0	200	353	949	0	248	1,302	0	1,020	0	617	804	1,149
4. Rocklin Road/I-80 Eastbound Ramps	593	0	754	178	475	0	0	0	0	0	662	37	0	699	1,347	653	215	1,229	0	1,255
5. Dominguez Road/Pacific Street	28	60	24	89	296	32	10	22	44	23	308	54	76	385	112	417	203	330	77	380
6. Dominguez Road/Granite Drive	55	75	0	23	0	39	0	215	46	0	0	0	261	0	130	62	98	0	254	101
7. Sierra College Boulevard/Taylor Road	135	173	115	50	177	51	18	420	88	173	185	10	526	368	423	278	233	310	644	408
8. Sierra College Boulevard/Brace Road	0	357	34	0	0	59	82	559	3	73	0	68	644	141	391	59	425	116	691	3
9. Sierra College Boulevard/Granite Drive	160	396	92	32	20	56	78	526	75	141	28	26	679	195	648	108	454	190	723	263
10. Sierra College Boulevard/I-80 Westbound Ramp	0	411	37	0	0	5	0	669	8	573	6	230	677	809	448	5	641	37	1,247	14
11. Sierra College Boulevard/I-80 Eastbound Ramp	0	508	1	184	1	123	0	1020	116	0	0	0	1,136	0	509	308	692	2	1,143	116
12. Sierra College Boulevard/Dominguez Road	0	509	0	0	0	0	0	1143	0	0	0	0	1,143	0	509	0	509	0	1,143	0
13. Sierra College Boulevard/Rocklin Road	330	376	54	51	137	199	37	550	46	77	269	81	633	427	760	387	508	228	826	645
14. Taylor Road/Horseshoe Bar Road	4	258	43	12	58	17	422	326	18	43	24	388	766	455	305	87	658	523	386	46
15. Horseshoe Bar Road/I-80 Westbound Ramp	152	474	69	54	44	63	13	193	394	29	71	25	600	125	695	161	553	126	285	617
16. Horseshoe Bar Road/I-80 Eastbound Ramp	0	370	41	0	0	0	84	208	0	39	0	325	292	364	411	0	695	125	247	0
17. Barton Road/Brace Road	14	0	64	0	89	20	0	0	0	68	69	0	0	137	78	109	0	153	88	83
18. Barton Road/Rocklin Road	213	40	0	55	0	165	0	33	62	0	0	0	95	0	253	220	95	0	198	275
19. Sierra College Boulevard/King Rd	8	145	21	1	18	7	101	481	25	42	16	46	607	104	174	26	192	140	530	49
20. Sierra College Boulevard/English Colony Way	0	191	0	0	0	0	70	505	0	1	0	65	575	66	191	0	256	70	506	0
21. Taylor Road/King Road	190	365	106	184	96	206	53	323	122	153	90	97	498	340	661	486	646	255	682	402
22. Sierra College Boulevard/Black Willow Street													0	0	0	0	0	0	0	0

Intersection <small>*Unsignalized Intersection</small>	PM APRIL 2010 RAW VEHICLE TURNING MOVEMENT COUNTS												PM 2010 RAW LINK VEHICLE VOLUMES							
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			APPROACH				DEPARTURE			
	L	T	R	L	T	R	L	T	R	L	T	R	NL	EL	SL	WL	NL	EL	SL	WL
1. Pacific Street/Rocklin Road	29	455	454	29	97	23	112	461	23	487	139	193	596	819	938	149	677	663	971	191
2. Granite Road/Rocklin Road	34	18	9	212	653	14	464	14	196	40	654	476	674	1,170	61	879	706	1,126	68	884
3. Rocklin Road/I-80 Westbound Ramps	0	0	0	0	575	558	35	0	203	438	1010	0	238	1,448	0	1,133	0	610	996	1,213
4. Rocklin Road/I-80 Eastbound Ramps	481	2	542	195	491	0	0	0	0	0	929	83	0	1,012	1,025	686	280	1,033	0	1,410
5. Dominguez Road/Pacific Street	33	19	27	36	482	27	53	43	134	12	396	12	230	420	79	545	67	562	82	563
6. Granite Drive/Dominguez Road	55	273	0	37	0	44	0	181	25	0	0	0	206	0	328	81	310	0	225	80
7. Sierra College Boulevard/Taylor Road	82	456	187	140	274	103	20	238	79	150	244	40	337	434	725	517	636	481	491	405
8. Sierra College Boulevard/Brace Road	0	678	105	0	0	73	83	386	0	62	0	80	469	142	783	73	758	188	521	0
9. Sierra College Boulevard/Granite Drive	105	550	64	130	32	159	62	406	88	113	25	32	556	170	719	321	712	158	678	218
10. Sierra College Boulevard/I-80 Westbound Ramp	7	573	61	7	0	14	0	650	8	291	6	176	658	473	641	21	756	61	955	21
11. Sierra College Boulevard/I-80 Eastbound Ramp	0	758	2	262	1	40	2	577	198	0	0	2	777	2	760	303	1,022	5	617	198
12. Sierra College Boulevard/Dominguez Road	0	760	0	0	0	0	0	617	0	0	0	0	617	0	760	0	760	0	617	0
13. Sierra College Boulevard/Rocklin Road	253	630	68	166	235	340	71	484	61	43	136	41	616	220	951	741	837	374	867	450
14. Taylor Road/Horseshoe Bar Road/	9	392	105	8	18	9	386	329	7	86	9	436	722	531	506	35	836	509	424	25
15. Horseshoe Bar Road/I-80 Westbound Ramp	58	431	142	45	46	56	54	223	315	114	46	65	592	225	631	147	541	242	393	419
16. Horseshoe Bar Road/I-80 Eastbound Ramp	0	193	44	0	0	0	146	246	0	130	0	438	392	568	237	0	631	190	376	0
17. Barton Road/Brace Road	29	0	58	1	78	22	0	0	0	47	81	0	0	128	87	101	1	136	69	110
18. Barton Road/Rocklin Road	162	52	0	69	0	219	0	36	36	0	0	0	72	0	214	288	121	0	255	198
19. Sierra College Boulevard/King Rd	4	578	22	3	7	9	77	402	8	31	10	50	487	91	604	19	631	106	442	22
20. Sierra College Boulevard/English Colony Way	0	582	4	0	0	0	36	295	0	3	0	64	331	67	586	0	646	40	298	0
21. Taylor Road/King Road	224	318	183	75	113	315	48	246	51	123	98	42	345	263	725	503	435	344	684	373
22. Sierra College Boulevard/Black Willow Street													0	0	0	0	0	0	0	0

**Rocklin Crossings Traffic Impact Study  
With Dominguez Road Extension - 2030 Link Volume Adjustments**

2030 AM Peak Hour REFINED VEH. VOLUMES (2010 + Growth)								
NODE NUMBER	APPROACH				DEPARTURE			
	NL	EL	SL	WL	NL	EL	SL	WL
1	902	1,231	1,454	330	831	1,130	1,609	346
2	624	2,152	37	1,243	850	1,441	23	1,737
3	659	2,307	0	1,487	0	1,002	1,233	2,219
4	0	1,510	2,007	1,038	354	1,940	0	2,260
5	330	856	390	796	674	560	272	865
6	445	244	801	162	404	416	449	381
7	1,768	946	1,220	465	982	539	1,913	965
8	1,913	643	1,072	59	1,222	466	1,996	3
9	1,897	195	1,452	183	1,156	190	1,799	531
10	1,753	1,563	1,385	97	1,445	37	3,043	361
11	2,243	256	1,107	1,449	1,918	676	2,467	116
12	2,467	141	1,248	195	1,022	51	2,292	671
13	1,496	1,012	1,582	629	1,162	375	1,881	1,303
14	1,328	764	429	87	986	675	901	46
15	1,051	125	1,014	277	907	126	509	908
16	516	804	555	0	1,014	238	624	0
17	0	574	155	250	0	335	139	505
18	394	0	622	355	194	0	325	851
19	1,709	301	456	39	669	189	1,437	210
20	2,024	268	628	0	811	334	1,775	0
21	898	588	863	577	857	336	1,087	646
22	0	0	0	0	0	0	0	0

AM 2030 FINAL LINK VOLUMES								
NODE NUMBER	APPROACH				DEPARTURE			
	NL	EL	SL	WL	NL	EL	SL	WL
1	902	1,231	1,454	330	831	1,130	1,609	346
2	624	2,152	37	1,243	850	1,441	23	1,737
3	659	2,307	0	1,487	0	1,002	1,233	2,219
4	0	1,510	2,007	1,038	354	1,940	0	2,260
5	330	856	390	796	674	560	272	865
6	445	244	801	162	404	416	449	381
7	1,768	946	1,220	465	982	539	1,913	965
8	1,913	643	1,072	59	1,222	466	1,996	3
9	1,897	195	1,452	183	1,156	190	1,799	531
10	1,753	1,563	1,385	97	1,445	37	3,043	361
11	2,243	256	1,107	1,449	1,918	676	2,467	116
12	2,467	141	1,248	195	1,022	51	2,292	671
13	1,496	1,012	1,582	629	1,162	375	1,881	1,303
14	1,328	764	429	87	986	675	901	46
15	1,051	125	1,014	277	907	126	509	908
16	516	804	555	0	1,014	238	624	0
17	0	574	155	250	0	335	139	505
18	394	0	622	355	194	0	325	851
19	1,709	301	456	39	669	189	1,437	210
20	2,024	268	628	0	811	334	1,775	0
21	898	588	863	577	857	336	1,087	646
22	0	0	0	0	0	0	0	0

2030 PM Peak Hour REFINED VEH. VOLUMES (2010 + Growth)								
NODE NUMBER	APPROACH				DEPARTURE			
	NL	EL	SL	WL	NL	EL	SL	WL
1	942	1,161	1,349	391	778	1,256	1,473	364
2	776	1,607	61	1,672	860	1,907	68	1,281
3	387	1,941	0	1,914	0	1,371	1,218	1,650
4	0	1,561	1,029	1,447	566	1,569	0	1,903
5	640	695	394	997	441	952	350	981
6	466	306	637	348	620	167	796	175
7	1,178	656	1,789	912	1,671	753	1,480	628
8	1,458	558	1,801	73	1,822	723	1,344	0
9	1,354	170	1,514	616	1,619	158	1,625	289
10	1,605	866	1,725	417	1,551	193	2,580	291
11	1,511	682	1,732	720	2,919	542	1,254	198
12	1,254	233	1,826	571	1,705	226	1,644	309
13	1,376	374	2,055	1,198	1,458	889	1,859	799
14	895	633	716	35	1,048	642	567	25
15	771	225	961	247	708	242	539	714
16	538	643	748	0	961	346	621	0
17	0	302	192	519	1	583	152	277
18	193	0	345	818	470	0	531	355
19	1,137	142	1,252	168	1,451	363	850	34
20	1,016	313	1,665	0	1,849	196	948	0
21	442	298	929	617	613	620	708	373
22	0	0	0	0	0	0	0	0

PM 2030 FINAL LINK VOLUMES								
NODE NUMBER	APPROACH				DEPARTURE			
	NL	EL	SL	WL	NL	EL	SL	WL
1	942	1,161	1,349	391	778	1,256	1,473	364
2	776	1,607	61	1,672	860	1,907	68	1,281
3	387	1,941	0	1,914	0	1,371	1,218	1,650
4	0	1,561	1,029	1,447	566	1,569	0	1,903
5	640	695	394	997	441	952	350	981
6	466	306	637	348	620	167	796	175
7	1,178	656	1,789	912	1,671	753	1,480	628
8	1,458	558	1,801	73	1,822	723	1,344	0
9	1,354	170	1,514	616	1,619	158	1,625	289
10	1,605	866	1,725	417	1,551	193	2,580	291
11	1,511	682	1,732	720	2,919	542	1,254	198
12	1,254	233	1,826	571	1,705	226	1,644	309
13	1,376	374	2,055	1,198	1,458	889	1,859	799
14	895	633	716	35	1,048	642	567	25
15	771	225	961	247	708	242	539	714
16	538	643	748	0	961	346	621	0
17	0	302	192	519	1	583	152	277
18	193	0	345	818	470	0	531	355
19	1,137	142	1,252	168	1,451	363	850	34
20	1,016	313	1,665	0	1,849	196	948	0
21	442	298	929	617	613	620	708	373
22	0	0	0	0	0	0	0	0

**Rocklin Crossings Traffic Impact Study  
With Dominguez Road Extension - 2030 Link Volume Adjustments**

<b>AM 2030 FINAL LINK VOLUMES</b>								
POST-PROCESS THESE NUMBERS								
<b>Intersection</b>	<b>NB IN</b>	<b>NB OUT</b>	<b>SB IN</b>	<b>SB OUT</b>	<b>EB IN</b>	<b>EB OUT</b>	<b>WB IN</b>	<b>WB OUT</b>
1	1,454	1,609	902	831	330	346	1,231	1,130
2	37	23	624	850	1,243	1,737	2,152	1,441
3	0	1,233	659	0	1,487	2,219	2,307	1,002
4	2,007	0	0	354	1,038	2,260	1,510	1,940
5	390	272	330	674	796	865	856	560
6	801	449	445	404	162	381	244	416
7	1,220	1,913	1,768	982	465	965	946	539
8	1,072	1,996	1,913	1,222	59	3	643	466
9	1,452	1,799	1,897	1,156	183	531	195	190
10	1,385	3,043	1,753	1,445	97	361	1,563	37
11	1,107	2,467	2,243	1,918	1,449	116	256	676
12	1,248	2,292	2,467	1,022	195	671	141	51
13	1,582	1,881	1,496	1,162	629	1,303	1,012	375
14	429	901	1,328	986	87	46	764	675
15	1,014	509	1,051	907	277	908	125	126
16	555	624	516	1,014	0	0	804	238
17	155	139	0	0	250	505	574	335
18	622	325	394	194	355	851	0	0
19	456	1,437	1,709	669	39	210	301	189
20	628	1,775	2,024	811	0	0	268	334
21	863	1,087	898	857	577	646	588	336
22	0	0	0	0	0	0	0	0

<b>PM 2030 FINAL LINK VOLUMES</b>								
POST-PROCESS THESE NUMBERS								
<b>Intersection</b>	<b>NB IN</b>	<b>NB OUT</b>	<b>SB IN</b>	<b>SB OUT</b>	<b>EB IN</b>	<b>EB OUT</b>	<b>WB IN</b>	<b>WB OUT</b>
1	1,349	1,473	942	778	391	364	1,161	1,256
2	61	68	776	860	1,672	1,281	1,607	1,907
3	0	1,218	387	0	1,914	1,650	1,941	1,371
4	1,029	0	0	566	1,447	1,903	1,561	1,569
5	394	350	640	441	997	981	695	952
6	637	796	466	620	348	175	306	167
7	1,789	1,480	1,178	1,671	912	628	656	753
8	1,801	1,344	1,458	1,822	73	0	558	723
9	1,514	1,625	1,354	1,619	616	289	170	158
10	1,725	2,580	1,605	1,551	417	291	866	193
11	1,732	1,254	1,511	2,919	720	198	682	542
12	1,826	1,644	1,254	1,705	571	309	233	226
13	2,055	1,859	1,376	1,458	1,198	799	374	889
14	716	567	895	1,048	35	25	633	642
15	961	539	771	708	247	714	225	242
16	748	621	538	961	0	0	643	346
17	192	152	0	1	519	277	302	583
18	345	531	193	470	818	355	0	0
19	1,252	850	1,137	1,451	168	34	142	363
20	1,665	948	1,016	1,849	0	0	313	196
21	929	708	442	613	617	373	298	620
22	0	0	0	0	0	0	0	0

Rocklin Crossings
2030 No Project - 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): 1.207
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

\*\*\*\*\*

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 FinalVolume.

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
2030 No Project - AM Peak Hour

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): 0.857
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 120 Level Of Service: D

\*\*\*\*\*

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

Volume Module:

Table with 13 columns representing different volume and adjustment factors. 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 FinalVolume.

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
2030 No Project - AM Peak Hour

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

\*\*\*\*\*

Intersection #3 Rocklin Road/I-80 Westbound Ramp

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.105
Loss Time (sec): 6 Average Delay (sec/veh): 52.8
Optimal Cycle: 180 Level Of Service: D

\*\*\*\*\*

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

Volume Module:

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

Saturation Flow Module:

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

Capacity Analysis Module:

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

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - AM Peak Hour

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

\*\*\*\*\*

Intersection #4 Rocklin Road/I-80 Eastbound Ramp

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.058
Loss Time (sec): 6 Average Delay (sec/veh): 55.4
Optimal Cycle: 180 Level Of Service: E

\*\*\*\*\*

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 metrics (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume).

Saturation Flow Module:

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

Capacity Analysis Module:

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

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - AM 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): 0.898
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 168 Level Of Service: D

\*\*\*\*\*

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

Volume Module:

Table with 13 columns representing different volume and adjustment factors (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume).

Saturation Flow Module:

Table with 13 columns representing saturation flow and adjustment factors (Sat/Lane, Adjustment, Lanes, Final Sat.).

Capacity Analysis Module:

Table with 13 columns representing capacity analysis factors (Vol/Sat, Crit Volume, Crit Moves).

\*\*\*\*\*

Rocklin Crossings
2030 No Project - AM Peak Hour

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*
Intersection #6 Dominguez Road/Granite Drive
\*\*\*\*\*
Future Volume Alternative: Peak Hour Warrant Met

Table with 5 columns: Approach, North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Lanes, Initial Vol, and ApproachDel.

Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=10.2]
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=152]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1628]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=OVERFLOW]
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=234]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1628]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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

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

Rocklin Crossings
2030 No Project - AM Peak Hour

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

\*\*\*\*\*

Intersection #6 Dominguez Road/Granite Drive

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.472
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 33 Level Of Service: A

\*\*\*\*\*

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 FinalVolume.

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
2030 No Project - AM Peak Hour

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

Intersection #7 Sierra College Boulevard/Taylor Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.950
Loss Time (sec): 8 Average Delay (sec/veh): 44.3
Optimal Cycle: 137 Level Of Service: D

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

Volume Module: Table with 13 columns for traffic volumes and adjustments (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 values (Sat/Lane, Adjustment, Lanes, Final Sat.).

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

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

Rocklin Crossings
2030 No Project - AM Peak Hour

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

\*\*\*\*\*

Intersection #8 Sierra College Boulevard/Brace Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.673
Loss Time (sec): 8 Average Delay (sec/veh): 23.7
Optimal Cycle: 45 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 (Permitted, Protected), Rights (Include), Min. Green, Y+R, Lanes.

Volume Module:

Table with 12 columns representing different volume metrics and 12 rows including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module:

Table with 12 columns representing saturation flow metrics and 4 rows: Sat/Lane, Adjustment, Lanes, Final Sat..

Capacity Analysis Module:

Table with 12 columns representing capacity analysis metrics and 10 rows: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - AM Peak Hour

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

\*\*\*\*\*

Intersection #9 Sierra College Boulevard/Granite Drive

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.773
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 76 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 (0), Y+R (4.0), Lanes (1, 0, 2, 1, 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, Final Volume.

Saturation Flow Module:

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

Capacity Analysis Module:

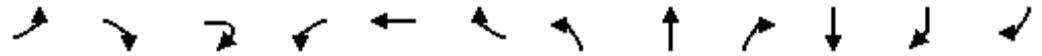
Table with 13 columns for capacity analysis metrics: Vol/Sat, Crit Volume, Crit Moves.

\*\*\*\*\*



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

10/6/2010



Movement	EBL	EBR	EBR2	WBL2	WBT	WBR	NBL	NBT	NBR	SBT	SBR	SBR2
Lane Configurations	↖	↗		↖↗	↑	↖	↖	↑↑↑	↖	↑↑	↖	↖
Volume (vph)	17	61	20	1204	20	327	256	1054	37	904	747	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		0.97	1.00	1.00	1.00	0.91	1.00	0.95	1.00	1.00
Frt	1.00	0.85		1.00	1.00	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	1863	1583	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	1863	1583	1770	5085	1583	3539	1863	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	17	61	20	1204	20	327	256	1054	37	904	747	85
RTOR Reduction (vph)	0	8	0	0	0	68	0	0	0	0	0	18
Lane Group Flow (vph)	17	73	0	1204	20	259	256	1054	37	904	747	67
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)	17.0	40.0		49.4	36.4	111.0	19.0	74.6	140.0	51.6	51.6	51.6
Effective Green, g (s)	17.0	40.0		49.4	36.4	111.0	19.0	74.6	140.0	51.6	51.6	51.6
Actuated g/C Ratio	0.12	0.29		0.35	0.26	0.79	0.14	0.53	1.00	0.37	0.37	0.37
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	215	498		1211	484	1300	240	2710	1583	1304	687	583
v/s Ratio Prot	0.01	0.00		c0.35	0.01	c0.05	c0.14	0.21		0.26	c0.40	
v/s Ratio Perm		0.04				0.11			0.02			0.04
v/c Ratio	0.08	0.15		0.99	0.04	0.20	1.07	0.39	0.02	0.69	1.09	0.11
Uniform Delay, d1	54.6	37.3		45.2	38.7	3.6	60.5	19.3	0.0	37.5	44.2	29.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.82	0.42	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.1		24.3	0.0	0.1	73.5	0.4	0.0	3.1	60.5	0.4
Delay (s)	54.7	37.4		69.5	38.8	3.6	123.0	8.4	0.0	40.5	104.7	29.5
Level of Service	D	D		E	D	A	F	A	A	D	F	C
Approach Delay (s)					55.2			30.0		67.6		
Approach LOS					E			C		E		

























**Intersection Summary**

HCM Average Control Delay	52.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

# HCM Signalized Intersection Capacity Analysis

## 11: I-80 EB & Rocklin Crossings

10/6/2010

												
Movement	EBL2	EBT	EBR	WBL	WBR	WBR2	NBT	NBR	NBR2	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	706	0	421	0	0	0	641	354	0	0	1957	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0			4.0	4.0
Lane Util. Factor	0.97		1.00				0.91	1.00			0.95	1.00
Frt	1.00		0.85				1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00				1.00	1.00			1.00	1.00
Satd. Flow (prot)	3433		1583				5085	1863			3539	1583
Flt Permitted	0.95		1.00				1.00	1.00			1.00	1.00
Satd. Flow (perm)	3433		1583				5085	1863			3539	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	706	0	421	0	0	0	641	354	0	0	1957	116
RTOR Reduction (vph)	0	0	15	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	706	0	406	0	0	0	641	354	0	0	1957	116
Turn Type	Split		Perm	custom	custom	Free		Prot	Perm	Prot		Free
Protected Phases	4	4					2	2		1	6	
Permitted Phases			4	7	7	Free			2			Free
Actuated Green, G (s)	37.4		37.4				94.6	94.6			94.6	140.0
Effective Green, g (s)	37.4		37.4				94.6	94.6			94.6	140.0
Actuated g/C Ratio	0.27		0.27				0.68	0.68			0.68	1.00
Clearance Time (s)	4.0		4.0				4.0	4.0			4.0	
Vehicle Extension (s)	3.0		3.0				3.0	3.0			3.0	
Lane Grp Cap (vph)	917		423				3436	1259			2391	1583
v/s Ratio Prot	0.21						0.13	0.19			c0.55	
v/s Ratio Perm			c0.26									0.07
v/c Ratio	0.77		0.96				0.19	0.28			0.82	0.07
Uniform Delay, d1	47.3		50.5				8.4	9.1			16.5	0.0
Progression Factor	1.00		1.00				1.00	1.00			2.16	1.00
Incremental Delay, d2	3.9		32.9				0.1	0.6			1.6	0.0
Delay (s)	51.3		83.4				8.5	9.6			37.1	0.0
Level of Service	D		F				A	A			D	A
Approach Delay (s)		63.3					8.9				35.0	
Approach LOS		E					A				D	
<b>Intersection Summary</b>												
HCM Average Control Delay			36.4				HCM Level of Service				D	
HCM Volume to Capacity ratio			0.86									
Actuated Cycle Length (s)			140.0				Sum of lost time (s)				8.0	
Intersection Capacity Utilization			86.8%				ICU Level of Service				E	
Analysis Period (min)			15									
c Critical Lane Group												

Rocklin Crossings
2030 No Project - 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): 0.799
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 85 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 metrics and 13 rows for various adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module:

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

Capacity Analysis Module:

Table with 13 columns for capacity analysis metrics and 4 rows for Vol/Sat, Crit Volume, Crit Moves, and asterisks.

\*\*\*\*\*

Rocklin Crossings
2030 No Project - AM Peak Hour

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

\*\*\*\*\*

Intersection #13 Sierra College Boulevard/Rocklin Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.408
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 sub-columns (L, T, R) for Movement. 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 FinalVolume.

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
2030 No Project - AM Peak Hour

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

\*\*\*\*\*

Intersection #14 Taylor Road/Horseshoe Bar Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.063
Loss Time (sec): 8 Average Delay (sec/veh): 54.4
Optimal Cycle: 180 Level Of Service: D

\*\*\*\*\*

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

Volume Module:

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

Saturation Flow Module:

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

Capacity Analysis Module:

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

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - AM Peak Hour

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

\*\*\*\*\*

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

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.447
Loss Time (sec): 8 Average Delay (sec/veh): 19.0
Optimal Cycle: 29 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, Rights, Min. Green, Y+R, Lanes.

Volume Module:

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

Saturation Flow Module:

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

Capacity Analysis Module:

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

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - AM Peak Hour

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

\*\*\*\*\*

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

\*\*\*\*\*

Average Delay (sec/veh): 26.5 Worst Case Level Of Service: F[ 60.5]

\*\*\*\*\*

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
2030 No Project - AM Peak Hour

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

\*\*\*\*\*

Intersection #17 Barton Road/Brace Road

\*\*\*\*\*

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: B[ 14.7]

\*\*\*\*\*

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., across four directions.

Critical Gap Module:

Table with 13 columns for Critical Gap and FollowUpTim values across four directions.

Capacity Module:

Table with 13 columns for Capacity metrics like Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Level Of Service Module:

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

\*\*\*\*\*

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

\*\*\*\*\*



Rocklin Crossings
2030 No Project - AM Peak Hour

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

\*\*\*\*\*

Intersection #18 Barton Road/Rocklin Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.969
Loss Time (sec): 0 Average Delay (sec/veh): 31.1
Optimal Cycle: 0 Level of Service: D

\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 rows: Movement (L, T, R), Control (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
2030 No Project - 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): 0.679
Loss Time (sec): 9 Average Delay (sec/veh): 20.1
Optimal Cycle: 49 Level Of Service: C

\*\*\*\*\*

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

Volume Module:

Table with 13 columns 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) and 3 rows for North, South, and East bounds.

Saturation Flow Module:

Table with 13 columns for saturation flow metrics (Sat/Lane, Adjustment, Lanes, Final Sat.) and 3 rows for North, South, and East bounds.

Capacity Analysis Module:

Table with 13 columns for capacity analysis metrics (Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ) and 3 rows for North, South, and East bounds.

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - AM Peak Hour

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

\*\*\*\*\*

Intersection #20 Sierra College Boulevard/English Colony Way

\*\*\*\*\*

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: C [ 17.1]

\*\*\*\*\*

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 different traffic flow directions and metrics like Base Vol, Growth Adj, Initial Bse, etc.

Critical Gap Module table with 12 columns showing critical gap and follow-up time for various directions.

Capacity Module table with 12 columns showing conflict volume, potential capacity, move capacity, and volume/capacity ratios.

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

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - AM Peak Hour

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

\*\*\*\*\*

Intersection #21 Taylor Road/King Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.749
Loss Time (sec): 9 Average Delay (sec/veh): 37.0
Optimal Cycle: 58 Level Of Service: D

\*\*\*\*\*

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

Volume Module:

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

Saturation Flow Module:

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

Capacity Analysis Module:

Table with 13 columns representing capacity analysis metrics and 9 rows of data including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - 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): 1.178
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 sub-columns (L, T, R) for each. Rows include 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
2030 No Project - PM Peak Hour

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): 0.826
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 99 Level Of Service: D

\*\*\*\*\*

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

Volume Module:

Table with 13 columns for various 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, FinalVolume.

Saturation Flow Module:

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

Capacity Analysis Module:

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - PM Peak Hour

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

\*\*\*\*\*

Intersection #3 Rocklin Road/I-80 Westbound Ramp

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.923
Loss Time (sec): 6 Average Delay (sec/veh): 28.8
Optimal Cycle: 109 Level Of Service: C

\*\*\*\*\*

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 FinalVolume.

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
2030 No Project - 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): 1.025
Loss Time (sec): 6 Average Delay (sec/veh): 42.4
Optimal Cycle: 180 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 for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

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, etc.

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

\*\*\*\*\*



Rocklin Crossings
2030 No Project - 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): 0.860
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 123 Level Of Service: D

\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 sub-columns (L, T, R) for each. 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 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
2030 No Project - PM Peak Hour

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*
Intersection #6 Dominguez Road/Granite Drive
\*\*\*\*\*
Future Volume Alternative: Peak Hour Warrant Met

Table with 5 columns: Approach, North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Lanes, Initial Vol, and ApproachDel.

Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=1.9]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=327]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1698]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=10.7]
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=275]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1698]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

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

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

Rocklin Crossings
2030 No Project - PM Peak Hour

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

\*\*\*\*\*

Intersection #6 Dominguez Road/Granite Drive

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.529
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: A

\*\*\*\*\*

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

Volume Module:

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

Saturation Flow Module:

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

Capacity Analysis Module:

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - 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): 0.761
Loss Time (sec): 8 Average Delay (sec/veh): 33.1
Optimal Cycle: 57 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 12 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) and 4 rows for North, South, East, West bounds.

Saturation Flow Module: Table with 12 columns for saturation flow metrics (Sat/Lane, Adjustment, Lanes, Final Sat) and 4 rows for North, South, East, West bounds.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics (Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ) and 4 rows for North, South, East, West bounds.

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

Rocklin Crossings
2030 No Project - 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): 0.828
Loss Time (sec): 8 Average Delay (sec/veh): 27.8
Optimal Cycle: 72 Level Of Service: C

\*\*\*\*\*

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

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

Volume Module: Table with 12 columns for different volume metrics and 12 rows for various adjustment factors like Base Vol, Growth Adj, etc.

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

Saturation Flow Module: Table with 12 columns for saturation flow metrics and 4 rows for Sat/Lane, Adjustment, Lanes, Final Sat.

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

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics and 10 rows for Vol/Sat, Crit Moves, Green/Cycle, etc.

\*\*\*\*\*

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

Rocklin Crossings
2030 No Project - 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): 0.608
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

\*\*\*\*\*

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 FinalVolume.

Saturation Flow Module:

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

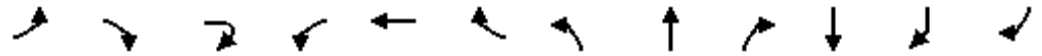
Capacity Analysis Module:

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

\*\*\*\*\*

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

10/6/2010



Movement	EBL	EBR	EBR2	WBL2	WBT	WBR	NBL	NBT	NBR	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	86	252	84	574	13	184	212	1136	41	412	1017	66
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	1.00	1.00	1.00	0.91	1.00	0.95	1.00	1.00
Frt	1.00	0.85		1.00	1.00	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	1863	1583	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	1863	1583	1770	5085	1583	3539	1863	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	86	252	84	574	13	184	212	1136	41	412	1017	66
RTOR Reduction (vph)	0	12	0	0	0	42	0	0	0	0	0	15
Lane Group Flow (vph)	86	324	0	574	13	142	212	1136	41	412	1017	51
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)	14.8	28.8		16.0	6.2	63.2	9.0	57.0	90.0	44.0	44.0	44.0
Effective Green, g (s)	14.8	28.8		16.0	6.2	63.2	9.0	57.0	90.0	44.0	44.0	44.0
Actuated g/C Ratio	0.16	0.32		0.18	0.07	0.70	0.10	0.63	1.00	0.49	0.49	0.49
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)	291	577		610	128	1182	177	3221	1583	1730	911	774
v/s Ratio Prot	0.05	c0.03		c0.17	0.01	0.01	c0.12	0.22		0.12	c0.55	
v/s Ratio Perm		0.17				0.08			c0.03			0.03
v/c Ratio	0.30	0.56		0.94	0.10	0.12	1.20	0.35	0.03	0.24	1.12	0.07
Uniform Delay, d1	33.0	25.4		36.5	39.3	4.4	40.5	7.8	0.0	13.3	23.0	12.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.98	0.68	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	1.3		22.9	0.3	0.0	128.0	0.3	0.0	0.3	67.1	0.2
Delay (s)	33.6	26.6		59.4	39.6	4.4	167.6	5.6	0.0	13.6	90.1	12.3
Level of Service	C	C		E	D	A	F	A	A	B	F	B
Approach Delay (s)					45.9			30.1		65.6		
Approach LOS					D			C		E		































Intersection Summary

HCM Average Control Delay	45.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	90.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

# HCM Signalized Intersection Capacity Analysis

## 11: I-80 EB & Rocklin Crossings

10/6/2010

												
Movement	EBL2	EBT	EBR	WBL	WBR	WBR2	NBT	NBR	NBR2	SBL	SBT	SBR
Lane Configurations	 	 					  			 	 	
Volume (vph)	558	0	43	0	0	0	831	858	0	0	1040	198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0			4.0	4.0
Lane Util. Factor	0.97		1.00				0.91	1.00			0.95	1.00
Frt	1.00		0.85				1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00				1.00	1.00			1.00	1.00
Satd. Flow (prot)	3433		1583				5085	1863			3539	1583
Flt Permitted	0.95		1.00				1.00	1.00			1.00	1.00
Satd. Flow (perm)	3433		1583				5085	1863			3539	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	558	0	43	0	0	0	831	858	0	0	1040	198
RTOR Reduction (vph)	0	0	34	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	558	0	9	0	0	0	831	858	0	0	1040	198
Turn Type	Split		Perm	custom	custom	Free		Prot	Perm	Prot		Free
Protected Phases	4	4					2	2		1	6	
Permitted Phases			4	7	7	Free			2			Free
Actuated Green, G (s)	18.0		18.0				64.0	64.0			64.0	90.0
Effective Green, g (s)	18.0		18.0				64.0	64.0			64.0	90.0
Actuated g/C Ratio	0.20		0.20				0.71	0.71			0.71	1.00
Clearance Time (s)	4.0		4.0				4.0	4.0			4.0	
Vehicle Extension (s)	3.0		3.0				3.0	3.0			3.0	
Lane Grp Cap (vph)	687		317				3616	1325			2517	1583
v/s Ratio Prot	c0.16						0.16	c0.46			0.29	
v/s Ratio Perm			0.01									0.13
v/c Ratio	0.81		0.03				0.23	0.65			0.41	0.13
Uniform Delay, d1	34.4		29.0				4.5	7.0			5.3	0.0
Progression Factor	1.00		1.00				0.38	0.71			0.36	1.00
Incremental Delay, d2	7.3		0.0				0.1	2.3			0.4	0.1
Delay (s)	41.6		29.0				1.8	7.2			2.3	0.1
Level of Service	D		C				A	A			A	A
Approach Delay (s)		40.7					4.6				2.0	
Approach LOS		D					A				A	
<b>Intersection Summary</b>												
HCM Average Control Delay			9.8				HCM Level of Service				A	
HCM Volume to Capacity ratio			0.68									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)				8.0	
Intersection Capacity Utilization			63.1%				ICU Level of Service				B	
Analysis Period (min)			15									
c	Critical Lane Group											



Rocklin Crossings
2030 No Project - 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): 0.655
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: B

\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 sub-columns (L, T, R) for each. 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 and adjustment factors. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - 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): 1.159
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

\*\*\*\*\*

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
2030 No Project - PM Peak Hour

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

\*\*\*\*\*

Intersection #14 Taylor Road/Horseshoe Bar Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.048
Loss Time (sec): 8 Average Delay (sec/veh): 55.0
Optimal Cycle: 180 Level Of Service: E

\*\*\*\*\*

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

Volume Module:

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

Saturation Flow Module:

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

Capacity Analysis Module:

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

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - PM Peak Hour

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

\*\*\*\*\*

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

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.374
Loss Time (sec): 8 Average Delay (sec/veh): 20.1
Optimal Cycle: 26 Level Of Service: C

\*\*\*\*\*

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

Volume Module:

Table with 13 columns 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) and 4 rows of data.

Saturation Flow Module:

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

Capacity Analysis Module:

Table with 13 columns for capacity analysis metrics (Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ) and 9 rows of data.

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - 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): 38.5 Worst Case Level Of Service: F[114.9]

\*\*\*\*\*

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

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

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

Capacity Module: Table with 3 columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module: Table with 3 columns for 2Way95thQ, Control Del, LOS by Move, and other metrics.

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - 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): 4.2 Worst Case Level Of Service: C [ 18.1]

\*\*\*\*\*

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

Volume Module:

Table with 13 columns representing different volume metrics like Base Vol, Growth Adj, Initial Bse, etc., across four bound directions.

Critical Gap Module:

Table with 13 columns for Critical Gap and FollowUpTim values across four bound directions.

Capacity Module:

Table with 13 columns for Capacity metrics like Cnflct Vol, Potent Cap., Move Cap., Volume/Cap. across four bound directions.

Level Of Service Module:

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

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - PM Peak Hour

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

\*\*\*\*\*

Intersection #18 Barton Road/Rocklin Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.650
Loss Time (sec): 0 Average Delay (sec/veh): 16.0
Optimal Cycle: 0 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 (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) and 4 rows of data.

Saturation Flow Module:

Table with 13 columns for saturation flow metrics (Adjustment, Lanes, Final Sat.) and 3 rows of data.

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) and 10 rows of data.

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - 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): 0.667
Loss Time (sec): 9 Average Delay (sec/veh): 20.1
Optimal Cycle: 47 Level Of Service: C

\*\*\*\*\*

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

Volume Module:

Table with 12 columns representing different volume metrics and 12 rows of data including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module:

Table with 12 columns representing saturation flow metrics and 4 rows of data including Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 12 columns representing capacity analysis metrics and 10 rows of data including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

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

\*\*\*\*\*



Rocklin Crossings
2030 No Project - PM Peak Hour

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

\*\*\*\*\*

Intersection #20 Sierra College Boulevard/English Colony Way

\*\*\*\*\*

Average Delay (sec/veh): 10.2 Worst Case Level Of Service: F[ 86.4]

\*\*\*\*\*

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 different volume categories and 12 rows of data.

Critical Gap Module table with 12 columns and 2 rows of data.

Capacity Module table with 12 columns and 4 rows of data.

Level Of Service Module table with 12 columns and 10 rows of data.

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings
2030 No Project - PM Peak Hour

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

\*\*\*\*\*

Intersection #21 Taylor Road/King Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.572
Loss Time (sec): 9 Average Delay (sec/veh): 31.0
Optimal Cycle: 39 Level Of Service: C

\*\*\*\*\*

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

Volume Module:

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

Saturation Flow Module:

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

Capacity Analysis Module:

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

\*\*\*\*\*

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

\*\*\*\*\*

Rocklin Crossings  
2030 No Project Conditions - 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): 0.881  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 144 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

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Volume Module:

Base Vol:	30	395	555	186	558	62	19	148	59	517	164	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	395	555	186	558	62	19	148	59	517	164	136
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	395	555	186	558	62	19	148	59	517	164	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	395	555	186	558	62	19	148	59	517	164	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	395	555	186	558	62	19	148	59	517	164	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00
FinalVolume:	30	395	555	186	558	62	19	148	59	569	164	136

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Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.80	0.20	1.00	1.43	0.57	1.55	0.45	1.00
Final Sat.:	1375	2750	1375	1375	2475	275	1375	1966	784	2134	616	1375

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Capacity Analysis Module:

Vol/Sat:	0.02	0.14	0.40	0.14	0.23	0.23	0.01	0.08	0.08	0.27	0.27	0.10
Crit Volume:	555			186			104			366		
Crit Moves:	****			****			****			****		

\*\*\*\*\*

Rocklin Crossings
2030 No Project Conditions - 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): 0.629
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: B

\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and Movement (L, T, R). 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 FinalVolume.

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 Volume, and Crit Moves.

\*\*\*\*\*

Rocklin Crossings  
2030 No Project Conditions - 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): 0.666  
 Loss Time (sec): 6 Average Delay (sec/veh): 23.5  
 Optimal Cycle: 39 Level Of Service: C

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	0	0	0	0	2	0	1	0

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Volume Module:

Base Vol:	0	0	0	33	8	139	0	953	392	491	416	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	8	139	0	953	392	491	416	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	33	8	139	0	953	392	491	416	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	33	8	139	0	953	392	491	416	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	33	8	139	0	953	392	491	416	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	33	8	139	0	953	392	491	416	0

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Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.85	0.86	0.86	1.00	0.95	0.85	0.95	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	0.05	0.95	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	1615	89	1541	0	3610	1615	1805	3610	0

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Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.02	0.09	0.09	0.00	0.26	0.24	0.27	0.12	0.00
Crit Moves:						****		****		****		
Green/Cycle:	0.00	0.00	0.00	0.14	0.14	0.14	0.00	0.40	0.40	0.41	0.80	0.00
Volume/Cap:	0.00	0.00	0.00	0.15	0.67	0.67	0.00	0.67	0.61	0.67	0.14	0.00
Delay/Veh:	0.0	0.0	0.0	38.5	48.6	48.6	0.0	26.0	25.8	26.4	2.2	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	38.5	48.6	48.6	0.0	26.0	25.8	26.4	2.2	0.0
LOS by Move:	A	A	A	D	D	D	A	C	C	C	A	A
HCM2kAvgQ:	0	0	0	1	6	6	0	12	9	12	1	0

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

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Rocklin Crossings  
2030 No Project Conditions - 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): 0.685  
 Loss Time (sec): 6 Average Delay (sec/veh): 21.1  
 Optimal Cycle: 40 Level Of Service: C

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	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	363	0	0	0	253	1252	0	0	997	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	307	2	363	0	0	0	253	1252	0	0	997	62
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	307	2	363	0	0	0	253	1252	0	0	997	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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:	307	2	363	0	0	0	253	1252	0	0	997	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	307	2	363	0	0	0	253	1252	0	0	997	62
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:	307	2	363	0	0	0	253	1252	0	0	997	62

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.94	0.94
Lanes:	1.45	0.01	1.54	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.88	0.12
Final Sat.:	2366	10	2501	0	0	0	1805	3610	0	0	3368	209

Capacity Analysis Module:

Vol/Sat:	0.13	0.21	0.15	0.00	0.00	0.00	0.14	0.35	0.00	0.00	0.30	0.30
Crit Moves:	****						****			****		
Green/Cycle:	0.30	0.30	0.30	0.00	0.00	0.00	0.20	0.64	0.00	0.00	0.43	0.43
Volume/Cap:	0.43	0.68	0.48	0.00	0.00	0.00	0.68	0.54	0.00	0.00	0.68	0.68
Delay/Veh:	28.1	32.7	28.7	0.0	0.0	0.0	42.0	10.3	0.0	0.0	24.2	24.2
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:	28.1	32.7	28.7	0.0	0.0	0.0	42.0	10.3	0.0	0.0	24.2	24.2
LOS by Move:	C	C	C	A	A	A	D	B	A	A	C	C
HCM2kAvgQ:	5	10	6	0	0	0	7	11	0	0	15	15

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

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Rocklin Crossings  
2030 No Project Conditions - Saturday

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): 0.615  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 45 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	1	0	0	1	0	0

Volume Module:

Base Vol:	56	133	107	19	20	76	107	555	84	98	513	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:	56	133	107	19	20	76	107	555	84	98	513	58
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	133	107	19	20	76	107	555	84	98	513	58
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:	56	133	107	19	20	76	107	555	84	98	513	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	133	107	19	20	76	107	555	84	98	513	58
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:	56	133	107	19	20	76	107	555	84	98	513	58

Saturation Flow Module:

Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.11	0.89	1.00	1.00	1.00	1.00	0.87	0.13	1.00	0.90	0.10
Final Sat.:	1425	1579	1271	1425	1425	1425	1425	1238	187	1425	1280	145

Capacity Analysis Module:

Vol/Sat:	0.04	0.08	0.08	0.01	0.01	0.05	0.08	0.45	0.45	0.07	0.40	0.40
Crit Volume:	120			19			639			98		
Crit Moves:	****			****			****			****		

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Rocklin Crossings
2030 No Project Conditions - Saturday

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*
Intersection #6 Dominguez Road/Granite Drive
\*\*\*\*\*
Future Volume Alternative: Peak Hour Warrant Met

Table with 5 columns: Approach, North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control, Lanes, Initial Vol, and ApproachDel.

Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.8]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=230]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1577]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=5.0]
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=167]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1577]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

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

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



Rocklin Crossings  
2030 No Project Conditions - Saturday

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

\*\*\*\*\*

Intersection #6 Dominguez Road/Granite Drive

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.562  
 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			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	1	0	1	0	1

Volume Module:

Base Vol:	173	411	388	4	198	6	2	13	215	153	12	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	173	411	388	4	198	6	2	13	215	153	12	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	173	411	388	4	198	6	2	13	215	153	12	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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:	173	411	388	4	198	6	2	13	215	153	12	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	411	388	4	198	6	2	13	215	153	12	2
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:	173	411	388	4	198	6	2	13	215	153	12	2

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	1.94	0.06	1.00	0.06	0.94	1.00	0.86	0.14
Final Sat.:	1375	2750	1375	1375	2669	81	1375	78	1297	1375	1179	196

Capacity Analysis Module:

Vol/Sat:	0.13	0.15	0.28	0.00	0.07	0.07	0.00	0.17	0.17	0.11	0.01	0.01
Crit Volume:	388			4			228			153		
Crit Moves:	****			****			****			****		

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Rocklin Crossings  
2030 No Project Conditions - 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): 0.710  
 Loss Time (sec): 8 Average Delay (sec/veh): 32.9  
 Optimal Cycle: 50 Level Of Service: C

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	1	0	1	0	1	1

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Volume Module:

Base Vol:	132	705	297	113	861	178	148	370	128	265	305	54
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:	132	705	297	113	861	178	148	370	128	265	305	54
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	132	705	297	113	861	178	148	370	128	265	305	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:	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:	132	705	297	113	861	178	148	370	128	265	305	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	705	297	113	861	178	148	370	128	265	305	54
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:	132	705	297	113	861	178	148	370	128	265	305	54

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Saturation Flow Module:

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

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Capacity Analysis Module:

Vol/Sat:	0.07	0.20	0.18	0.06	0.24	0.11	0.08	0.19	0.08	0.15	0.16	0.03
Crit Moves:	****			****			****			****		
Green/Cycle:	0.10	0.33	0.33	0.11	0.34	0.34	0.16	0.27	0.27	0.21	0.32	0.32
Volume/Cap:	0.71	0.59	0.55	0.59	0.71	0.33	0.50	0.71	0.29	0.71	0.50	0.11
Delay/Veh:	55.4	28.5	28.6	47.3	30.9	25.1	39.6	37.2	29.0	43.1	28.4	24.1
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:	55.4	28.5	28.6	47.3	30.9	25.1	39.6	37.2	29.0	43.1	28.4	24.1
LOS by Move:	E	C	C	D	C	C	D	D	C	D	C	C
HCM2kAvgQ:	4	9	7	4	13	4	5	11	3	9	8	1

\*\*\*\*\*

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

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Rocklin Crossings
2030 No Project Conditions - 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): 0.612
Loss Time (sec): 8 Average Delay (sec/veh): 22.2
Optimal Cycle: 39 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 (Permitted, Protected, Permitted, Permitted), Rights (Include, Include, Include, Include). Includes values for Min. Green, Y+R, and Lanes.

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

Volume Module: Table with 13 columns and 14 rows showing various volume adjustments like Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume.

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

Saturation Flow Module: Table with 13 columns and 4 rows showing Sat/Lane, Adjustment, Lanes, and Final Sat.

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Capacity Analysis Module: Table with 13 columns and 10 rows showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

\*\*\*\*\*

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

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Rocklin Crossings  
2030 No Project Conditions - Saturday

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): 0.480  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 33 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:	1	0	2	1	0	2	1	0	2	1	0	1

Volume Module:

Base Vol:	152	877	103	82	741	99	161	37	166	137	26	45
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	877	103	82	741	99	161	37	166	137	26	45
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	152	877	103	82	741	99	161	37	166	137	26	45
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:	152	877	103	82	741	99	161	37	166	137	26	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	877	103	82	741	99	161	37	166	137	26	45
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:	152	877	103	82	741	99	161	37	183	137	26	45

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	2.68	0.32	1.00	2.65	0.35	1.00	1.00	2.00	1.00	1.00	1.00
Final Sat.:	1375	3691	434	1375	3639	486	1375	1375	2750	1375	1375	1375

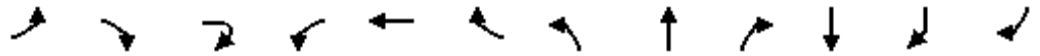
Capacity Analysis Module:

Vol/Sat:	0.11	0.24	0.24	0.06	0.20	0.20	0.12	0.03	0.07	0.10	0.02	0.03
Crit Volume:	152					280			91	137		
Crit Moves:	****					****			****	****		

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

10/6/2010

































Movement	EBL	EBR	EBR2	WBL2	WBT	WBR	NBL	NBT	NBR	SBT	SBR	SBR2
Lane Configurations	↖	↗		↖↗	↑	↖	↖	↑↑↑	↖	↑↑	↖	↖
Volume (vph)	76	186	65	428	20	161	153	913	162	135	1087	60
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	1.00	1.00	1.00	0.91	1.00	0.95	1.00	1.00
Frt	1.00	0.85		1.00	1.00	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	1863	1583	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	1863	1583	1770	5085	1583	3539	1863	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	76	186	65	428	20	161	153	913	162	135	1087	60
RTOR Reduction (vph)	0	13	0	0	0	31	0	0	0	0	0	13
Lane Group Flow (vph)	76	238	0	428	20	130	153	913	162	135	1087	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)	12.4	23.4		15.0	6.6	65.6	7.0	59.0	90.0	48.0	48.0	48.0
Effective Green, g (s)	12.4	23.4		15.0	6.6	65.6	7.0	59.0	90.0	48.0	48.0	48.0
Actuated g/C Ratio	0.14	0.26		0.17	0.07	0.73	0.08	0.66	1.00	0.53	0.53	0.53
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)	244	482		572	137	1224	138	3334	1583	1887	994	844
v/s Ratio Prot	0.04	c0.02		c0.12	0.01	0.01	c0.09	0.18		0.04	c0.58	
v/s Ratio Perm		0.13				0.07			c0.10			0.03
v/c Ratio	0.31	0.49		0.75	0.15	0.11	1.11	0.27	0.10	0.07	1.09	0.06
Uniform Delay, d1	35.0	28.3		35.7	39.1	3.6	41.5	6.5	0.0	10.2	21.0	10.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.80	0.08	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.8		5.3	0.5	0.0	107.7	0.2	0.1	0.1	57.6	0.1
Delay (s)	35.7	29.1		41.0	39.6	3.6	141.0	0.7	0.1	10.3	78.6	10.2
Level of Service	D	C		D	D	A	F	A	A	B	E	B
Approach Delay (s)					31.1			18.1		68.2		
Approach LOS					C			B		E		

Intersection Summary		
HCM Average Control Delay	40.2	HCM Level of Service D
HCM Volume to Capacity ratio	0.91	
Actuated Cycle Length (s)	90.0	Sum of lost time (s) 8.0
Intersection Capacity Utilization	89.5%	ICU Level of Service E
Analysis Period (min)	15	
c Critical Lane Group		

# HCM Signalized Intersection Capacity Analysis

## 11: I-80 EB & Rocklin Crossings

10/6/2010

												
Movement	EBL2	EBT	EBR	WBL	WBR	WBR2	NBT	NBR	NBR2	SBL	SBT	SBR
Lane Configurations	 	 					  			 	 	
Volume (vph)	434	0	123	0	0	0	794	371	0	0	709	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0			4.0	4.0
Lane Util. Factor	0.97		1.00				0.91	1.00			0.95	1.00
Frt	1.00		0.85				1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00				1.00	1.00			1.00	1.00
Satd. Flow (prot)	3433		1583				5085	1863			3539	1583
Flt Permitted	0.95		1.00				1.00	1.00			1.00	1.00
Satd. Flow (perm)	3433		1583				5085	1863			3539	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	434	0	123	0	0	0	794	371	0	0	709	40
RTOR Reduction (vph)	0	0	100	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	434	0	23	0	0	0	794	371	0	0	709	40
Turn Type	Split		Perm	custom	custom	Free		Prot	Perm	Prot		Free
Protected Phases	4	4					2	2		1	6	
Permitted Phases			4	7	7	Free			2			Free
Actuated Green, G (s)	17.0		17.0				65.0	65.0			65.0	90.0
Effective Green, g (s)	17.0		17.0				65.0	65.0			65.0	90.0
Actuated g/C Ratio	0.19		0.19				0.72	0.72			0.72	1.00
Clearance Time (s)	4.0		4.0				4.0	4.0			4.0	
Vehicle Extension (s)	3.0		3.0				3.0	3.0			3.0	
Lane Grp Cap (vph)	648		299				3673	1346			2556	1583
v/s Ratio Prot	c0.13						0.16	0.20			c0.20	
v/s Ratio Perm			0.01									0.03
v/c Ratio	0.67		0.08				0.22	0.28			0.28	0.03
Uniform Delay, d1	33.9		30.0				4.1	4.3			4.3	0.0
Progression Factor	1.00		1.00				0.37	0.35			0.41	1.00
Incremental Delay, d2	2.6		0.1				0.1	0.3			0.2	0.0
Delay (s)	36.5		30.2				1.6	1.9			2.0	0.0
Level of Service	D		C				A	A			A	A
Approach Delay (s)		35.1					1.7				1.9	
Approach LOS		D					A				A	
<b>Intersection Summary</b>												
HCM Average Control Delay			9.3				HCM Level of Service				A	
HCM Volume to Capacity ratio			0.36									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)				8.0	
Intersection Capacity Utilization			38.6%				ICU Level of Service				A	
Analysis Period (min)			15									
c	Critical Lane Group											

Rocklin Crossings  
2030 No Project Conditions - 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): 0.999  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: E

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	3	0	1	1	2	0	1	0	1	1

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Volume Module:

Base Vol:	339	1305	322	338	772	89	288	361	517	153	195	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	339	1305	322	338	772	89	288	361	517	153	195	68
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	339	1305	322	338	772	89	288	361	517	153	195	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	339	1305	322	338	772	89	288	361	517	153	195	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	339	1305	322	338	772	89	288	361	517	153	195	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
FinalVolume:	373	1305	322	338	772	89	317	361	517	168	195	68

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Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	2750	4125	1375	1375	4125	1375	2750	1375	1375	2750	1375	1375

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Capacity Analysis Module:

Vol/Sat:	0.14	0.32	0.23	0.25	0.19	0.06	0.12	0.26	0.38	0.06	0.14	0.05
Crit Volume:	435		338				517		84			
Crit Moves:	****			****			****		****			

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Rocklin Crossings  
2030 No Project Conditions - 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): 0.942  
 Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: E

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	1	0	2	0	1	0

Volume Module:

Base Vol:	442	796	137	79	803	93	80	300	458	127	271	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:	442	796	137	79	803	93	80	300	458	127	271	70
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	442	796	137	79	803	93	80	300	458	127	271	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:	442	796	137	79	803	93	80	300	458	127	271	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	442	796	137	79	803	93	80	300	458	127	271	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	1.00	1.00	1.00
FinalVolume:	442	796	137	79	803	93	80	300	458	127	271	70

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	0.79	0.21
Final Sat.:	1375	2750	1375	1375	4125	1375	1375	2750	1375	1375	1093	282

Capacity Analysis Module:

Vol/Sat:	0.32	0.29	0.10	0.06	0.19	0.07	0.06	0.11	0.33	0.09	0.25	0.25
Crit Volume:	442			268			458			127		
Crit Moves:	****			****			****			****		

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Rocklin Crossings  
2030 No Project Conditions - 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): 0.901  
Loss Time (sec): 8 Average Delay (sec/veh): 35.8  
Optimal Cycle: 100 Level Of Service: D

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	1	0	0	0	0	1	0	0	1

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Volume Module:

Base Vol:	18	438	222	377	393	21	11	12	20	150	12	361
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	438	222	377	393	21	11	12	20	150	12	361
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	438	222	377	393	21	11	12	20	150	12	361
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	438	222	377	393	21	11	12	20	150	12	361
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	438	222	377	393	21	11	12	20	150	12	361
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	438	222	377	393	21	11	12	20	150	12	361

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.99	0.99	0.92	0.92	0.92	0.95	0.86	0.86
Lanes:	1.00	0.66	0.34	1.00	0.95	0.05	0.26	0.28	0.46	1.00	0.03	0.97
Final Sat.:	1805	1198	607	1805	1789	96	450	490	817	1805	52	1572

Capacity Analysis Module:

Vol/Sat:	0.01	0.37	0.37	0.21	0.22	0.22	0.02	0.02	0.02	0.08	0.23	0.23
Crit Moves:	****			****			****			****		
Green/Cycle:	0.03	0.41	0.41	0.23	0.61	0.61	0.03	0.03	0.03	0.25	0.25	0.49
Volume/Cap:	0.36	0.90	0.90	0.90	0.36	0.36	0.90	0.90	0.90	0.33	0.90	0.47
Delay/Veh:	52.1	42.0	42.0	59.3	9.9	9.9	141.7	142	141.7	30.7	58.2	17.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.1	42.0	42.0	59.3	9.9	9.9	141.7	142	141.7	30.7	58.2	17.5
LOS by Move:	D	D	D	E	A	A	F	F	F	C	E	B
HCM2kAvgQ:	1	23	23	15	6	6	3	3	3	4	15	8

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

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Rocklin Crossings
2030 No Project Conditions - Saturday

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

\*\*\*\*\*

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

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.392
Loss Time (sec): 8 Average Delay (sec/veh): 21.8
Optimal Cycle: 27 Level Of Service: C

\*\*\*\*\*

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

Volume Module:

Table with 13 columns representing different volume and adjustment factors 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, FinalVolume.

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.

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Rocklin Crossings
2030 No Project Conditions - Saturday

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

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

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Average Delay (sec/veh): 8.7 Worst Case Level Of Service: D[ 29.7]

\*\*\*\*\*

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 for volume components like Base Vol, Growth Adj, Initial Bse, etc.

Critical Gap Module: Table with 12 columns for gap and follow-up times.

Capacity Module: Table with 12 columns for capacity-related metrics like Cnflct Vol, Potent Cap., etc.

Level Of Service Module: Table with 12 columns for LOS metrics like 2Way95thQ, Control Del, etc.

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

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Rocklin Crossings
2030 No Project Conditions - Saturday

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

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Intersection #17 Barton Road/Brace Road

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Average Delay (sec/veh): 3.8 Worst Case Level Of Service: B[ 14.9]

\*\*\*\*\*

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

Volume Module:

Table with 13 columns representing traffic volumes and adjustment factors. 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 and volume. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module:

Table with 13 columns for level of service. 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
2030 No Project Conditions - Saturday

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

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Intersection #18 Barton Road/Rocklin Road

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.496
Loss Time (sec): 0 Average Delay (sec/veh): 12.1
Optimal Cycle: 0 Level Of Service: B

\*\*\*\*\*

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

Volume Module: Table with 13 columns (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) and 13 rows.

Saturation Flow Module: Table with 13 columns (Adjustment, Lanes, Final Sat.) and 3 rows.

Capacity Analysis Module: Table with 13 columns (Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, AllWayAvgQ) and 10 rows.

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

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Rocklin Crossings  
2030 No Project Conditions - 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): 0.458  
 Loss Time (sec): 9 Average Delay (sec/veh): 20.7  
 Optimal Cycle: 32 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	1	1	0	1	0	0	1!	0	0	1!

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Volume Module:

Base Vol:	7	657	39	188	487	3	72	74	31	21	12	122
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	657	39	188	487	3	72	74	31	21	12	122
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	657	39	188	487	3	72	74	31	21	12	122
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	657	39	188	487	3	72	74	31	21	12	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	657	39	188	487	3	72	74	31	21	12	122
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	657	39	188	487	3	72	74	31	21	12	122

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Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.95	0.95	0.79	0.79	0.79	0.85	0.85	0.85
Lanes:	1.00	1.89	0.11	1.00	1.99	0.01	0.41	0.42	0.17	0.13	0.08	0.79
Final Sat.:	1805	3380	201	1805	3584	22	610	626	262	219	125	1271

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Capacity Analysis Module:

Vol/Sat:	0.00	0.19	0.19	0.10	0.14	0.14	0.12	0.12	0.12	0.10	0.10	0.10
Crit Moves:	****			****			****			****		
Green/Cycle:	0.02	0.42	0.42	0.23	0.63	0.63	0.26	0.26	0.26	0.26	0.26	0.26
Volume/Cap:	0.21	0.46	0.46	0.46	0.21	0.21	0.46	0.46	0.46	0.37	0.37	0.37
Delay/Veh:	51.7	20.8	20.8	34.1	7.8	7.8	32.1	32.1	32.1	31.0	31.0	31.0
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:	51.7	20.8	20.8	34.1	7.8	7.8	32.1	32.1	32.1	31.0	31.0	31.0
LOS by Move:	D	C	C	C	A	A	C	C	C	C	C	C
HCM2kAvgQ:	0	8	8	5	3	3	5	5	5	4	4	4

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

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Rocklin Crossings
2030 No Project Conditions - Saturday

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

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Intersection #20 Sierra College Boulevard/English Colony Way

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Average Delay (sec/veh): 3.5 Worst Case Level Of Service: D[ 28.2]

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

Volume Module:

Table with 12 columns representing different volume categories and 12 rows of data including Base Vol, Growth Adj, Initial Bse, etc.

Critical Gap Module:

Table with 12 columns and 2 rows of data for Critical Gap and FollowUpTim.

Capacity Module:

Table with 12 columns and 4 rows of data for Capacity metrics like Cnflct Vol, Potent Cap., etc.

Level Of Service Module:

Table with 12 columns and 10 rows of data for Level Of Service metrics like 2Way95thQ, Control Del, etc.

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

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Rocklin Crossings  
2030 No Project Conditions - Saturday

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

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Intersection #21 Taylor Road/King Road

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.398  
 Loss Time (sec): 9 Average Delay (sec/veh): 28.0  
 Optimal Cycle: 29 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:	183	384	217	62	300	73	60	102	171	88	66	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:	183	384	217	62	300	73	60	102	171	88	66	53
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	183	384	217	62	300	73	60	102	171	88	66	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:	183	384	217	62	300	73	60	102	171	88	66	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	384	217	62	300	73	60	102	171	88	66	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	1.00	1.00	1.00
FinalVolume:	183	384	217	62	300	73	60	102	171	88	66	53

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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	0.92	0.92	0.95	1.00	0.85	0.95	0.93	0.93
Lanes:	1.00	1.28	0.72	1.00	1.61	0.39	1.00	1.00	1.00	1.00	0.55	0.45
Final Sat.:	1805	2182	1233	1805	2819	686	1805	1900	1615	1805	983	790

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Capacity Analysis Module:

Vol/Sat:	0.10	0.18	0.18	0.03	0.11	0.11	0.03	0.05	0.11	0.05	0.07	0.07
Crit Moves:	****				****				****	****		
Green/Cycle:	0.25	0.44	0.44	0.09	0.27	0.27	0.13	0.27	0.27	0.12	0.26	0.26
Volume/Cap:	0.40	0.40	0.40	0.40	0.40	0.40	0.26	0.20	0.40	0.40	0.26	0.26
Delay/Veh:	31.5	19.4	19.4	45.1	30.3	30.3	39.9	28.7	30.7	41.7	29.7	29.7
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:	31.5	19.4	19.4	45.1	30.3	30.3	39.9	28.7	30.7	41.7	29.7	29.7
LOS by Move:	C	B	B	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	7	7	2	5	5	2	2	5	3	3	3

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

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