LINSCOTT LAW & GREENSPAN engineers

TECHNICAL APPENDICES

SWEETWATER VISTAS

County of San Diego, California
April 20, 2017

LLG Ref. 3-15-2436

Linscott, Law & Greenspan, Engineers
4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
858.300.8810 F
www.llgengineers.com

APPENDIX A

INTERSECTION AND SEGMENT MANUAL COUNT SHEETS

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Campo Rd (SR 94) @ Jamacha Blvd (SR54)

Date of Count: *Thursday, November 07, 2013*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *13-0118*

LINSCOTT LAW & GREENSPAN engineers

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Campo Rd (SR 94) @ Jamacha Blvd (SR54)

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOTAL
7:00 AM	0	0	0	54	510	5	50	1	96	3	221	9	949
7:15 AM	0	1	0	82	478	1	42	1	115	3	237	11	971
7:30 AM	2	0	1	79	500	6	69	0	148	5	244	17	1,071
7:45 AM	3	1	1	76	371	3	75	1	155	10	317	24	1,037
8:00 AM	2	0	1	67	427	1	58	1	140	9	274	28	1,008
8:15 AM	0	0	0	71	356	3	60	1	116	3	383	10	1,003
8:30 AM	3	1	1	76	362	5	75	1	152	10	365	24	1,075
8:45 AM	3	2	1	92	406	3	26	1	132	13	325	16	1,020
Total	13	5	5	597	3,410	27	455	7	1,054	56	2,366	139	8,134

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Volume	8	2	3	290	1,516	12	268	4	563	32	1,339	86	4,123
PHF	0.67	0.50	0.75	0.95	0.89	0.60	0.89	1.00	0.91	0.80	0.87	0.77	0.96
Movement PHF		0.65			0.92			0.90			0.91		0.96

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOTAL
4:00 PM	5	0	0	164	327	2	27	1	119	7	433	37	1,122
4:15 PM	0	0	0	85	368	6	64	1	133	4	490	21	1,172
4:30 PM	2	1	0	122	359	7	69	0	178	5	477	16	1,236
4:45 PM	3	1	1	77	420	2	81	2	172	11	482	30	1,282
5:00 PM	2	0	2	105	416	2	94	1	208	11	460	34	1,335
5:15 PM	2	1	0	90	388	6	88	2	167	9	521	21	1,295
5:30 PM	2	1	2	106	284	4	60	0	181	11	503	25	1,179
5:45 PM	5	1	0	131	264	2	23	5	175	22	459	44	1,131
Total	21	5	5	880	2,826	31	506	12	1,333	80	3,825	228	9,752

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Volume	9	3	3	394	1583	17	332	5	725	36	1940	101	5148
PHF	0.75	0.75	0.375	0.807	0.942	0.607	0.883	0.625	0.871	0.818	0.931	0.743	0.96
Movement PHF		0.75			0.95			0.88			0.94		0.96

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

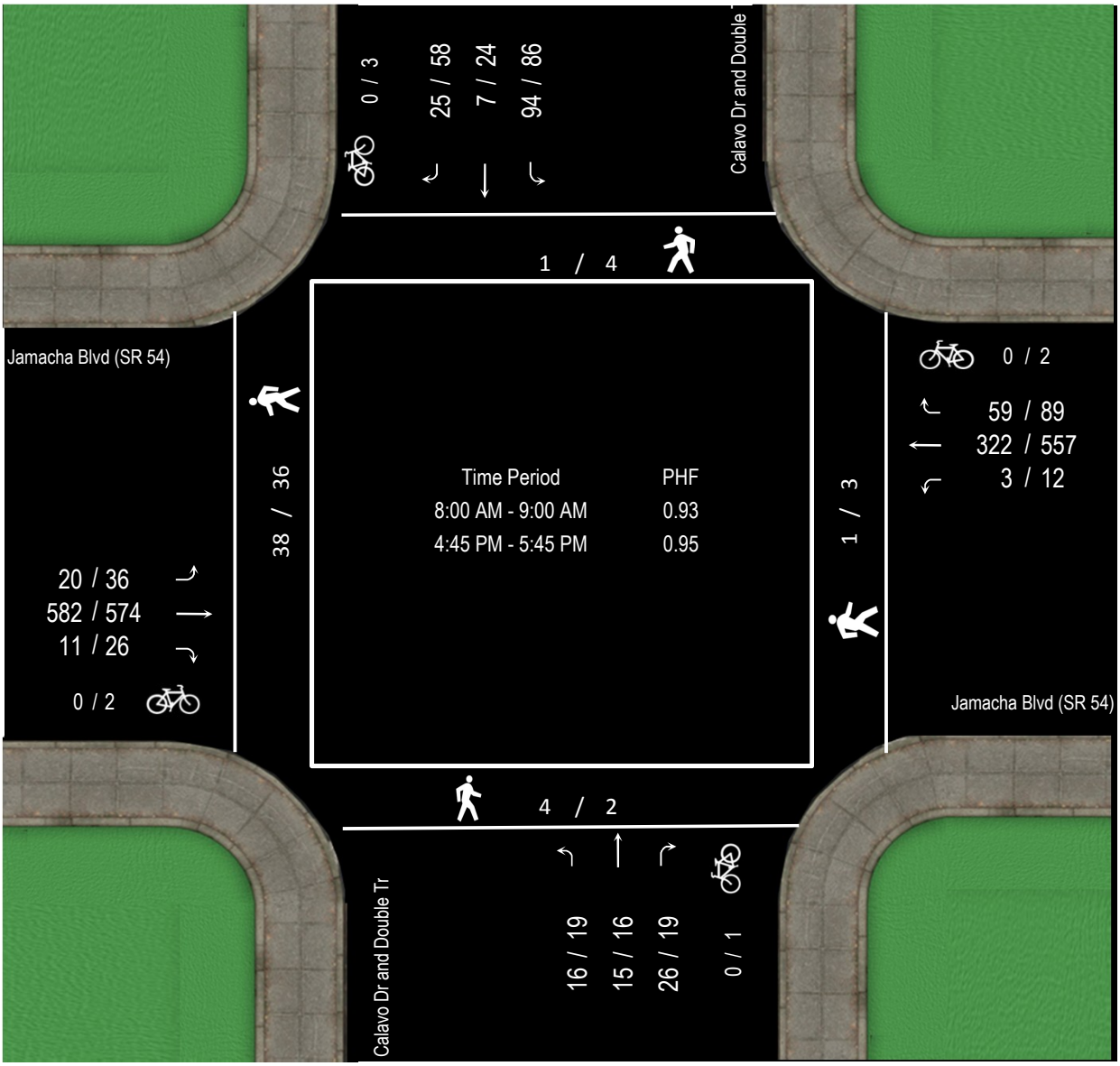
Location: Jamacha Blvd (SR 54) @ Calavo Dr and Double Tree Rd

Date of Count: *Wednesday, November 06, 2013*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *13-0118*



LINSCOTT LAW & GREENSPAN engineers

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Jamacha Blvd (SR 54) @ Calavo Dr and Double Tree Rd

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOTAL
7:00 AM	14	4	14	2	55	16	2	5	5	15	110	2	244
7:15 AM	11	2	13	4	68	19	9	8	5	10	123	4	276
7:30 AM	28	2	15	2	68	10	11	6	5	13	160	1	321
7:45 AM	10	4	9	2	74	14	1	6	6	7	150	0	283
8:00 AM	15	2	7	1	66	9	5	6	2	3	144	2	262
8:15 AM	29	3	6	2	67	20	2	3	12	8	154	5	311
8:30 AM	33	1	6	0	89	19	7	2	6	4	146	3	316
8:45 AM	17	1	6	0	100	11	2	4	6	5	138	1	291
Total	157	19	76	13	587	118	39	40	47	65	1,125	18	2,304

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Volume	94	7	25	3	322	59	16	15	26	20	582	11	1,180
PHF	0.71	0.58	0.89	0.38	0.81	0.74	0.57	0.63	0.54	0.63	0.94	0.55	0.93
Movement PHF		0.79			0.86			0.84			0.92		0.93

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOTAL
4:00 PM	30	6	9	5	153	15	1	2	3	7	109	8	348
4:15 PM	28	2	12	4	118	25	6	3	5	13	131	1	348
4:30 PM	24	8	14	3	118	17	10	5	6	13	138	8	364
4:45 PM	18	7	14	4	136	14	6	5	4	7	139	8	362
5:00 PM	24	9	21	2	146	32	4	4	3	13	134	5	397
5:15 PM	31	4	13	2	133	27	5	3	7	6	123	2	356
5:30 PM	13	4	10	4	142	16	4	4	5	10	178	11	401
5:45 PM	23	5	15	6	126	17	4	1	3	13	130	4	347
Total	191	45	108	30	1,072	163	40	27	36	82	1,082	47	2,923

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Volume	86	24	58	12	557	89	19	16	19	36	574	26	1516
PHF	0.69	0.667	0.69	0.75	0.954	0.695	0.792	0.8	0.679	0.692	0.806	0.591	0.95
Movement PHF		0.78			0.91			0.90			0.80		0.95

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Jamacha Boulevard @ Sweetwater Springs Boulevard

Date of Count: *Tuesday, February 24, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0313*

LINSCOTT LAW & GREENSPAN engineers

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Jamacha Boulevard @ Sweetwater Springs Boulevard

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	127	2	28	41	82	2	4	4	1	4	162	205	662
7:15 AM	71	10	35	29	102	3	2	1	4	5	100	161	523
7:30 AM	68	14	21	34	82	0	3	3	4	3	211	191	634
7:45 AM	117	12	34	40	108	4	1	4	2	2	151	290	765
8:00 AM	175	9	53	30	57	7	1	5	4	2	160	142	645
8:15 AM	50	5	32	22	99	2	1	2	1	1	73	110	398
8:30 AM	51	2	31	31	76	4	1	2	5	1	111	84	399
8:45 AM	63	6	32	31	58	2	0	3	1	1	104	87	388
Total	722	60	266	258	664	24	13	24	22	19	1,072	1,270	4,414

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.84**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	383	38	118	144	374	9	10	12	11	14	624	847	2,584
PHF	0.75	0.68	0.84	0.88	0.87	0.56	0.63	0.75	0.69	0.70	0.74	0.73	0.84
Movement PHF		0.83			0.87			0.83			0.84		0.84

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	127	6	35	24	106	4	6	28	11	3	114	79	543
4:15 PM	101	6	33	24	146	3	0	6	9	2	145	80	555
4:30 PM	111	6	40	44	130	1	2	22	2	1	128	68	555
4:45 PM	111	8	50	17	149	1	3	14	2	6	108	106	575
5:00 PM	124	3	51	29	125	0	5	30	16	1	130	90	604
5:15 PM	113	5	29	22	168	0	5	14	7	3	148	107	621
5:30 PM	119	6	44	20	129	2	6	13	10	1	116	125	591
5:45 PM	134	3	50	37	157	0	0	6	2	0	145	79	613
Total	940	43	332	217	1,110	11	27	133	59	17	1,034	734	4,657

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	490	17	174	108	579	2	16	63	35	5	539	401	2429
PHF	0.91	0.708	0.853	0.73	0.862	0.25	0.667	0.525	0.547	0.417	0.91	0.802	0.98
Movement PHF		0.91			0.89			0.56			0.92		0.98

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

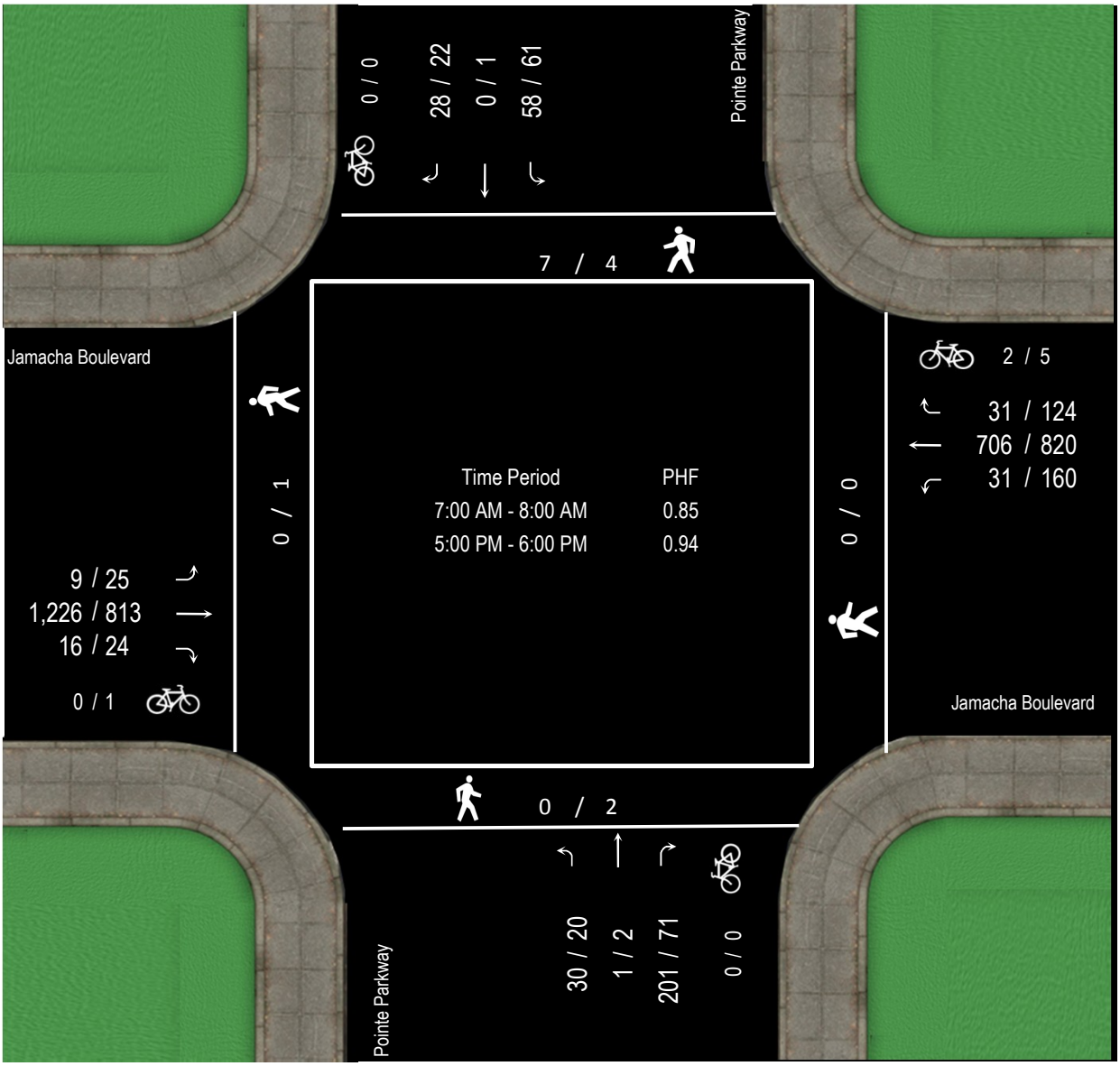
Location: Jamacha Boulevard @ Pointe Parkway

Date of Count: *Tuesday, February 24, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0313*



LINSCOTT LAW & GREENSPAN engineers

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Jamacha Boulevard @ Pointe Parkway

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	7	0	11	6	195	9	52	0	9	5	308	1	603
7:15 AM	8	0	19	2	168	7	43	0	8	5	204	4	468
7:30 AM	7	0	10	9	140	5	55	0	9	3	340	4	582
7:45 AM	6	0	18	14	203	10	51	1	4	3	374	0	684
8:00 AM	5	0	12	18	195	23	41	0	6	3	251	3	557
8:15 AM	9	0	18	11	125	14	38	0	5	1	128	4	353
8:30 AM	4	0	13	11	106	15	37	0	6	3	146	0	341
8:45 AM	8	0	8	13	96	13	27	1	7	3	157	1	334
Total	54	0	109	84	1,228	96	344	2	54	26	1,908	17	3,922

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.85**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	28	0	58	31	706	31	201	1	30	16	1,226	9	2,337
PHF	0.88	#####	0.76	0.55	0.87	0.78	0.91	0.25	0.83	0.80	0.82	0.56	0.85
Movement PHF		0.80			0.85			0.91			0.83		0.85

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	9	27	183	34	16	1	2	3	171	7	453
4:15 PM	6	0	13	31	199	26	21	1	3	9	193	2	504
4:30 PM	3	0	10	27	170	46	21	0	1	5	166	7	456
4:45 PM	2	0	14	19	206	37	12	1	5	5	194	3	498
5:00 PM	7	1	15	27	188	50	21	1	3	3	185	10	511
5:15 PM	5	0	13	40	214	34	19	0	6	7	226	3	567
5:30 PM	4	0	20	23	198	37	16	0	4	8	206	9	525
5:45 PM	6	0	13	34	220	39	15	1	7	6	196	3	540
Total	33	1	107	228	1,578	303	141	5	31	46	1,537	44	4,054

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	22	1	61	124	820	160	71	2	20	24	813	25	2143
PHF	0.79	0.25	0.763	0.775	0.932	0.8	0.845	0.5	0.714	0.75	0.899	0.625	0.94
Movement PHF		0.88			0.94			0.93			0.91		0.94

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Jamacha Boulevard @ Whitestone Road

Date of Count: *Tuesday, February 24, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0313*

LINSCOTT LAW & GREENSPAN engineers

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Jamacha Boulevard @ Whitestone Road

AM Period (7:00 AM - 9:00 AM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
7:00 AM	11	27	13	176		246	4	477
7:15 AM	2	18	3	183		209	4	419
7:30 AM	6	46	7	156		279	1	495
7:45 AM	9	39	9	176		345	1	579
8:00 AM	5	13	22	203		226	7	476
8:15 AM	4	17	9	121		130	8	289
8:30 AM	6	19	11	104		121	0	261
8:45 AM	4	11	11	104		149	7	286
Total	47	190	85	1,223		1,705	32	3,282

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.85**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	28	130	32	691		1,079	10	1,970
PHF	0.64	0.71	0.62	0.94		0.78	0.63	0.85
Movement PHF	0.76			0.96		0.79		0.85

PM Period (4:00 PM - 6:00 PM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
4:00 PM	5	16	16	178		172	4	391
4:15 PM	4	12	16	177		193	5	407
4:30 PM	6	6	22	190		175	6	405
4:45 PM	3	16	25	190		188	7	429
5:00 PM	10	18	22	190		181	12	433
5:15 PM	3	17	25	184		201	4	434
5:30 PM	5	20	18	186		194	7	430
5:45 PM	4	7	33	171		189	4	408
Total	40	112	177	1,466		1,493	49	3,337

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.99**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	21	71	90	750		764	30	1726
PHF	0.53	0.888	0.9	0.987		0.95	0.625	0.99
Movement PHF	0.82			0.98		0.97		0.99

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Jamacha Boulevard @ Maya Street

Date of Count: *Tuesday, February 24, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0313*

LINSCOTT LAW & GREENSPAN engineers

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Jamacha Boulevard @ Maya Street

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	2	0	50	44	143	0	0	0	0	0	200	2	441
7:15 AM	9	0	33	21	164	0	0	0	0	0	180	4	411
7:30 AM	11	0	68	21	141	0	0	0	0	0	212	3	456
7:45 AM	4	0	82	31	154	0	0	0	0	0	264	3	538
8:00 AM	7	0	38	36	172	0	0	0	0	0	195	2	450
8:15 AM	3	0	20	20	105	0	0	0	0	0	118	4	270
8:30 AM	3	0	26	7	103	0	0	0	0	0	95	6	240
8:45 AM	5	0	22	14	94	0	0	0	0	0	134	0	269
Total	44	0	339	194	1,076	0	0	0	0	0	1,398	24	3,075

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.86**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	31	0	221	109	631	0	0	0	0	0	851	12	1,855
PHF	0.70	#####	0.67	0.76	0.92	#####	#####	#####	#####	#####	0.81	0.75	0.86
Movement PHF		0.73			0.89			#DIV/0!			0.81		0.86

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	3	0	19	18	165	0	0	0	0	0	157	11	373
4:15 PM	2	0	32	29	152	0	0	0	0	0	166	6	387
4:30 PM	2	0	24	36	160	0	0	0	0	0	157	6	385
4:45 PM	6	0	23	36	157	0	0	0	0	0	172	6	400
5:00 PM	4	0	23	27	173	0	0	0	0	0	170	5	402
5:15 PM	7	0	23	32	155	0	0	0	0	0	182	6	405
5:30 PM	3	0	28	40	151	0	0	0	0	0	173	9	404
5:45 PM	5	0	35	30	145	0	0	0	0	0	158	9	382
Total	32	0	207	248	1,258	0	0	0	0	0	1,335	58	3,138

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.99**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	20	0	97	135	636	0	0	0	0	0	697	26	1611
PHF	0.71	#####	0.866	0.844	0.919	#####	#####	#####	#####	#####	0.957	0.722	0.99
Movement PHF		0.94			0.96			#DIV/0!			0.96		0.99

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

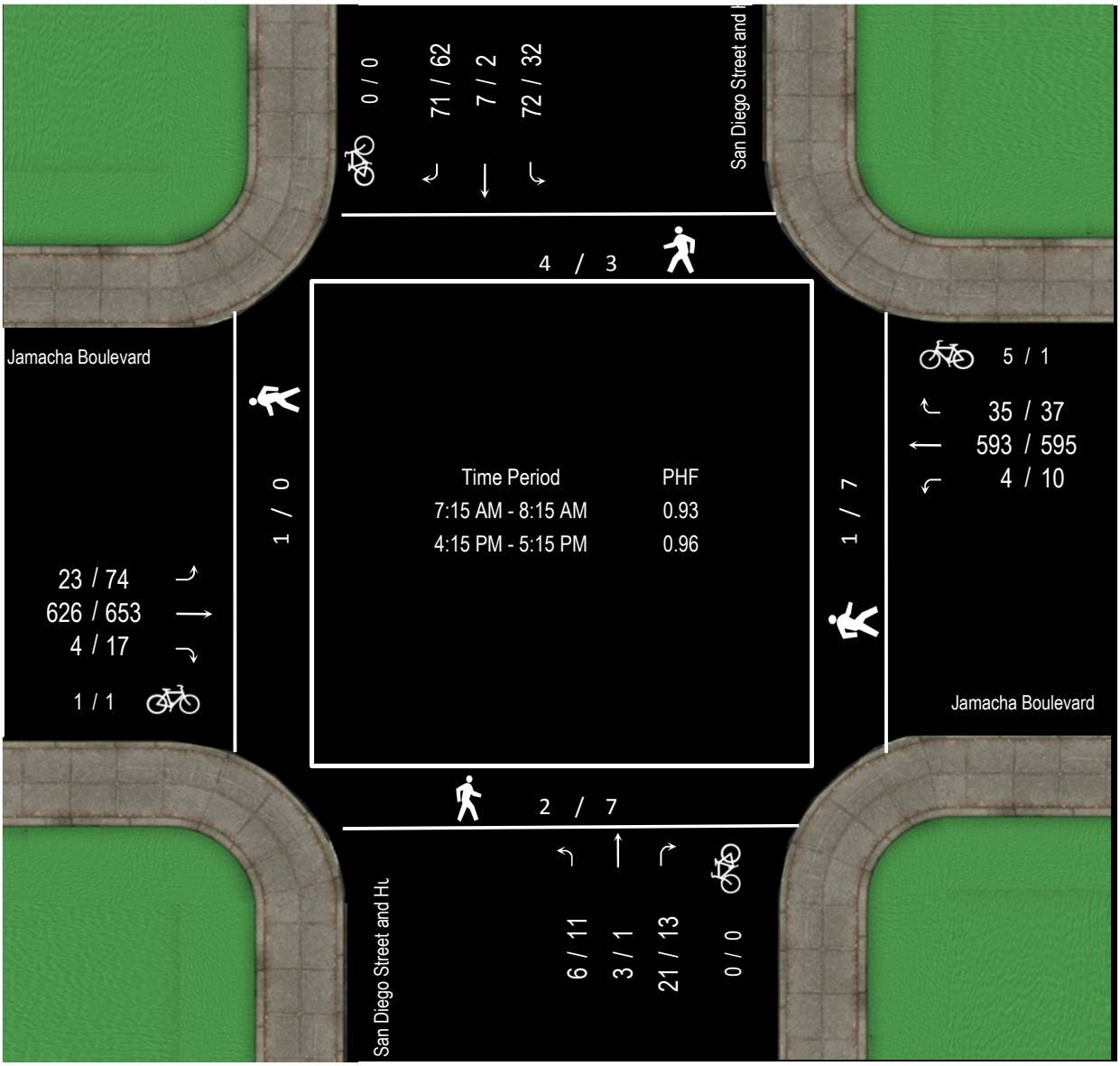
Location: Jamacha Boulevard @ San Diego Street and Huron Street

Date of Count: *Thursday, March 27, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0181*



LINSCOTT LAW & GREENSPAN engineers

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Jamacha Boulevard @ San Diego Street and Huron Street

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	18	0	23	5	117	3	6	0	1	1	144	1	319
7:15 AM	15	0	7	6	166	0	4	0	2	0	149	5	354
7:30 AM	22	0	34	9	124	1	4	1	0	2	190	7	394
7:45 AM	18	0	22	10	146	1	7	0	1	0	172	6	383
8:00 AM	16	7	9	10	157	2	6	2	3	2	115	5	334
8:15 AM	13	0	4	4	125	2	5	4	1	1	94	3	256
8:30 AM	18	0	10	0	90	4	4	1	4	2	122	5	260
8:45 AM	18	0	3	3	98	1	2	0	1	3	81	10	220
Total	138	7	112	47	1,023	14	38	8	13	11	1,067	42	2,520

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	71	7	72	35	593	4	21	3	6	4	626	23	1,465
PHF	0.81	0.25	0.53	0.88	0.89	0.50	0.75	0.38	0.50	0.50	0.82	0.82	0.93
Movement PHF		0.67			0.92			0.68			0.82		0.93

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	9	0	10	11	140	5	3	0	1	2	148	24	353
4:15 PM	19	0	13	8	139	2	4	0	0	4	173	14	376
4:30 PM	13	0	8	14	146	4	4	0	2	7	144	16	358
4:45 PM	19	2	7	7	139	3	3	0	6	3	183	21	393
5:00 PM	11	0	4	8	171	1	2	1	3	3	153	23	380
5:15 PM	11	0	5	6	132	3	2	0	2	1	183	21	366
5:30 PM	7	0	9	11	141	2	5	2	1	4	143	18	343
5:45 PM	11	3	13	6	132	5	1	0	2	4	152	16	345
Total	100	5	69	71	1,140	25	24	3	17	28	1,279	153	2,914

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	62	2	32	37	595	10	13	1	11	17	653	74	1507
PHF	0.82	0.25	0.615	0.661	0.87	0.625	0.813	0.25	0.458	0.607	0.892	0.804	0.96
Movement PHF		0.75			0.89			0.69			0.90		0.96

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Austin Drive @ Sweetwater Springs Boulevard

Date of Count: *Thursday, March 27, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0181*

LINSCOTT LAW & GREENSPAN engineers

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Austin Drive @ Sweetwater Springs Boulevard

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	32	97	17	28	9	2	10	217	6	22	23	57	520
7:15 AM	24	85	28	22	11	6	9	154	12	23	15	48	437
7:30 AM	31	59	13	16	11	1	8	192	26	18	22	77	474
7:45 AM	40	113	29	16	14	4	17	200	50	38	15	110	646
8:00 AM	30	149	27	26	9	2	16	170	12	28	12	66	547
8:15 AM	22	77	22	27	4	5	10	118	10	16	6	31	348
8:30 AM	19	67	18	36	5	2	13	97	14	14	12	46	343
8:45 AM	25	66	22	19	8	9	6	96	10	10	18	36	325
Total	223	713	176	190	71	31	89	1,244	140	169	123	471	3,640

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.81**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	125	406	97	80	45	13	50	716	100	107	64	301	2,104
PHF	0.78	0.68	0.84	0.77	0.80	0.54	0.74	0.90	0.50	0.70	0.73	0.68	0.81
Movement PHF		0.76			0.88			0.81			0.72		0.81

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	43	110	29	35	21	18	1	81	21	25	15	64	463
4:15 PM	48	115	22	36	12	11	7	58	23	21	11	42	406
4:30 PM	46	152	25	60	19	17	6	112	21	19	13	40	530
4:45 PM	59	132	19	29	22	9	10	86	19	21	23	49	478
5:00 PM	31	140	22	52	11	18	0	108	11	21	23	51	488
5:15 PM	59	124	19	26	24	7	3	94	18	18	13	55	460
5:30 PM	61	159	19	36	8	3	11	105	19	30	8	36	495
5:45 PM	56	145	36	16	12	3	4	90	15	19	20	31	447
Total	403	1077	191	290	129	86	42	734	147	174	126	368	3,767

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	195	548	85	167	76	51	19	400	69	79	72	195	1956
PHF	0.83	0.901	0.85	0.696	0.792	0.708	0.475	0.893	0.821	0.94	0.783	0.886	0.92
Movement PHF		0.93			0.77			0.88			0.91		0.92

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR 94 East bound Ramps @ Campo Road

Date of Count: *Thursday, March 27, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0181*

LINSCOTT LAW & GREENSPAN engineers

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: SR 94 East bound Ramps @ Campo Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	52	30	0	0	0	46	259	0	185	1	10	583
7:15 AM	0	44	23	0	0	0	61	305	0	108	0	27	568
7:30 AM	0	72	22	0	0	0	82	246	0	136	0	29	587
7:45 AM	0	107	32	0	0	0	62	321	0	217	0	60	799
8:00 AM	0	110	54	0	0	0	53	314	0	141	0	33	705
8:15 AM	0	79	38	0	0	0	41	255	0	107	0	33	553
8:30 AM	0	81	54	0	0	0	37	209	0	93	0	16	490
8:45 AM	0	94	33	0	0	0	47	206	0	93	0	24	497
Total	0	639	286	0	0	0	429	2,115	0	1,080	1	232	4,782

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.83**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	333	131	0	0	0	258	1,186	0	602	0	149	2,659
PHF	#####	0.76	0.61	#####	#####	#####	0.79	0.92	#####	0.69	#####	0.62	0.83
Movement PHF		0.71			#DIV/0!			0.94			0.68		0.83

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	119	56	0	0	0	52	177	0	201	2	55	662
4:15 PM	0	123	60	0	0	0	40	147	0	220	0	47	637
4:30 PM	0	87	61	0	0	0	43	194	0	219	0	46	650
4:45 PM	0	120	40	0	0	0	46	167	0	222	2	46	643
5:00 PM	0	107	42	0	0	0	61	189	0	218	1	37	655
5:15 PM	0	92	50	0	0	0	52	170	0	219	6	41	630
5:30 PM	0	96	56	0	0	0	52	177	0	200	3	66	650
5:45 PM	0	129	40	0	0	0	48	154	0	194	0	33	598
Total	0	873	405	0	0	0	394	1,375	0	1,693	14	371	5,125

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	449	217	0	0	0	181	685	0	862	4	194	2592
PHF	#####	0.913	0.889	#####	#####	#####	0.87	0.883	#####	0.971	0.5	0.882	0.98
Movement PHF		0.91			#DIV/0!			0.91			0.98		0.98

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Agua Dulce Boulevard @ Campo Road

Date of Count: *Thursday, March 27, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *14-0181*

LINSCOTT LAW & GREENSPAN engineers

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Agua Dulce Boulevard @ Campo Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	37	49	1	27	23	33	9	78	182	0	0	0	439
7:15 AM	43	35	1	32	23	32	18	134	180	0	0	0	498
7:30 AM	60	59	2	39	27	35	24	109	142	0	0	0	497
7:45 AM	36	112	2	45	22	27	58	181	142	0	0	0	625
8:00 AM	55	127	1	28	28	37	16	196	135	0	0	0	623
8:15 AM	42	88	4	32	31	29	23	103	162	0	0	0	514
8:30 AM	47	96	0	39	28	39	13	56	156	0	0	0	474
8:45 AM	21	102	2	24	13	25	5	84	141	0	0	0	417
Total	341	668	13	266	195	257	166	941	1,240	0	0	0	4,087

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	193	386	9	144	108	128	121	589	581	0	0	0	2,259
PHF	0.80	0.76	0.56	0.80	0.87	0.86	0.52	0.75	0.90	#####	#####	#####	0.90
Movement PHF		0.80			0.94			0.85			#DIV/0!		0.90

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	22	126	2	26	14	49	32	84	116	0	0	0	471
4:15 PM	26	114	0	35	17	69	24	65	105	0	0	0	455
4:30 PM	39	94	2	38	8	54	19	89	132	0	0	0	475
4:45 PM	21	108	2	41	11	52	22	74	117	0	0	0	448
5:00 PM	22	105	4	32	13	44	13	95	118	0	0	0	446
5:15 PM	20	98	0	52	12	44	18	68	125	0	0	0	437
5:30 PM	20	112	2	42	19	40	32	92	119	0	0	0	478
5:45 PM	19	128	1	32	15	41	16	75	96	0	0	0	423
Total	189	885	13	298	109	393	176	642	928	0	0	0	3,633

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	108	442	6	140	50	224	97	312	470	0	0	0	1849
PHF	0.69	0.877	0.75	0.854	0.735	0.812	0.758	0.876	0.89	#####	#####	#####	0.97
Movement PHF		0.93			0.86			0.92			#DIV/0!		0.97

LINSCOTT LAW & GREENSPAN engineers

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: c. Sweetwater Springs Blvd btw SR 94 East bound Ramps to Austin Drive

Orientation: *North-South*

Date of Count: *Thursday, March 27, 2014*

Analysts: *DASH*

Weather: *Sunny*

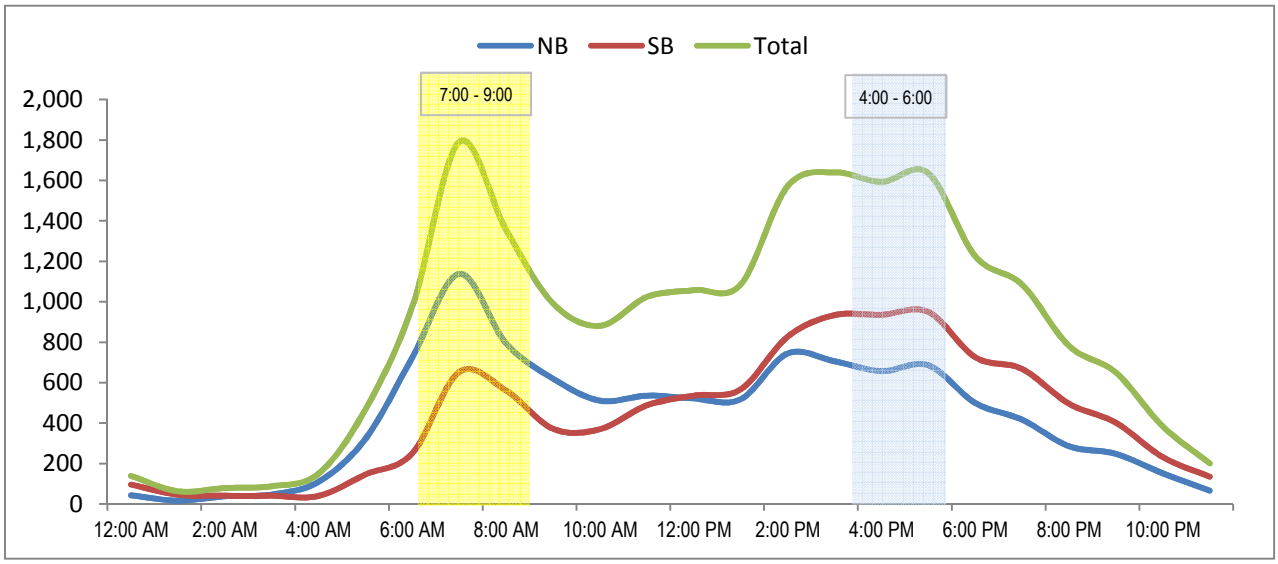
AVC Proj. No: *14-0181*

24 Hour Segment Volume			*20,917*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	43	96	139
1:00 AM - 2:00 AM	17	46	63
2:00 AM - 3:00 AM	38	41	79
3:00 AM - 4:00 AM	47	41	88
4:00 AM - 5:00 AM	110	40	150
5:00 AM - 6:00 AM	322	146	468
6:00 AM - 7:00 AM	725	251	976
7:00 AM - 8:00 AM	1,138	653	1,791
8:00 AM - 9:00 AM	794	561	1,355
9:00 AM - 10:00 AM	620	372	992
10:00 AM - 11:00 AM	511	370	881
11:00 AM - 12:00 PM	536	488	1024
Total	**4,901**	**3,105**	**8,006**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	522	536	1,058
1:00 PM - 2:00 PM	518	567	1,085
2:00 PM - 3:00 PM	744	827	1,571
3:00 PM - 4:00 PM	706	934	1,640
4:00 PM - 5:00 PM	657	936	1,593
5:00 PM - 6:00 PM	686	950	1,636
6:00 PM - 7:00 PM	500	726	1,226
7:00 PM - 8:00 PM	417	668	1,085
8:00 PM - 9:00 PM	286	496	782
9:00 PM - 10:00 PM	248	402	650
10:00 PM - 11:00 PM	152	232	384
11:00 PM - 12:00 AM	66	135	201
Total	**5,502**	**7,409**	**12,911**

24-Hour	*NB*	*Volume*	*10,403*	*24-Hour*	*SB*	*Volume*	*10,514*



LINSCOTT LAW & GREENSPAN engineers

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: d. Sweetwater Springs Blvd btw Austin Drive to Jamacha Boulevard

Orientation: *North-South*

Date of Count: *Thursday, March 27, 2014*

Analysts: *DASH*

Weather: *Sunny*

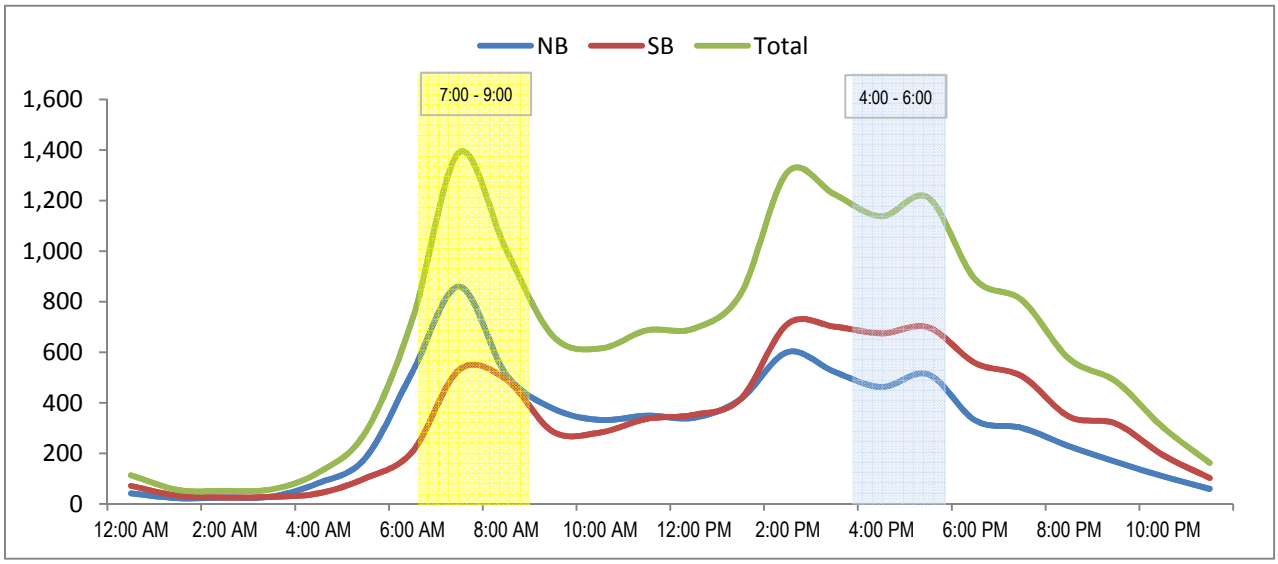
AVC Proj. No: *14-0181*

24 Hour Segment Volume			*15,416*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	42	72	114
1:00 AM - 2:00 AM	23	33	56
2:00 AM - 3:00 AM	26	26	52
3:00 AM - 4:00 AM	30	28	58
4:00 AM - 5:00 AM	83	42	125
5:00 AM - 6:00 AM	182	102	284
6:00 AM - 7:00 AM	522	207	729
7:00 AM - 8:00 AM	860	531	1,391
8:00 AM - 9:00 AM	513	493	1,006
9:00 AM - 10:00 AM	378	286	664
10:00 AM - 11:00 AM	332	283	615
11:00 AM - 12:00 PM	350	337	687
Total	**3,341**	**2,440**	**5,781**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	341	353	694
1:00 PM - 2:00 PM	415	416	831
2:00 PM - 3:00 PM	601	712	1,313
3:00 PM - 4:00 PM	523	702	1,225
4:00 PM - 5:00 PM	463	675	1,138
5:00 PM - 6:00 PM	513	699	1,212
6:00 PM - 7:00 PM	331	558	889
7:00 PM - 8:00 PM	301	505	806
8:00 PM - 9:00 PM	229	346	575
9:00 PM - 10:00 PM	167	318	485
10:00 PM - 11:00 PM	110	194	304
11:00 PM - 12:00 AM	60	103	163
Total	**4,054**	**5,581**	**9,635**

24-Hour	*NB*	*Volume*	*7,395*	*24-Hour*	*SB*	*Volume*	*8,021*



LINSCOTT LAW & GREENSPAN engineers

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: a. Jamacha Boulevard btw San Miguel Street to San Diego Street

Orientation: *East-West*

Date of Count: *Thursday, March 27, 2014*

Analysts: *DASH*

Weather: *Sunny*

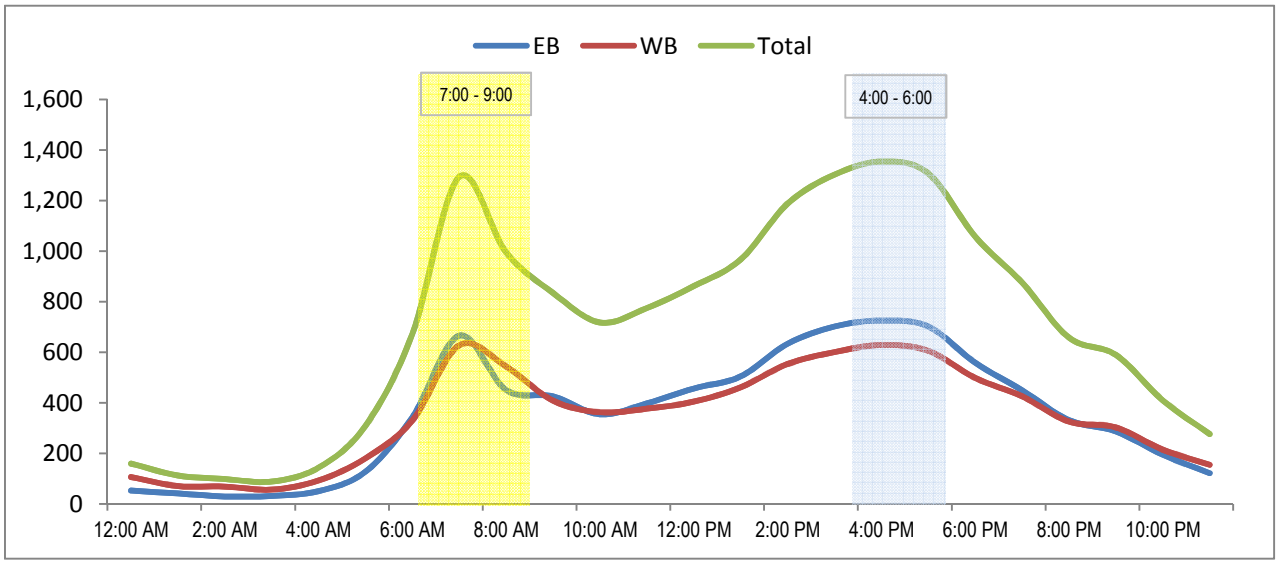
AVC Proj. No: *14-0181*

24 Hour Segment Volume			*17,056*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	53	107	160
1:00 AM - 2:00 AM	42	71	113
2:00 AM - 3:00 AM	30	69	99
3:00 AM - 4:00 AM	32	57	89
4:00 AM - 5:00 AM	51	93	144
5:00 AM - 6:00 AM	128	181	309
6:00 AM - 7:00 AM	343	330	673
7:00 AM - 8:00 AM	666	628	1,294
8:00 AM - 9:00 AM	451	544	995
9:00 AM - 10:00 AM	426	409	835
10:00 AM - 11:00 AM	355	363	718
11:00 AM - 12:00 PM	398	377	775
Total	**2,975**	**3,229**	**6,204**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	457	405	862
1:00 PM - 2:00 PM	505	462	967
2:00 PM - 3:00 PM	634	554	1,188
3:00 PM - 4:00 PM	702	601	1,303
4:00 PM - 5:00 PM	726	629	1,355
5:00 PM - 6:00 PM	702	606	1,308
6:00 PM - 7:00 PM	559	499	1,058
7:00 PM - 8:00 PM	450	426	876
8:00 PM - 9:00 PM	332	326	658
9:00 PM - 10:00 PM	287	303	590
10:00 PM - 11:00 PM	195	215	410
11:00 PM - 12:00 AM	122	155	277
Total	**5,671**	**5,181**	**10,852**

24-Hour	*EB*	*Volume*	*8,646*	*24-Hour*	*WB*	*Volume*	*8,410*



LINSCOTT LAW & GREENSPAN engineers

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: b. Jamacha Blvd, From Pointe Parkway to Maya Street

Orientation: *North-South*

Date of Count: *Tuesday, February 24, 2015*

Analysts: *DASH*

Weather: *Sunny*

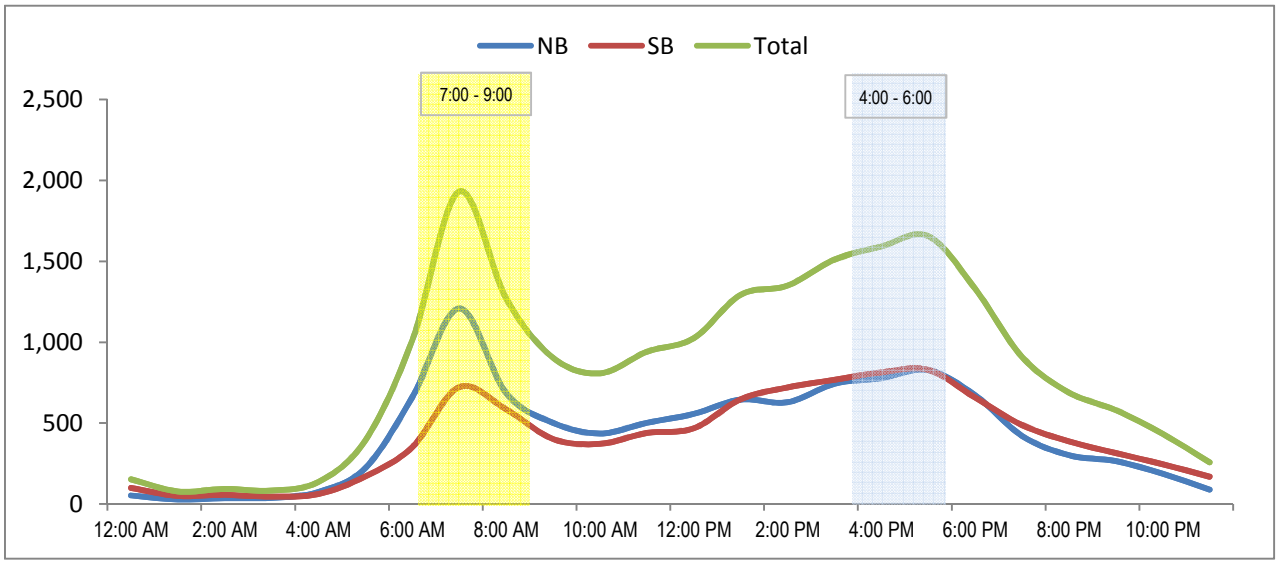
AVC Proj. No: *15-0313*

24 Hour Segment Volume			*20,434*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	53	100	153
1:00 AM - 2:00 AM	28	50	78
2:00 AM - 3:00 AM	36	57	93
3:00 AM - 4:00 AM	38	46	84
4:00 AM - 5:00 AM	75	62	137
5:00 AM - 6:00 AM	223	171	394
6:00 AM - 7:00 AM	661	352	1,013
7:00 AM - 8:00 AM	1,209	723	1,932
8:00 AM - 9:00 AM	686	585	1,271
9:00 AM - 10:00 AM	502	402	904
10:00 AM - 11:00 AM	436	372	808
11:00 AM - 12:00 PM	502	439	941
Total	**4,449**	**3,359**	**7,808**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	557	468	1,025
1:00 PM - 2:00 PM	646	647	1,293
2:00 PM - 3:00 PM	629	721	1,350
3:00 PM - 4:00 PM	743	768	1,511
4:00 PM - 5:00 PM	778	814	1,592
5:00 PM - 6:00 PM	827	829	1,656
6:00 PM - 7:00 PM	672	658	1,330
7:00 PM - 8:00 PM	421	488	909
8:00 PM - 9:00 PM	302	387	689
9:00 PM - 10:00 PM	265	315	580
10:00 PM - 11:00 PM	187	246	433
11:00 PM - 12:00 AM	89	169	258
Total	**6,116**	**6,510**	**12,626**

24-Hour	*NB*	*Volume*	*10,565*	*24-Hour*	*SB*	*Volume*	*9,869*



LINSCOTT LAW & GREENSPAN engineers

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: a. Jamacha Blvd, from Sweetwater Springs Blvd to Pointe Parkway

Orientation: *North-South*

Date of Count: *Tuesday, February 24, 2015*

Analysts: *DASH*

Weather: *Sunny*

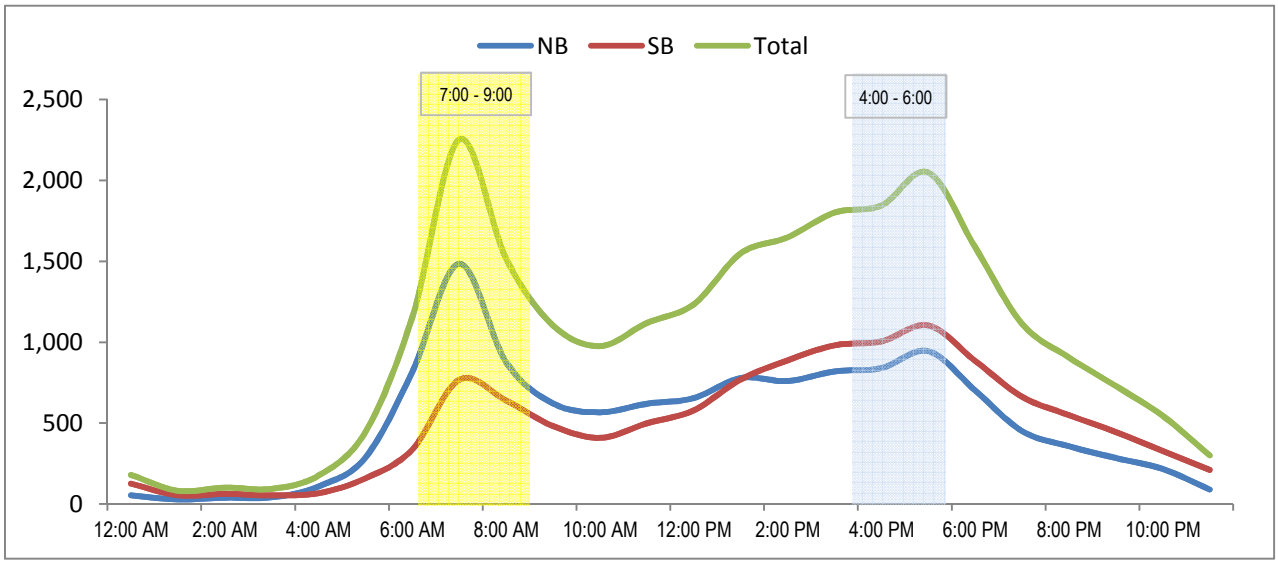
AVC Proj. No: *15-0313*

24 Hour Segment Volume			*24,511*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	54	126	180
1:00 AM - 2:00 AM	28	54	82
2:00 AM - 3:00 AM	39	63	102
3:00 AM - 4:00 AM	41	53	94
4:00 AM - 5:00 AM	109	67	176
5:00 AM - 6:00 AM	287	159	446
6:00 AM - 7:00 AM	818	337	1,155
7:00 AM - 8:00 AM	1,485	768	2,253
8:00 AM - 9:00 AM	876	640	1,516
9:00 AM - 10:00 AM	622	482	1,104
10:00 AM - 11:00 AM	567	409	976
11:00 AM - 12:00 PM	620	499	1119
Total	**5,546**	**3,657**	**9,203**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	655	579	1,234
1:00 PM - 2:00 PM	779	770	1,549
2:00 PM - 3:00 PM	760	888	1,648
3:00 PM - 4:00 PM	820	981	1,801
4:00 PM - 5:00 PM	840	1,005	1,845
5:00 PM - 6:00 PM	945	1,104	2,049
6:00 PM - 7:00 PM	702	885	1,587
7:00 PM - 8:00 PM	451	663	1,114
8:00 PM - 9:00 PM	357	549	906
9:00 PM - 10:00 PM	284	445	729
10:00 PM - 11:00 PM	217	328	545
11:00 PM - 12:00 AM	90	211	301
Total	**6,900**	**8,408**	**15,308**

24-Hour	*NB*	*Volume*	*12,446*	*24-Hour*	*SB*	*Volume*	*12,065*



LINSCOTT LAW & GREENSPAN engineers

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Jamacha Rd (SR 54), btwn Sweetwater Springs Blvd and Calavo Dr

Orientation: *East-West*

Date of Count: *Thursday, November 07, 2013*

Analysts: *DASH*

Weather: *Sunny*

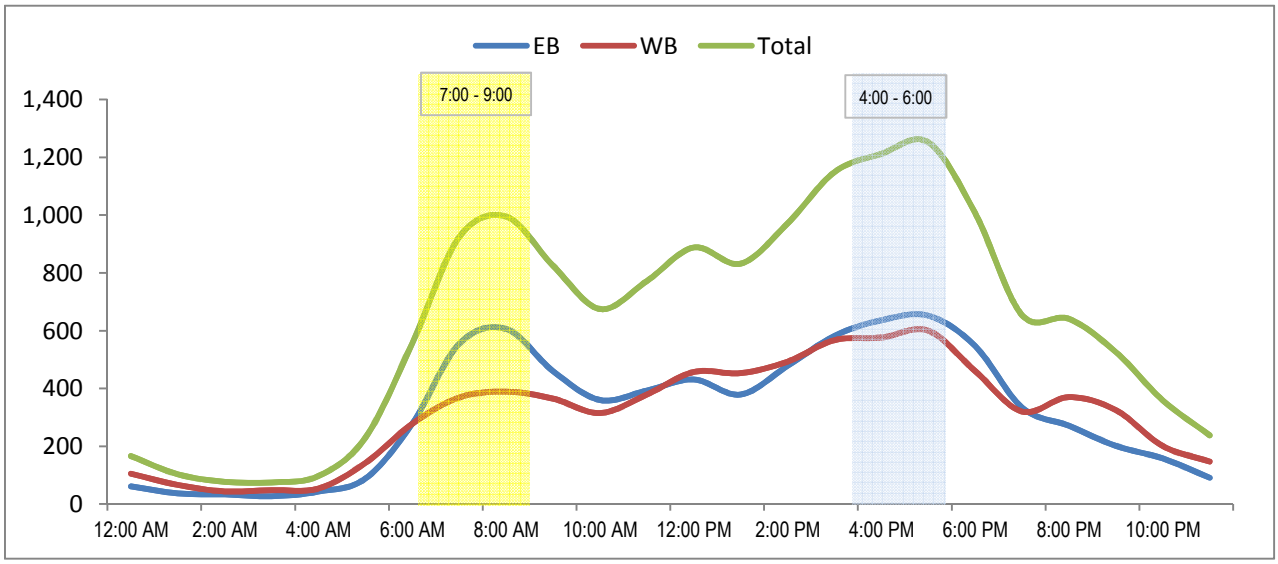
AVC Proj. No: *13-0118*

24 Hour Segment Volume			*15,225*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	61	105	166
1:00 AM - 2:00 AM	37	66	103
2:00 AM - 3:00 AM	33	44	77
3:00 AM - 4:00 AM	27	48	75
4:00 AM - 5:00 AM	43	54	97
5:00 AM - 6:00 AM	88	142	230
6:00 AM - 7:00 AM	279	278	557
7:00 AM - 8:00 AM	555	369	924
8:00 AM - 9:00 AM	606	389	995
9:00 AM - 10:00 AM	460	365	825
10:00 AM - 11:00 AM	360	315	675
11:00 AM - 12:00 PM	393	379	772
Total	**2,942**	**2,554**	**5,496**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	431	457	888
1:00 PM - 2:00 PM	379	453	832
2:00 PM - 3:00 PM	478	493	971
3:00 PM - 4:00 PM	582	567	1,149
4:00 PM - 5:00 PM	636	576	1,212
5:00 PM - 6:00 PM	652	600	1,252
6:00 PM - 7:00 PM	547	460	1,007
7:00 PM - 8:00 PM	334	320	654
8:00 PM - 9:00 PM	271	370	641
9:00 PM - 10:00 PM	201	325	526
10:00 PM - 11:00 PM	158	201	359
11:00 PM - 12:00 AM	91	147	238
Total	**4,760**	**4,969**	**9,729**

24-Hour	*EB*	*Volume*	*7,702*	*24-Hour*	*WB*	*Volume*	*7,523*



LINSCOTT LAW & GREENSPAN engineers

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Jamacha Rd (SR 54), btwn Calavo Dr and Campo Rd (SR 54)

Orientation: *East-West*

Date of Count: *Thursday, November 07, 2013*

Analysts: *DASH*

Weather: *Sunny*

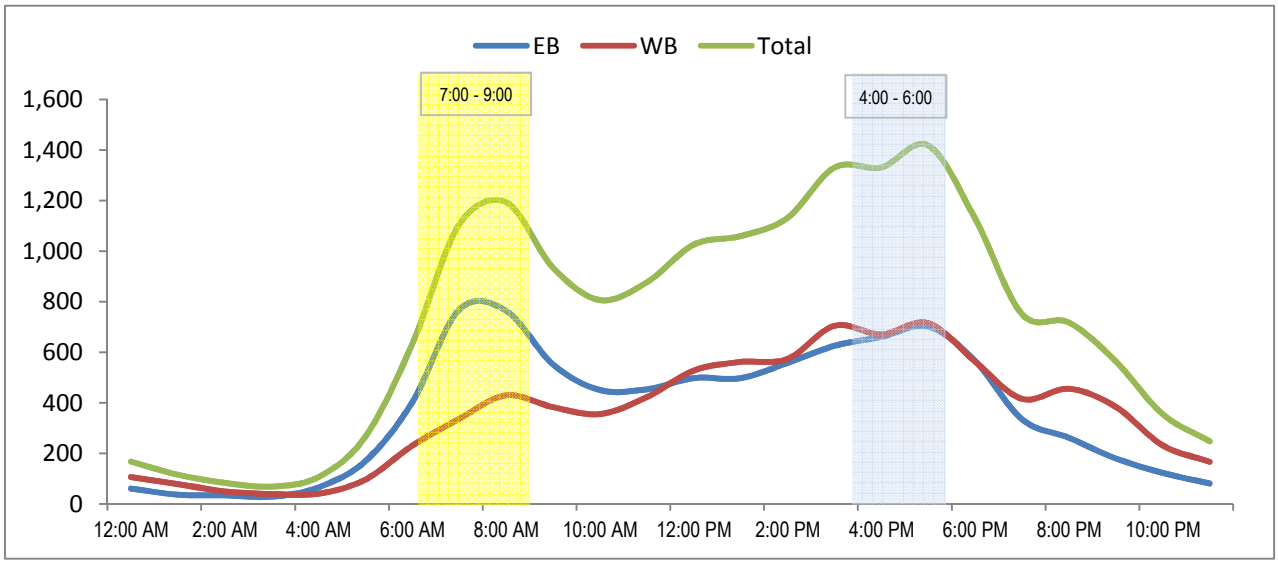
AVC Proj. No: *13-0118*

24 Hour Segment Volume			*17,428*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	61	107	168
1:00 AM - 2:00 AM	37	79	116
2:00 AM - 3:00 AM	34	50	84
3:00 AM - 4:00 AM	29	40	69
4:00 AM - 5:00 AM	66	41	107
5:00 AM - 6:00 AM	170	97	267
6:00 AM - 7:00 AM	403	231	634
7:00 AM - 8:00 AM	769	337	1,106
8:00 AM - 9:00 AM	764	430	1,194
9:00 AM - 10:00 AM	552	383	935
10:00 AM - 11:00 AM	451	356	807
11:00 AM - 12:00 PM	454	423	877
Total	**3,790**	**2,574**	**6,364**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	498	528	1,026
1:00 PM - 2:00 PM	498	562	1,060
2:00 PM - 3:00 PM	558	574	1,132
3:00 PM - 4:00 PM	626	705	1,331
4:00 PM - 5:00 PM	661	671	1,332
5:00 PM - 6:00 PM	702	716	1,418
6:00 PM - 7:00 PM	566	563	1,129
7:00 PM - 8:00 PM	335	416	751
8:00 PM - 9:00 PM	262	456	718
9:00 PM - 10:00 PM	180	384	564
10:00 PM - 11:00 PM	123	232	355
11:00 PM - 12:00 AM	81	167	248
Total	**5,090**	**5,974**	**11,064**

24-Hour	*EB*	*Volume*	*8,880*	*24-Hour*	*WB*	*Volume*	*8,548*



APPENDIX B

COUNTY OF SAN DIEGO ROADWAY CLASSIFICATION TABLE

TABLE 1
AVERAGE DAILY VEHICLE TRIPS*

MOBILITY ELEMENT ROADS			LEVELS OF SERVICE				
Road Classification		# of Travel Lanes	A	B	C	D	E
Expressway (6.1)		6	<36,000	<54,000	<70,000	<86,000	<108,000
Prime Arterial (6.2)		6	<22,200	<37,000	<44,600	<50,000	<57,000
Major Road	w/ Raised Median (4.1A)	4	<14,800	<24,700	<29,600	<33,400	<37,000
	w/ Intermittent Turn Lanes (4.1B)	4	<13,700	<22,800	<27,400	<30,800	<34,200
Boulevard	w/ Raised Median (4.2A)	4	<18,000	<21,000	<24,000	<27,000	<30,000
	w/ Intermittent Turn Lanes (4.2B)	4	<16,800	<19,600	<22,500	<25,000	<28,000
Community Collector	w/ Raised Median (2.1A)	2	<10,000	<11,700	<13,400	<15,000	<19,000
	w/ Continuous Left Turn Lane (2.1B)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Intermittent Turn Lane (2.1C)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Passing Lane (2.1D)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	No Median (2.1E)	2	<1,900	<4,100	<7,100	<10,900	<16,200
Light Collector	w/ Raised Median (2.2A)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Continuous Left Turn Lane (2.2B)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Intermittent Turn Lane (2.2C)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Passing Lane (2.2D)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	No Median (2.2E)	2	<1,900	<4,100	<7,100	<10,900	<16,200
	w/ Reduced Shoulder (2.2F)	2	<5,800	<6,800	<7,800	<8,700	<9,700
Minor Collector	w/ Raised Median (2.3A)	2	<3,000	<6,000	<7,000	<8,000	<9,000
	w/ Intermittent Turn Lane (2.3B)	2	<3,000	<6,000	<7,000	<8,000	<9,000
	No Median (2.3C)	2	<1,900	<4,100	<6,000	<7,000	<8,000
NON-MOBILITY ELEMENT ROADS**			LEVELS OF SERVICE				
Residential Collector		2	-	-	<4,500	-	-
Rural Residential Collector***		2	-	-	<4,500	-	-
Residential Road		2	-	-	<1,500	-	-
Rural Residential Road***		2	-	-	<1,500	-	-
Residential Cul-de-Sac or Loop Road		2	-	-	<200	-	-

* The values shown are subject to adjustment based on the geometry of the roadway, side frictions, and other relevant factors as determined by the Director, Department of Public Works.

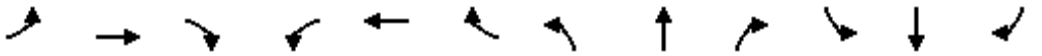
** Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

*** Rural Residential Collectors and Rural Residential Roads are intended to serve areas with lot sizes of 2 acres or more which do not have a demand for on-street parking. On-street parking is not assured for these cross sections. Additional right-of-way is needed if on-street parking is in paved area.

**** See Tables 2A and 2B for roadway surfacing and right-of-way widths.

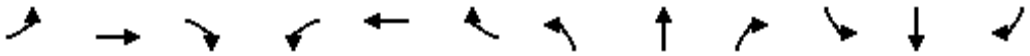
APPENDIX C

INTERSECTION ANALYSIS SHEETS



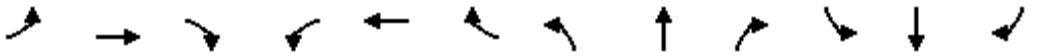
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	1339	86	290	1516	12	268	4	563	8	2	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.0	7.0	7.3	7.0	7.0	7.7	7.7	7.3	7.0	7.0	7.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00
Frt	1.00	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	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	1681	1688	1583	1681	1713	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.97	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	1681	1688	1583	1681	1713	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	35	1455	93	315	1648	13	291	4	612	9	2	3
RTOR Reduction (vph)	0	0	51	0	0	6	0	0	136	0	0	3
Lane Group Flow (vph)	35	1455	42	315	1648	7	148	147	476	5	6	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pm+ov	Split	NA	Perm
Protected Phases	5	2		1	6		8	8	1	7	7	
Permitted Phases			2			6			8			7
Actuated Green, G (s)	2.8	53.5	53.5	15.8	66.5	66.5	15.0	15.0	30.8	4.1	4.1	4.1
Effective Green, g (s)	2.8	53.5	53.5	15.8	66.5	66.5	15.0	15.0	30.8	4.1	4.1	4.1
Actuated g/C Ratio	0.02	0.46	0.46	0.13	0.57	0.57	0.13	0.13	0.26	0.03	0.03	0.03
Clearance Time (s)	7.3	7.0	7.0	7.3	7.0	7.0	7.7	7.7	7.3	7.0	7.0	7.0
Vehicle Extension (s)	2.0	8.0	8.0	2.0	8.0	8.0	3.0	3.0	2.0	3.0	3.0	3.0
Lane Grp Cap (vph)	81	2317	721	462	2880	896	214	215	415	58	59	55
v/s Ratio Prot	0.01	c0.29		0.09	0.32		0.09	0.09	c0.15	0.00	c0.00	
v/s Ratio Perm			0.03			0.00			0.15			0.00
v/c Ratio	0.43	0.63	0.06	0.68	0.57	0.01	0.69	0.68	1.15	0.09	0.10	0.00
Uniform Delay, d1	56.5	24.4	17.9	48.4	16.3	11.1	49.0	48.9	43.3	54.8	54.9	54.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	1.2	0.1	3.3	0.8	0.0	9.3	8.7	91.0	0.6	0.8	0.0
Delay (s)	57.9	25.6	18.0	51.7	17.1	11.1	58.3	57.6	134.3	55.5	55.6	54.7
Level of Service	E	C	B	D	B	B	E	E	F	E	E	D
Approach Delay (s)		25.9			22.6			109.5			55.4	
Approach LOS		C			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	41.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	117.4	Sum of lost time (s)	29.0
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	582	11	3	322	59	16	15	26	94	7	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.98			0.94			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.96	
Satd. Flow (prot)	1770	3529		1770	3457			1723			1748	
Flt Permitted	0.51	1.00		0.95	1.00			0.99			0.74	
Satd. Flow (perm)	949	3529		1770	3457			1723			1345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	633	12	3	350	64	17	16	28	102	8	27
RTOR Reduction (vph)	0	2	0	0	21	0	0	19	0	0	12	0
Lane Group Flow (vph)	22	643	0	3	393	0	0	42	0	0	125	0
Turn Type	Perm	NA		Prot	NA		Split	NA		Perm	NA	
Protected Phases		4		3	8		2	2			6	
Permitted Phases	4									6		
Actuated Green, G (s)	15.6	15.6		0.6	20.7			19.4			10.7	
Effective Green, g (s)	15.6	15.6		0.6	20.7			19.4			10.7	
Actuated g/C Ratio	0.24	0.24		0.01	0.32			0.30			0.17	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	232	862		16	1121			523			225	
v/s Ratio Prot		c0.18		0.00	c0.11			c0.02				
v/s Ratio Perm	0.02										c0.09	
v/c Ratio	0.09	0.75		0.19	0.35			0.08			0.55	
Uniform Delay, d1	18.6	22.3		31.4	16.4			15.8			24.4	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.2	3.6		5.6	0.2			0.3			2.9	
Delay (s)	18.8	25.8		37.0	16.6			16.1			27.3	
Level of Service	B	C		D	B			B			C	
Approach Delay (s)		25.6			16.8			16.1			27.3	
Approach LOS		C			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	63.8	Sum of lost time (s)	17.5
Intersection Capacity Utilization	37.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

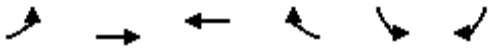


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	847	624	14	9	374	144	11	12	10	118	38	383
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	0.95		1.00	0.95		1.00	1.00	1.00		1.00	0.88
Frt	1.00	1.00		1.00	0.96		1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	3433	3528		1770	3391		1770	1863	1583		1795	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.96	1.00
Satd. Flow (perm)	3433	3528		1770	3391		1770	1863	1583		1795	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	921	678	15	10	407	157	12	13	11	128	41	416
RTOR Reduction (vph)	0	2	0	0	47	0	0	0	11	0	0	223
Lane Group Flow (vph)	921	691	0	10	517	0	12	13	0	0	169	193
Turn Type	Prot	NA		Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8	1	4	4	5
Permitted Phases									8			4
Actuated Green, G (s)	21.7	42.0		1.4	21.7		1.4	1.4	2.8		11.7	33.4
Effective Green, g (s)	21.7	42.0		1.4	21.7		1.4	1.4	2.8		11.7	33.4
Actuated g/C Ratio	0.29	0.56		0.02	0.29		0.02	0.02	0.04		0.16	0.45
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	999	1988		33	987		33	35	155		281	1249
v/s Ratio Prot	c0.27	0.20		0.01	c0.15		0.01	c0.01	0.00		c0.09	0.04
v/s Ratio Perm									0.00			0.02
v/c Ratio	0.92	0.35		0.30	0.52		0.36	0.37	0.00		0.60	0.15
Uniform Delay, d1	25.6	8.8		36.1	22.1		36.1	36.1	34.5		29.2	12.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	13.4	0.5		5.1	2.0		6.7	6.5	0.0		3.6	0.1
Delay (s)	39.0	9.3		41.2	24.1		42.8	42.6	34.5		32.8	12.2
Level of Service	D	A		D	C		D	D	C		C	B
Approach Delay (s)		26.2			24.4			40.2			18.2	
Approach LOS		C			C			D			B	

Intersection Summary			
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	74.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

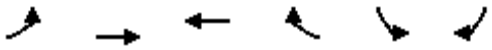
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1226	16	31	706	31	30	1	201	58	0	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00		1.00
Frt	1.00	1.00		1.00	0.99		1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	1770	3533		1770	3517		1770	1863	1583	1770		1583
Flt Permitted	0.29	1.00		0.20	1.00		0.76	1.00	1.00	0.76		1.00
Satd. Flow (perm)	543	3533		367	3517		1410	1863	1583	1410		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	1333	17	34	767	34	33	1	218	63	0	30
RTOR Reduction (vph)	0	2	0	0	7	0	0	0	15	0	0	19
Lane Group Flow (vph)	10	1348	0	34	794	0	33	1	203	63	0	11
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	20.3	20.3		20.3	20.3		16.0	16.0	16.0	16.0		16.0
Effective Green, g (s)	20.3	20.3		20.3	20.3		16.0	16.0	16.0	16.0		16.0
Actuated g/C Ratio	0.46	0.46		0.46	0.46		0.36	0.36	0.36	0.36		0.36
Clearance Time (s)	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
Lane Grp Cap (vph)	248	1618		168	1611		509	672	571	509		571
v/s Ratio Prot		c0.38			0.23			0.00				
v/s Ratio Perm	0.02			0.09			0.02		c0.13	0.04		0.01
v/c Ratio	0.04	0.83		0.20	0.49		0.06	0.00	0.35	0.12		0.02
Uniform Delay, d1	6.6	10.5		7.2	8.4		9.3	9.0	10.4	9.5		9.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.1	3.8		0.6	0.2		0.2	0.0	1.7	0.5		0.1
Delay (s)	6.7	14.4		7.8	8.6		9.5	9.0	12.1	10.0		9.2
Level of Service	A	B		A	A		A	A	B	A		A
Approach Delay (s)		14.3			8.6			11.7			9.7	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	44.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



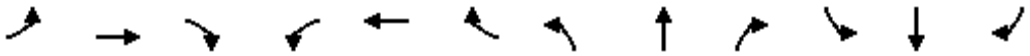
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	10	1079	691	32	130	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3516		1770	1583
Flt Permitted	0.28	1.00	1.00		0.95	1.00
Satd. Flow (perm)	527	3539	3516		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1173	751	35	141	30
RTOR Reduction (vph)	0	0	8	0	0	18
Lane Group Flow (vph)	11	1173	778	0	141	12
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	15.7	15.7	15.7		16.0	16.0
Effective Green, g (s)	15.7	15.7	15.7		16.0	16.0
Actuated g/C Ratio	0.40	0.40	0.40		0.40	0.40
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)	208	1399	1390		713	637
v/s Ratio Prot		c0.33	0.22		c0.08	
v/s Ratio Perm	0.02					0.01
v/c Ratio	0.05	0.84	0.56		0.20	0.02
Uniform Delay, d1	7.4	10.9	9.3		7.7	7.1
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	4.6	0.5		0.6	0.1
Delay (s)	7.5	15.4	9.8		8.3	7.2
Level of Service	A	B	A		A	A
Approach Delay (s)		15.4	9.8		8.1	
Approach LOS		B	A		A	

Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	39.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



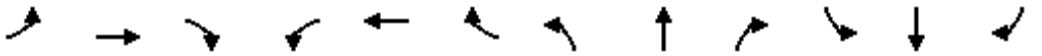
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	12	851	631	109	221	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3461		1770	1583
Flt Permitted	0.27	1.00	1.00		0.95	1.00
Satd. Flow (perm)	510	3539	3461		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	925	686	118	240	34
RTOR Reduction (vph)	0	0	36	0	0	20
Lane Group Flow (vph)	13	925	768	0	240	14
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	14.6	14.6	14.6		16.1	16.1
Effective Green, g (s)	14.6	14.6	14.6		16.1	16.1
Actuated g/C Ratio	0.38	0.38	0.38		0.42	0.42
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)	192	1335	1305		736	658
v/s Ratio Prot		c0.26	0.22		c0.14	
v/s Ratio Perm	0.03					0.01
v/c Ratio	0.07	0.69	0.59		0.33	0.02
Uniform Delay, d1	7.7	10.2	9.6		7.6	6.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	1.6	0.7		1.2	0.1
Delay (s)	7.9	11.7	10.3		8.8	6.7
Level of Service	A	B	B		A	A
Approach Delay (s)		11.7	10.3		8.6	
Approach LOS		B	B		A	

Intersection Summary			
HCM 2000 Control Delay	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	38.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



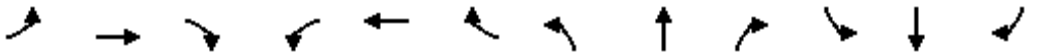
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	626	4	4	593	35	6	3	21	72	7	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.91			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	3536		1770	3510			1670			1703	
Flt Permitted	0.95	1.00		0.95	1.00			0.91			0.83	
Satd. Flow (perm)	1770	3536		1770	3510			1529			1449	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	680	4	4	645	38	7	3	23	78	8	77
RTOR Reduction (vph)	0	1	0	0	7	0	0	19	0	0	63	0
Lane Group Flow (vph)	25	683	0	4	676	0	0	14	0	0	100	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2			6		
Actuated Green, G (s)	0.5	12.6		0.5	12.6			6.0			6.0	
Effective Green, g (s)	0.5	12.6		0.5	12.6			6.0			6.0	
Actuated g/C Ratio	0.02	0.39		0.02	0.39			0.18			0.18	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	27	1366		27	1356			281			266	
v/s Ratio Prot	c0.01	c0.19		0.00	0.19							
v/s Ratio Perm								0.01			c0.07	
v/c Ratio	0.93	0.50		0.15	0.50			0.05			0.38	
Uniform Delay, d1	16.0	7.6		15.8	7.6			11.0			11.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	139.9	0.3		2.5	0.3			0.1			0.9	
Delay (s)	155.9	7.9		18.4	7.9			11.0			12.6	
Level of Service	F	A		B	A			B			B	
Approach Delay (s)		13.1			7.9			11.0			12.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	32.6	Sum of lost time (s)	13.5
Intersection Capacity Utilization	42.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	301	64	107	13	45	80	100	716	50	97	406	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.96	
Flt Protected	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1714	1583	1770	1863	1583	1770	3505		1770	3414	
Flt Permitted	0.95	0.62	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1101	1583	1770	1863	1583	1770	3505		1770	3414	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	327	70	116	14	49	87	109	778	54	105	441	136
RTOR Reduction (vph)	0	0	80	0	0	75	0	6	0	0	32	0
Lane Group Flow (vph)	196	201	36	14	49	12	109	826	0	105	545	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA		Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8						
Actuated Green, G (s)	15.7	31.8	26.6	0.7	11.6	11.6	22.7	22.7		16.8	16.8	
Effective Green, g (s)	15.7	31.8	26.6	0.7	11.6	11.6	22.7	22.7		16.8	16.8	
Actuated g/C Ratio	0.19	0.38	0.31	0.01	0.14	0.14	0.27	0.27		0.20	0.20	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	311	526	496	14	254	216	473	938		350	676	
v/s Ratio Prot	c0.12	0.07		0.01	0.03		0.06	c0.24		0.06	c0.16	
v/s Ratio Perm		c0.07	0.02			0.01						
v/c Ratio	0.63	0.38	0.07	1.00	0.19	0.06	0.23	0.88		0.30	0.81	
Uniform Delay, d1	31.9	19.3	20.4	42.0	32.4	31.8	24.2	29.8		29.0	32.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.1	0.5	0.1	240.5	0.4	0.1	0.3	9.7		0.5	7.0	
Delay (s)	36.0	19.8	20.5	282.6	32.8	31.9	24.5	39.5		29.5	39.4	
Level of Service	D	B	C	F	C	C	C	D		C	D	
Approach Delay (s)		26.1			55.6			37.7			37.9	
Approach LOS		C			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	84.8	Sum of lost time (s)	18.0
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

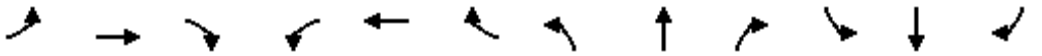


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	149	0	602	0	0	0	0	1186	258	167	347	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.0					4.5	4.5	4.5	4.5	
Lane Util. Factor		1.00	1.00					0.95	1.00	1.00	0.95	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	1583					3539	1583	1770	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	162	0	654	0	0	0	0	1289	280	182	377	0
RTOR Reduction (vph)	0	0	52	0	0	0	0	0	50	0	0	0
Lane Group Flow (vph)	0	162	602	0	0	0	0	1289	230	182	377	0
Turn Type	Split	NA	custom					NA	Perm	Prot	NA	
Protected Phases	4	4	5					2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		8.8	30.4					27.5	27.5	9.4	15.8	
Effective Green, g (s)		8.8	30.4					27.5	27.5	9.4	15.8	
Actuated g/C Ratio		0.15	0.51					0.46	0.46	0.16	0.27	
Clearance Time (s)		4.5	4.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		263	919					1643	735	281	944	
v/s Ratio Prot		0.09	c0.24					c0.36		c0.10	0.11	
v/s Ratio Perm			0.14						0.15			
v/c Ratio		0.62	0.66					0.78	0.31	0.65	0.40	
Uniform Delay, d1		23.6	10.6					13.4	9.9	23.3	17.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		4.2	1.7					2.5	0.2	5.1	1.3	
Delay (s)		27.9	12.3					15.9	10.2	28.4	19.1	
Level of Service		C	B					B	B	C	B	
Approach Delay (s)		15.4			0.0			14.9			22.1	
Approach LOS		B			A			B			C	

Intersection Summary			
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	59.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

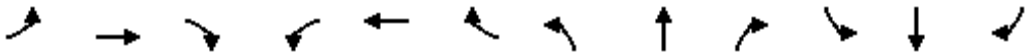
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	128	108	144	601	609	125	9	386	193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frt					0.95		1.00	0.97		1.00	0.95	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1738		1770	3449		1770	3362	
Flt Permitted					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)					1738		1770	3449		1770	3362	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	139	117	157	653	662	136	10	420	210
RTOR Reduction (vph)	0	0	0	0	30	0	0	20	0	0	79	0
Lane Group Flow (vph)	0	0	0	0	383	0	653	778	0	10	551	0
Turn Type				Split	NA		Prot	NA		Prot	NA	
Protected Phases				8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)					17.7		28.5	45.4		0.8	17.7	
Effective Green, g (s)					17.7		28.5	45.4		0.8	17.7	
Actuated g/C Ratio					0.23		0.37	0.59		0.01	0.23	
Clearance Time (s)					4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)					3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)					397		651	2023		18	768	
v/s Ratio Prot					c0.22		c0.37	0.23		0.01	c0.16	
v/s Ratio Perm												
v/c Ratio					0.96		1.00	0.38		0.56	0.72	
Uniform Delay, d1					29.5		24.5	8.5		38.1	27.5	
Progression Factor					1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2					35.7		36.0	0.1		32.3	3.2	
Delay (s)					65.2		60.5	8.7		70.4	30.8	
Level of Service					E		E	A		E	C	
Approach Delay (s)		0.0			65.2			32.0			31.4	
Approach LOS		A			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	77.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



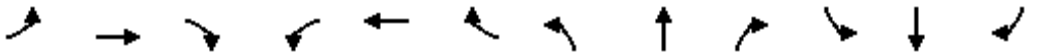
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	1940	101	394	1583	17	332	5	725	9	3	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.0	7.0	7.3	7.0	7.0	7.7	7.7	7.3	7.0	7.0	7.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00
Frt	1.00	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	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	1681	1688	1583	1681	1720	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.97	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	1681	1688	1583	1681	1720	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	2109	110	428	1721	18	361	5	788	10	3	3
RTOR Reduction (vph)	0	0	63	0	0	8	0	0	178	0	0	3
Lane Group Flow (vph)	39	2109	47	428	1721	10	184	182	610	6	7	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pm+ov	Split	NA	Perm
Protected Phases	5	2		1	6		8	8	1	7	7	
Permitted Phases			2			6			8			7
Actuated Green, G (s)	3.6	52.0	52.0	18.0	66.4	66.4	17.8	17.8	35.8	4.2	4.2	4.2
Effective Green, g (s)	3.6	52.0	52.0	18.0	66.4	66.4	17.8	17.8	35.8	4.2	4.2	4.2
Actuated g/C Ratio	0.03	0.43	0.43	0.15	0.55	0.55	0.15	0.15	0.30	0.03	0.03	0.03
Clearance Time (s)	7.3	7.0	7.0	7.3	7.0	7.0	7.7	7.7	7.3	7.0	7.0	7.0
Vehicle Extension (s)	2.0	8.0	8.0	2.0	8.0	8.0	3.0	3.0	2.0	3.0	3.0	3.0
Lane Grp Cap (vph)	102	2185	680	510	2790	868	247	248	468	58	59	54
v/s Ratio Prot	0.01	c0.41		0.12	0.34		0.11	0.11	c0.19	0.00	c0.00	
v/s Ratio Perm			0.03			0.01			0.19			0.00
v/c Ratio	0.38	0.97	0.07	0.84	0.62	0.01	0.74	0.73	1.30	0.10	0.12	0.00
Uniform Delay, d1	57.6	33.6	20.3	50.1	18.6	12.4	49.4	49.3	42.6	56.6	56.6	56.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	12.6	0.2	11.1	1.0	0.0	11.5	10.7	151.3	0.8	0.9	0.0
Delay (s)	58.5	46.3	20.5	61.2	19.6	12.4	61.0	60.0	193.9	57.4	57.5	56.4
Level of Service	E	D	C	E	B	B	E	E	F	E	E	E
Approach Delay (s)		45.2			27.7			151.6			57.2	
Approach LOS		D			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	60.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	121.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	110.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



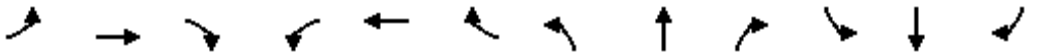
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	574	26	12	557	89	19	16	19	86	24	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.95			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	3516		1770	3466			1742			1731	
Flt Permitted	0.35	1.00		0.95	1.00			0.98			0.81	
Satd. Flow (perm)	649	3516		1770	3466			1742			1435	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	624	28	13	605	97	21	17	21	93	26	63
RTOR Reduction (vph)	0	4	0	0	18	0	0	15	0	0	26	0
Lane Group Flow (vph)	39	648	0	13	684	0	0	44	0	0	156	0
Turn Type	Perm	NA		Prot	NA		Split	NA		Perm	NA	
Protected Phases		4		3	8		2	2			6	
Permitted Phases	4									6		
Actuated Green, G (s)	17.0	17.0		0.7	22.2			19.4			11.4	
Effective Green, g (s)	17.0	17.0		0.7	22.2			19.4			11.4	
Actuated g/C Ratio	0.26	0.26		0.01	0.34			0.29			0.17	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	167	905		18	1165			512			247	
v/s Ratio Prot		c0.18		0.01	c0.20			c0.03				
v/s Ratio Perm	0.06										c0.11	
v/c Ratio	0.23	0.72		0.72	0.59			0.09			0.63	
Uniform Delay, d1	19.4	22.3		32.6	18.1			16.9			25.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.7	2.7		87.1	0.8			0.3			5.0	
Delay (s)	20.1	25.0		119.6	18.9			17.2			30.3	
Level of Service	C	C		F	B			B			C	
Approach Delay (s)		24.7			20.7			17.2			30.3	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	66.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	47.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



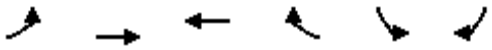
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	401	539	5	2	579	108	35	63	16	174	17	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	0.95		1.00	0.95		1.00	1.00	1.00		1.00	0.88
Frt	1.00	1.00		1.00	0.98		1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	3433	3535		1770	3456		1770	1863	1583		1781	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.96	1.00
Satd. Flow (perm)	3433	3535		1770	3456		1770	1863	1583		1781	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	436	586	5	2	629	117	38	68	17	189	18	533
RTOR Reduction (vph)	0	1	0	0	20	0	0	0	16	0	0	157
Lane Group Flow (vph)	436	590	0	2	726	0	38	68	1	0	207	376
Turn Type	Prot	NA		Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8	1	4	4	5
Permitted Phases									8			4
Actuated Green, G (s)	10.4	31.1		1.5	22.2		3.4	3.4	4.9		12.5	22.9
Effective Green, g (s)	10.4	31.1		1.5	22.2		3.4	3.4	4.9		12.5	22.9
Actuated g/C Ratio	0.16	0.47		0.02	0.33		0.05	0.05	0.07		0.19	0.34
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	536	1653		39	1153		90	95	223		334	959
v/s Ratio Prot	c0.13	0.17		0.00	c0.21		0.02	c0.04	0.00		c0.12	0.06
v/s Ratio Perm									0.00			0.07
v/c Ratio	0.81	0.36		0.05	0.63		0.42	0.72	0.01		0.62	0.39
Uniform Delay, d1	27.1	11.3		31.8	18.7		30.6	31.1	28.5		24.8	16.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	9.2	0.6		0.5	2.6		3.2	22.5	0.0		3.4	0.3
Delay (s)	36.3	11.9		32.4	21.3		33.8	53.6	28.6		28.2	16.8
Level of Service	D	B		C	C		C	D	C		C	B
Approach Delay (s)		22.3			21.3			44.0			20.0	
Approach LOS		C			C			D			B	

Intersection Summary			
HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	66.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



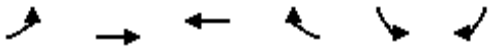
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	813	24	160	820	124	20	2	71	61	1	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3524		1770	3469		1770	1863	1583	1770	1863	1583
Flt Permitted	0.20	1.00		0.25	1.00		0.76	1.00	1.00	0.76	1.00	1.00
Satd. Flow (perm)	377	3524		463	3469		1410	1863	1583	1409	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	884	26	174	891	135	22	2	77	66	1	24
RTOR Reduction (vph)	0	5	0	0	25	0	0	0	51	0	0	16
Lane Group Flow (vph)	27	905	0	174	1001	0	22	2	26	66	1	8
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	23.7	23.7		23.7	23.7		16.6	16.6	16.6	16.6	16.6	16.6
Effective Green, g (s)	23.7	23.7		23.7	23.7		16.6	16.6	16.6	16.6	16.6	16.6
Actuated g/C Ratio	0.49	0.49		0.49	0.49		0.34	0.34	0.34	0.34	0.34	0.34
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)	184	1729		227	1702		484	640	544	484	640	544
v/s Ratio Prot		0.26			0.29			0.00			0.00	
v/s Ratio Perm	0.07			c0.38			0.02		0.02	c0.05		0.01
v/c Ratio	0.15	0.52		0.77	0.59		0.05	0.00	0.05	0.14	0.00	0.02
Uniform Delay, d1	6.8	8.4		10.0	8.8		10.6	10.4	10.6	10.9	10.4	10.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.3		14.3	0.5		0.2	0.0	0.2	0.6	0.0	0.1
Delay (s)	7.1	8.7		24.3	9.3		10.7	10.4	10.7	11.5	10.4	10.5
Level of Service	A	A		C	A		B	B	B	B	B	B
Approach Delay (s)		8.7			11.5			10.7			11.2	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	10.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	48.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



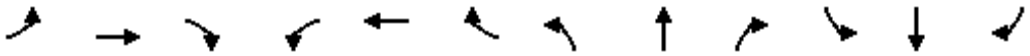
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	30	764	750	90	71	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3482		1770	1583
Flt Permitted	0.28	1.00	1.00		0.95	1.00
Satd. Flow (perm)	525	3539	3482		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	830	815	98	77	23
RTOR Reduction (vph)	0	0	24	0	0	13
Lane Group Flow (vph)	33	830	889	0	77	10
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	14.2	14.2	14.2		16.1	16.1
Effective Green, g (s)	14.2	14.2	14.2		16.1	16.1
Actuated g/C Ratio	0.37	0.37	0.37		0.42	0.42
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)	194	1312	1290		744	665
v/s Ratio Prot		0.23	c0.26		c0.04	
v/s Ratio Perm	0.06					0.01
v/c Ratio	0.17	0.63	0.69		0.10	0.01
Uniform Delay, d1	8.1	9.9	10.2		6.7	6.5
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	1.0	1.6		0.3	0.0
Delay (s)	8.5	10.9	11.7		7.0	6.5
Level of Service	A	B	B		A	A
Approach Delay (s)		10.8	11.7		6.9	
Approach LOS		B	B		A	

Intersection Summary			
HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	38.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



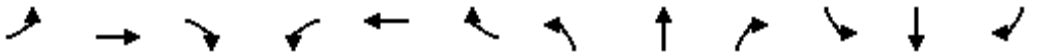
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	26	697	636	135	97	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.97		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3446		1770	1583
Flt Permitted	0.29	1.00	1.00		0.95	1.00
Satd. Flow (perm)	548	3539	3446		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	758	691	147	105	22
RTOR Reduction (vph)	0	0	48	0	0	13
Lane Group Flow (vph)	28	758	790	0	105	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	13.6	13.6	13.6		16.1	16.1
Effective Green, g (s)	13.6	13.6	13.6		16.1	16.1
Actuated g/C Ratio	0.36	0.36	0.36		0.43	0.43
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)	197	1276	1243		755	676
v/s Ratio Prot		0.21	c0.23		c0.06	
v/s Ratio Perm	0.05					0.01
v/c Ratio	0.14	0.59	0.64		0.14	0.01
Uniform Delay, d1	8.1	9.8	10.0		6.6	6.2
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.3	0.7	1.1		0.4	0.0
Delay (s)	8.5	10.6	11.1		7.0	6.3
Level of Service	A	B	B		A	A
Approach Delay (s)		10.5	11.1		6.8	
Approach LOS		B	B		A	

Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	37.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



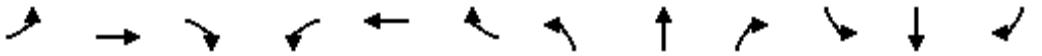
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	74	653	17	10	595	37	11	1	13	32	2	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.93			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	3526		1770	3508			1695			1673	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.88	
Satd. Flow (perm)	1770	3526		1770	3508			1517			1492	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	80	710	18	11	647	40	12	1	14	35	2	67
RTOR Reduction (vph)	0	2	0	0	7	0	0	13	0	0	61	0
Lane Group Flow (vph)	80	726	0	11	680	0	0	14	0	0	43	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2			6		
Actuated Green, G (s)	2.4	17.4		0.5	15.5			3.3			3.3	
Effective Green, g (s)	2.4	17.4		0.5	15.5			3.3			3.3	
Actuated g/C Ratio	0.07	0.50		0.01	0.45			0.10			0.10	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	122	1768		25	1566			144			141	
v/s Ratio Prot	c0.05	c0.21		0.01	0.19							
v/s Ratio Perm								0.01			c0.03	
v/c Ratio	0.66	0.41		0.44	0.43			0.10			0.31	
Uniform Delay, d1	15.7	5.4		17.0	6.6			14.3			14.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	12.0	0.2		11.9	0.2			0.3			1.2	
Delay (s)	27.7	5.6		28.8	6.8			14.6			15.9	
Level of Service	C	A		C	A			B			B	
Approach Delay (s)		7.8			7.1			14.6			15.9	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	8.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	34.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	195	72	79	51	76	167	69	400	19	85	548	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.96	
Flt Protected	0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1729	1583	1770	1863	1583	1770	3515		1770	3400	
Flt Permitted	0.95	0.86	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1518	1583	1770	1863	1583	1770	3515		1770	3400	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	212	78	86	55	83	182	75	435	21	92	596	212
RTOR Reduction (vph)	0	0	64	0	0	144	0	5	0	0	44	0
Lane Group Flow (vph)	144	146	22	55	83	38	75	451	0	92	765	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA		Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8						
Actuated Green, G (s)	7.6	26.8	19.2	3.7	15.3	15.3	14.3	14.3		18.4	18.4	
Effective Green, g (s)	7.6	26.8	19.2	3.7	15.3	15.3	14.3	14.3		18.4	18.4	
Actuated g/C Ratio	0.10	0.36	0.26	0.05	0.21	0.21	0.19	0.19		0.25	0.25	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	173	574	412	88	387	329	343	682		442	850	
v/s Ratio Prot	c0.09	c0.03		0.03	0.04		0.04	c0.13		0.05	c0.22	
v/s Ratio Perm		c0.07	0.01			0.02						
v/c Ratio	0.83	0.25	0.05	0.62	0.21	0.11	0.22	0.66		0.21	0.90	
Uniform Delay, d1	32.4	16.4	20.4	34.3	24.2	23.7	24.9	27.4		21.8	26.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	27.5	0.2	0.1	13.0	0.3	0.2	0.3	2.4		0.2	12.3	
Delay (s)	59.9	16.6	20.4	47.3	24.4	23.8	25.3	29.8		22.1	39.0	
Level of Service	E	B	C	D	C	C	C	C		C	D	
Approach Delay (s)		34.1			28.0			29.2			37.3	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	33.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	73.6	Sum of lost time (s)	18.0
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

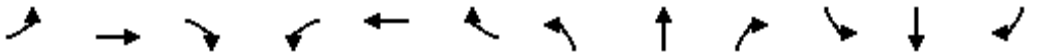


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	194	4	862	0	0	0	0	685	181	217	449	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.0					4.5	4.5	4.5	4.5	
Lane Util. Factor		1.00	1.00					0.95	1.00	1.00	0.95	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1776	1583					3539	1583	1770	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1776	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	211	4	937	0	0	0	0	745	197	236	488	0
RTOR Reduction (vph)	0	0	26	0	0	0	0	0	74	0	0	0
Lane Group Flow (vph)	0	215	911	0	0	0	0	745	123	236	488	0
Turn Type	Split	NA	custom					NA	Perm	Prot	NA	
Protected Phases	4	4	5					2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		11.6	27.7					19.2	19.2	9.4	13.0	
Effective Green, g (s)		11.6	27.7					19.2	19.2	9.4	13.0	
Actuated g/C Ratio		0.22	0.52					0.36	0.36	0.18	0.24	
Clearance Time (s)		4.5	4.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		383	934					1265	565	309	856	
v/s Ratio Prot		0.12	c0.29					c0.21		c0.13	0.14	
v/s Ratio Perm			0.28						0.08			
v/c Ratio		0.56	0.98					0.59	0.22	0.76	0.57	
Uniform Delay, d1		18.8	12.7					14.0	12.0	21.1	17.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.9	23.4					0.7	0.2	10.7	2.7	
Delay (s)		20.7	36.1					14.7	12.2	31.8	20.6	
Level of Service		C	D					B	B	C	C	
Approach Delay (s)		33.2			0.0			14.2			24.3	
Approach LOS		C			A			B			C	

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	53.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	224	50	140	470	312	97	6	442	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frt					0.95		1.00	0.96		1.00	0.97	
Flt Protected					0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1731		1770	3414		1770	3435	
Flt Permitted					0.97		0.95	1.00		0.95	1.00	
Satd. Flow (perm)					1731		1770	3414		1770	3435	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	243	54	152	511	339	105	7	480	117
RTOR Reduction (vph)	0	0	0	0	29	0	0	39	0	0	31	0
Lane Group Flow (vph)	0	0	0	0	420	0	511	405	0	7	566	0
Turn Type				Split	NA		Prot	NA		Prot	NA	
Protected Phases				8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)					17.2		19.9	35.4		0.8	16.3	
Effective Green, g (s)					17.2		19.9	35.4		0.8	16.3	
Actuated g/C Ratio					0.26		0.30	0.53		0.01	0.24	
Clearance Time (s)					4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)					3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)					445		526	1806		21	836	
v/s Ratio Prot					c0.24		c0.29	0.12		0.00	c0.16	
v/s Ratio Perm												
v/c Ratio					0.94		0.97	0.22		0.33	0.68	
Uniform Delay, d1					24.4		23.2	8.4		32.8	22.9	
Progression Factor					1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2					28.8		31.9	0.1		9.1	2.2	
Delay (s)					53.1		55.1	8.5		41.9	25.1	
Level of Service					D		E	A		D	C	
Approach Delay (s)		0.0			53.1			33.4			25.3	
Approach LOS		A			D			C			C	

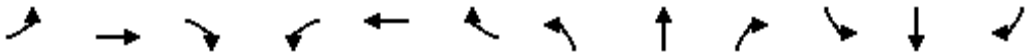
Intersection Summary			
HCM 2000 Control Delay	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	66.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	1339	86	293	1516	12	268	4	574	8	2	3
Future Volume (vph)	32	1339	86	293	1516	12	268	4	574	8	2	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.0	7.0	7.3	7.0	7.0	7.7	7.7	7.3	7.0	7.0	7.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00
Frt	1.00	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	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	1681	1688	1583	1681	1713	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.97	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	1681	1688	1583	1681	1713	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	35	1455	93	318	1648	13	291	4	624	9	2	3
RTOR Reduction (vph)	0	0	51	0	0	6	0	0	136	0	0	3
Lane Group Flow (vph)	35	1455	42	318	1648	7	148	147	488	5	6	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pm+ov	Split	NA	Perm
Protected Phases	5	2		1	6		8	8	1	7	7	
Permitted Phases			2			6			8			7
Actuated Green, G (s)	2.8	53.5	53.5	16.0	66.7	66.7	15.0	15.0	31.0	4.2	4.2	4.2
Effective Green, g (s)	2.8	53.5	53.5	16.0	66.7	66.7	15.0	15.0	31.0	4.2	4.2	4.2
Actuated g/C Ratio	0.02	0.45	0.45	0.14	0.57	0.57	0.13	0.13	0.26	0.04	0.04	0.04
Clearance Time (s)	7.3	7.0	7.0	7.3	7.0	7.0	7.7	7.7	7.3	7.0	7.0	7.0
Vehicle Extension (s)	2.0	8.0	8.0	2.0	8.0	8.0	3.0	3.0	2.0	3.0	3.0	3.0
Lane Grp Cap (vph)	81	2311	719	466	2881	897	214	215	416	59	61	56
v/s Ratio Prot	0.01	c0.29		0.09	0.32		0.09	0.09	c0.16	0.00	c0.00	
v/s Ratio Perm			0.03			0.00			0.15			0.00
v/c Ratio	0.43	0.63	0.06	0.68	0.57	0.01	0.69	0.68	1.17	0.08	0.10	0.00
Uniform Delay, d1	56.7	24.5	18.0	48.4	16.3	11.1	49.1	49.1	43.4	54.9	54.9	54.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	1.2	0.1	3.3	0.8	0.0	9.3	8.7	101.0	0.6	0.7	0.0
Delay (s)	58.0	25.8	18.1	51.7	17.1	11.1	58.4	57.7	144.4	55.5	55.6	54.7
Level of Service	E	C	B	D	B	B	E	E	F	E	E	D
Approach Delay (s)		26.0			22.6			116.7			55.4	
Approach LOS		C			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	43.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	117.7	Sum of lost time (s)	29.0
Intersection Capacity Utilization	89.2%	ICU Level of Service	E
Analysis Period (min)	15		

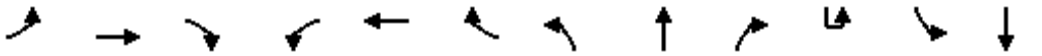
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	593	11	3	325	59	16	15	26	94	7	25
Future Volume (vph)	21	593	11	3	325	59	16	15	26	94	7	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.98			0.94			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.96	
Satd. Flow (prot)	1770	3530		1770	3458			1723			1748	
Flt Permitted	0.51	1.00		0.95	1.00			0.99			0.74	
Satd. Flow (perm)	946	3530		1770	3458			1723			1345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	645	12	3	353	64	17	16	28	102	8	27
RTOR Reduction (vph)	0	2	0	0	20	0	0	20	0	0	12	0
Lane Group Flow (vph)	23	655	0	3	397	0	0	41	0	0	125	0
Turn Type	Perm	NA		Prot	NA		Split	NA		Perm	NA	
Protected Phases		4		3	8		2	2			6	
Permitted Phases	4									6		
Actuated Green, G (s)	15.9	15.9		0.6	21.0			19.4			10.8	
Effective Green, g (s)	15.9	15.9		0.6	21.0			19.4			10.8	
Actuated g/C Ratio	0.25	0.25		0.01	0.33			0.30			0.17	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	234	874		16	1131			520			226	
v/s Ratio Prot		c0.19		0.00	c0.11			c0.02				
v/s Ratio Perm	0.02										c0.09	
v/c Ratio	0.10	0.75		0.19	0.35			0.08			0.55	
Uniform Delay, d1	18.6	22.3		31.6	16.4			16.0			24.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.2	3.6		5.6	0.2			0.3			2.9	
Delay (s)	18.8	25.9		37.2	16.6			16.3			27.4	
Level of Service	B	C		D	B			B			C	
Approach Delay (s)		25.6			16.8			16.3			27.4	
Approach LOS		C			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	64.2	Sum of lost time (s)	17.5
Intersection Capacity Utilization	38.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



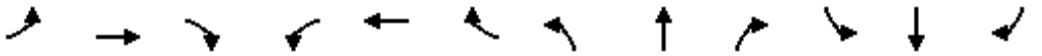
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	764	628	14	9	375	146	11	12	10	26	126	38
Future Volume (vph)	764	628	14	9	375	146	11	12	10	26	126	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	0.95		1.00	0.95		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	0.96		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	3528		1770	3390		1770	1863	1583		1770	1863
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	3528		1770	3390		1770	1863	1583		1770	1863
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	830	683	15	10	408	159	12	13	11	28	137	41
RTOR Reduction (vph)	0	1	0	0	47	0	0	0	11	0	0	0
Lane Group Flow (vph)	830	697	0	10	520	0	12	13	0	0	165	41
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	7	4
Permitted Phases									8			
Actuated Green, G (s)	20.3	40.6		1.4	21.7		0.7	0.8	2.2		11.4	11.5
Effective Green, g (s)	20.3	40.6		1.4	21.7		0.7	0.8	2.2		11.4	11.5
Actuated g/C Ratio	0.28	0.56		0.02	0.30		0.01	0.01	0.03		0.16	0.16
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	965	1983		34	1018		17	20	146		279	296
v/s Ratio Prot	c0.24	0.20		0.01	c0.15		0.01	0.01	0.00		c0.09	0.02
v/s Ratio Perm									0.00			
v/c Ratio	0.86	0.35		0.29	0.51		0.71	0.65	0.00		0.59	0.14
Uniform Delay, d1	24.6	8.6		34.9	20.9		35.6	35.6	33.9		28.2	26.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	7.9	0.5		4.8	1.8		84.0	56.6	0.0		3.3	0.2
Delay (s)	32.5	9.1		39.7	22.7		119.6	92.1	33.9		31.6	26.3
Level of Service	C	A		D	C		F	F	C		C	C
Approach Delay (s)		21.8			23.0			83.5				19.4
Approach LOS		C			C			F				B

Intersection Summary			
HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	72.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	353
Future Volume (vph)	353
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.5
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	384
RTOR Reduction (vph)	128
Lane Group Flow (vph)	256
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	31.8
Effective Green, g (s)	31.8
Actuated g/C Ratio	0.44
Clearance Time (s)	4.5
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	795
v/s Ratio Prot	c0.09
v/s Ratio Perm	0.07
v/c Ratio	0.32
Uniform Delay, d1	13.2
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	13.4
Level of Service	B
Approach Delay (s)	
Approach LOS	

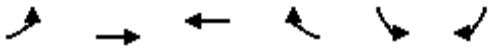
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	1228	16	31	714	32	30	1	201	62	0	81
Future Volume (vph)	98	1228	16	31	714	32	30	1	201	62	0	81
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
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00		1.00
Frt	1.00	1.00		1.00	0.99		1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	1770	3533		1770	3516		1770	1863	1583	1770		1583
Flt Permitted	0.29	1.00		0.20	1.00		0.76	1.00	1.00	0.76		1.00
Satd. Flow (perm)	534	3533		367	3516		1410	1863	1583	1410		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	107	1335	17	34	776	35	33	1	218	67	0	88
RTOR Reduction (vph)	0	2	0	0	7	0	0	0	15	0	0	56
Lane Group Flow (vph)	107	1350	0	34	804	0	33	1	203	67	0	32
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	20.3	20.3		20.3	20.3		16.0	16.0	16.0	16.0		16.0
Effective Green, g (s)	20.3	20.3		20.3	20.3		16.0	16.0	16.0	16.0		16.0
Actuated g/C Ratio	0.46	0.46		0.46	0.46		0.36	0.36	0.36	0.36		0.36
Clearance Time (s)	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
Lane Grp Cap (vph)	244	1618		168	1611		509	672	571	509		571
v/s Ratio Prot		c0.38			0.23			0.00				
v/s Ratio Perm	0.20			0.09			0.02		c0.13	0.05		0.02
v/c Ratio	0.44	0.83		0.20	0.50		0.06	0.00	0.35	0.13		0.06
Uniform Delay, d1	8.1	10.5		7.2	8.4		9.3	9.0	10.4	9.5		9.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.3	3.9		0.6	0.2		0.2	0.0	1.7	0.5		0.2
Delay (s)	9.4	14.4		7.8	8.7		9.5	9.0	12.1	10.0		9.4
Level of Service	A	B		A	A		A	A	B	B		A
Approach Delay (s)		14.0			8.6			11.7			9.7	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	44.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.3%	ICU Level of Service	B
Analysis Period (min)	15		

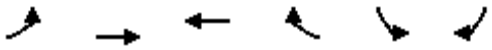
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	1085	712	34	130	28
Future Volume (vph)	10	1085	712	34	130	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3515		1770	1583
Flt Permitted	0.27	1.00	1.00		0.95	1.00
Satd. Flow (perm)	502	3539	3515		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1179	774	37	141	30
RTOR Reduction (vph)	0	0	8	0	0	18
Lane Group Flow (vph)	11	1179	803	0	141	12
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	15.7	15.7	15.7		16.0	16.0
Effective Green, g (s)	15.7	15.7	15.7		16.0	16.0
Actuated g/C Ratio	0.40	0.40	0.40		0.40	0.40
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)	198	1399	1390		713	637
v/s Ratio Prot		c0.33	0.23		c0.08	
v/s Ratio Perm	0.02					0.01
v/c Ratio	0.06	0.84	0.58		0.20	0.02
Uniform Delay, d1	7.4	10.9	9.4		7.7	7.1
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	4.8	0.6		0.6	0.1
Delay (s)	7.5	15.7	10.0		8.3	7.2
Level of Service	A	B	A		A	A
Approach Delay (s)		15.6	10.0		8.1	
Approach LOS		B	A		A	

Intersection Summary			
HCM 2000 Control Delay	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	39.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		

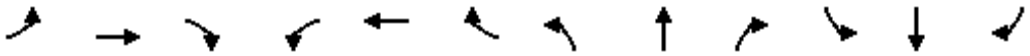
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	12	856	650	111	222	31
Future Volume (vph)	12	856	650	111	222	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3462		1770	1583
Flt Permitted	0.27	1.00	1.00		0.95	1.00
Satd. Flow (perm)	510	3539	3462		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	930	707	121	241	34
RTOR Reduction (vph)	0	0	36	0	0	20
Lane Group Flow (vph)	13	930	792	0	241	14
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	14.6	14.6	14.6		16.1	16.1
Effective Green, g (s)	14.6	14.6	14.6		16.1	16.1
Actuated g/C Ratio	0.38	0.38	0.38		0.42	0.42
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)	192	1335	1306		736	658
v/s Ratio Prot		c0.26	0.23		c0.14	
v/s Ratio Perm	0.03					0.01
v/c Ratio	0.07	0.70	0.61		0.33	0.02
Uniform Delay, d1	7.7	10.2	9.7		7.6	6.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	1.6	0.8		1.2	0.1
Delay (s)	7.9	11.8	10.5		8.8	6.7
Level of Service	A	B	B		A	A
Approach Delay (s)		11.7	10.5		8.6	
Approach LOS		B	B		A	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	38.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.6%	ICU Level of Service	A
Analysis Period (min)	15		

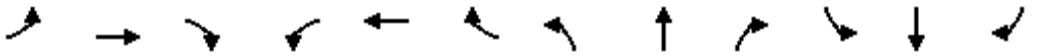
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	631	4	5	610	36	6	3	21	72	7	71
Future Volume (vph)	23	631	4	5	610	36	6	3	21	72	7	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.91			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	3536		1770	3510			1670			1703	
Flt Permitted	0.95	1.00		0.95	1.00			0.91			0.83	
Satd. Flow (perm)	1770	3536		1770	3510			1534			1449	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	686	4	5	663	39	7	3	23	78	8	77
RTOR Reduction (vph)	0	1	0	0	7	0	0	19	0	0	63	0
Lane Group Flow (vph)	25	689	0	5	695	0	0	14	0	0	100	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2			6		
Actuated Green, G (s)	0.5	12.6		0.5	12.6			5.9			5.9	
Effective Green, g (s)	0.5	12.6		0.5	12.6			5.9			5.9	
Actuated g/C Ratio	0.02	0.39		0.02	0.39			0.18			0.18	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	27	1370		27	1360			278			263	
v/s Ratio Prot	c0.01	0.19		0.00	c0.20							
v/s Ratio Perm								0.01			c0.07	
v/c Ratio	0.93	0.50		0.19	0.51			0.05			0.38	
Uniform Delay, d1	16.0	7.6		15.8	7.6			11.0			11.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	139.9	0.3		3.3	0.3			0.1			0.9	
Delay (s)	155.8	7.9		19.1	7.9			11.1			12.6	
Level of Service	F	A		B	A			B			B	
Approach Delay (s)		13.0			8.0			11.1			12.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	32.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	42.0%	ICU Level of Service	A
Analysis Period (min)	15		

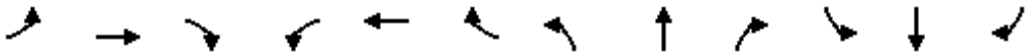
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	427	64	107	13	45	80	101	665	50	97	385	164
Future Volume (vph)	427	64	107	13	45	80	101	665	50	97	385	164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.96	
Flt Protected	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1706	1583	1770	1863	1583	1770	3502		1770	3381	
Flt Permitted	0.95	0.54	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	957	1583	1770	1863	1583	1770	3502		1770	3381	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	464	70	116	14	49	87	110	723	54	105	418	178
RTOR Reduction (vph)	0	0	79	0	0	75	0	6	0	0	52	0
Lane Group Flow (vph)	264	270	37	14	49	12	110	771	0	105	544	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA		Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8						
Actuated Green, G (s)	15.8	31.9	26.7	0.7	11.6	11.6	22.1	22.1		16.8	16.8	
Effective Green, g (s)	15.8	31.9	26.7	0.7	11.6	11.6	22.1	22.1		16.8	16.8	
Actuated g/C Ratio	0.19	0.38	0.32	0.01	0.14	0.14	0.26	0.26		0.20	0.20	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	315	502	501	14	256	217	464	918		352	673	
v/s Ratio Prot	c0.16	0.10		0.01	0.03		0.06	c0.22		0.06	c0.16	
v/s Ratio Perm		c0.10	0.02			0.01						
v/c Ratio	0.84	0.54	0.07	1.00	0.19	0.06	0.24	0.84		0.30	0.81	
Uniform Delay, d1	33.0	20.4	20.1	41.8	32.2	31.6	24.5	29.4		28.7	32.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.4	1.1	0.1	240.5	0.4	0.1	0.3	6.8		0.5	7.1	
Delay (s)	50.4	21.6	20.2	282.3	32.6	31.7	24.7	36.3		29.2	39.3	
Level of Service	D	C	C	F	C	C	C	D		C	D	
Approach Delay (s)		33.0			55.4			34.8			37.8	
Approach LOS		C			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	36.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	84.3	Sum of lost time (s)	18.0
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	149	0	618	0	0	0	0	1261	258	167	349	0
Future Volume (vph)	149	0	618	0	0	0	0	1261	258	167	349	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.0					4.5	4.5	4.5	4.5	
Lane Util. Factor		1.00	1.00					0.95	1.00	1.00	0.95	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	1583					3539	1583	1770	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	162	0	672	0	0	0	0	1371	280	182	379	0
RTOR Reduction (vph)	0	0	51	0	0	0	0	0	50	0	0	0
Lane Group Flow (vph)	0	162	621	0	0	0	0	1371	230	182	379	0
Turn Type	Split	NA	custom					NA	Perm	Prot	NA	
Protected Phases	4	4	5					2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		8.8	30.7					27.8	27.8	9.4	15.8	
Effective Green, g (s)		8.8	30.7					27.8	27.8	9.4	15.8	
Actuated g/C Ratio		0.15	0.52					0.47	0.47	0.16	0.27	
Clearance Time (s)		4.5	4.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		261	923					1653	739	279	939	
v/s Ratio Prot		0.09	c0.25					c0.39		c0.10	0.11	
v/s Ratio Perm			0.14						0.15			
v/c Ratio		0.62	0.67					0.83	0.31	0.65	0.40	
Uniform Delay, d1		23.8	10.7					13.8	9.9	23.5	18.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		4.5	1.9					3.6	0.2	5.4	1.3	
Delay (s)		28.3	12.6					17.4	10.1	28.9	19.3	
Level of Service		C	B					B	B	C	B	
Approach Delay (s)		15.7			0.0			16.2			22.4	
Approach LOS		B			A			B			C	

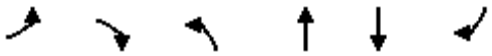
Intersection Summary			
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	59.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	128	108	144	650	635	125	9	388	193
Future Volume (vph)	0	0	0	128	108	144	650	635	125	9	388	193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frt					0.95		1.00	0.98		1.00	0.95	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1738		1770	3452		1770	3363	
Flt Permitted					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)					1738		1770	3452		1770	3363	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	139	117	157	707	690	136	10	422	210
RTOR Reduction (vph)	0	0	0	0	25	0	0	17	0	0	65	0
Lane Group Flow (vph)	0	0	0	0	388	0	707	809	0	10	567	0
Turn Type				Split	NA		Prot	NA		Prot	NA	
Protected Phases				8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)					20.9		37.2	56.3		0.8	19.9	
Effective Green, g (s)					20.9		37.2	56.3		0.8	19.9	
Actuated g/C Ratio					0.23		0.41	0.62		0.01	0.22	
Clearance Time (s)					4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)					3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)					396		719	2124		15	731	
v/s Ratio Prot					c0.22		c0.40	0.23		0.01	c0.17	
v/s Ratio Perm												
v/c Ratio					0.98		0.98	0.38		0.67	0.78	
Uniform Delay, d1					35.1		26.8	8.8		45.2	33.7	
Progression Factor					1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2					39.9		29.2	0.1		75.9	5.2	
Delay (s)					75.0		56.0	9.0		121.1	38.9	
Level of Service					E		E	A		F	D	
Approach Delay (s)		0.0			75.0			30.7			40.1	
Approach LOS		A			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	91.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	38	3	945	505	7
Future Volume (Veh/h)	0	38	3	945	505	7
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	41	3	1027	549	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (ft)				590		
pX, platoon unblocked						
vC, conflicting volume	1072	278	557			
vC1, stage 1 conf vol	553					
vC2, stage 2 conf vol	520					
vCu, unblocked vol	1072	278	557			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	100			
cM capacity (veh/h)	427	719	1010			

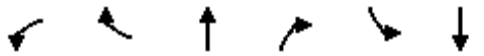
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	345	685	366	191
Volume Left	0	3	0	0	0
Volume Right	41	0	0	0	8
cSH	719	1010	1700	1700	1700
Volume to Capacity	0.06	0.00	0.40	0.22	0.11
Queue Length 95th (ft)	5	0	0	0	0
Control Delay (s)	10.3	0.1	0.0	0.0	0.0
Lane LOS	B	A			
Approach Delay (s)	10.3	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	38.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	395	16	62	347	30	210
Future Volume (Veh/h)	395	16	62	347	30	210
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	429	17	67	377	33	228
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				878		
pX, platoon unblocked						
vC, conflicting volume			446		940	429
vC1, stage 1 conf vol					429	
vC2, stage 2 conf vol					511	
vCu, unblocked vol			446		940	429
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			94		93	64
cM capacity (veh/h)			1114		482	626

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	429	17	67	377	261
Volume Left	0	0	67	0	33
Volume Right	0	17	0	0	228
cSH	1700	1700	1114	1700	603
Volume to Capacity	0.25	0.01	0.06	0.22	0.43
Queue Length 95th (ft)	0	0	5	0	54
Control Delay (s)	0.0	0.0	8.4	0.0	15.4
Lane LOS			A		C
Approach Delay (s)	0.0		1.3		15.4
Approach LOS					C

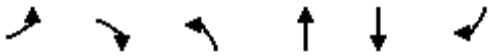
Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	11	69	174	73	53	40
Future Volume (vph)	11	69	174	73	53	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	75	189	79	58	43

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	87	268	101
Volume Left (vph)	12	0	58
Volume Right (vph)	75	79	0
Hadj (s)	-0.46	-0.14	0.15
Departure Headway (s)	4.2	4.1	4.5
Degree Utilization, x	0.10	0.30	0.13
Capacity (veh/h)	775	862	764
Control Delay (s)	7.7	8.8	8.2
Approach Delay (s)	7.7	8.8	8.2
Approach LOS	A	A	A

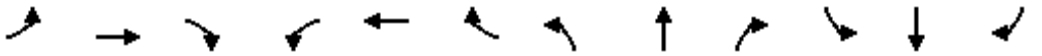
Intersection Summary			
Delay	8.5		
Level of Service	A		
Intersection Capacity Utilization	33.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	62	56	65	933	702	18
Future Volume (Veh/h)	62	56	65	933	702	18
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	68	61	71	1014	763	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (ft)				1220	946	
pX, platoon unblocked	0.91	0.91	0.91			
vC, conflicting volume	1422	392	783			
vC1, stage 1 conf vol	773					
vC2, stage 2 conf vol	649					
vCu, unblocked vol	1270	141	570			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	80	92	92			
cM capacity (veh/h)	346	804	911			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	129	71	507	507	509	274
Volume Left	68	71	0	0	0	0
Volume Right	61	0	0	0	0	20
cSH	474	911	1700	1700	1700	1700
Volume to Capacity	0.27	0.08	0.30	0.30	0.30	0.16
Queue Length 95th (ft)	27	6	0	0	0	0
Control Delay (s)	15.4	9.3	0.0	0.0	0.0	0.0
Lane LOS	C	A				
Approach Delay (s)	15.4	0.6			0.0	
Approach LOS	C					

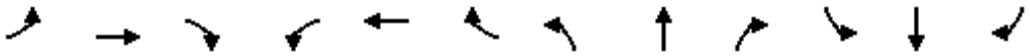
Intersection Summary				
Average Delay	1.3			
Intersection Capacity Utilization	40.5%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	1940	101	406	1583	17	332	5	731	9	3	3
Future Volume (vph)	36	1940	101	406	1583	17	332	5	731	9	3	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.0	7.0	7.3	7.0	7.0	7.7	7.7	7.3	7.0	7.0	7.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00
Frt	1.00	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	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	1681	1688	1583	1681	1720	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.97	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	1681	1688	1583	1681	1720	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	2109	110	441	1721	18	361	5	795	10	3	3
RTOR Reduction (vph)	0	0	63	0	0	8	0	0	178	0	0	3
Lane Group Flow (vph)	39	2109	47	441	1721	10	184	182	617	6	7	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pm+ov	Split	NA	Perm
Protected Phases	5	2		1	6		8	8	1	7	7	
Permitted Phases			2			6			8			7
Actuated Green, G (s)	3.6	52.0	52.0	18.0	66.4	66.4	17.8	17.8	35.8	4.2	4.2	4.2
Effective Green, g (s)	3.6	52.0	52.0	18.0	66.4	66.4	17.8	17.8	35.8	4.2	4.2	4.2
Actuated g/C Ratio	0.03	0.43	0.43	0.15	0.55	0.55	0.15	0.15	0.30	0.03	0.03	0.03
Clearance Time (s)	7.3	7.0	7.0	7.3	7.0	7.0	7.7	7.7	7.3	7.0	7.0	7.0
Vehicle Extension (s)	2.0	8.0	8.0	2.0	8.0	8.0	3.0	3.0	2.0	3.0	3.0	3.0
Lane Grp Cap (vph)	102	2185	680	510	2790	868	247	248	468	58	59	54
v/s Ratio Prot	0.01	c0.41		0.13	0.34		0.11	0.11	c0.20	0.00	c0.00	
v/s Ratio Perm			0.03			0.01			0.19			0.00
v/c Ratio	0.38	0.97	0.07	0.86	0.62	0.01	0.74	0.73	1.32	0.10	0.12	0.00
Uniform Delay, d1	57.6	33.6	20.3	50.3	18.6	12.4	49.4	49.3	42.6	56.6	56.6	56.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	12.6	0.2	13.8	1.0	0.0	11.5	10.7	157.6	0.8	0.9	0.0
Delay (s)	58.5	46.3	20.5	64.1	19.6	12.4	61.0	60.0	200.2	57.4	57.5	56.4
Level of Service	E	D	C	E	B	B	E	E	F	E	E	E
Approach Delay (s)		45.2			28.5			156.2			57.2	
Approach LOS		D			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	61.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	121.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	110.5%	ICU Level of Service	H
Analysis Period (min)	15		

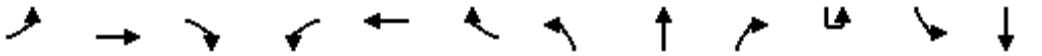
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	580	26	12	569	89	19	16	19	86	24	59
Future Volume (vph)	36	580	26	12	569	89	19	16	19	86	24	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.95			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	3517		1770	3467			1742			1731	
Flt Permitted	0.34	1.00		0.95	1.00			0.98			0.81	
Satd. Flow (perm)	629	3517		1770	3467			1742			1436	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	630	28	13	618	97	21	17	21	93	26	64
RTOR Reduction (vph)	0	4	0	0	17	0	0	15	0	0	27	0
Lane Group Flow (vph)	39	654	0	13	698	0	0	44	0	0	156	0
Turn Type	Perm	NA		Prot	NA		Split	NA		Perm	NA	
Protected Phases		4		3	8		2	2			6	
Permitted Phases	4									6		
Actuated Green, G (s)	17.2	17.2		0.7	22.4			19.4			11.5	
Effective Green, g (s)	17.2	17.2		0.7	22.4			19.4			11.5	
Actuated g/C Ratio	0.26	0.26		0.01	0.34			0.29			0.17	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	163	912		18	1171			509			249	
v/s Ratio Prot		c0.19		0.01	c0.20			c0.03				
v/s Ratio Perm	0.06										c0.11	
v/c Ratio	0.24	0.72		0.72	0.60			0.09			0.63	
Uniform Delay, d1	19.4	22.3		32.7	18.2			17.0			25.4	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.8	2.7		87.1	0.8			0.3			4.8	
Delay (s)	20.1	25.0		119.8	19.0			17.4			30.2	
Level of Service	C	C		F	B			B			C	
Approach Delay (s)		24.8			20.8			17.4			30.2	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	66.3	Sum of lost time (s)	17.5
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



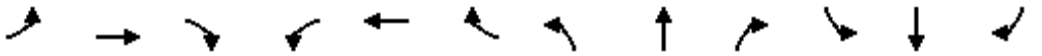
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	369	541	5	2	584	117	35	63	16	12	178	17
Future Volume (vph)	369	541	5	2	584	117	35	63	16	12	178	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	0.95		1.00	0.95		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	0.97		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	3535		1770	3451		1770	1863	1583		1770	1863
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	3535		1770	3451		1770	1863	1583		1770	1863
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	401	588	5	2	635	127	38	68	17	13	193	18
RTOR Reduction (vph)	0	1	0	0	22	0	0	0	15	0	0	0
Lane Group Flow (vph)	401	592	0	2	740	0	38	68	2	0	206	18
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	7	4
Permitted Phases									8			
Actuated Green, G (s)	10.5	31.6		1.4	22.5		5.2	6.5	7.9		10.6	11.9
Effective Green, g (s)	10.5	31.6		1.4	22.5		5.2	6.5	7.9		10.6	11.9
Actuated g/C Ratio	0.15	0.46		0.02	0.33		0.08	0.10	0.12		0.16	0.17
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	529	1640		36	1140		135	177	288		275	325
v/s Ratio Prot	c0.12	0.17		0.00	c0.21		0.02	0.04	0.00		c0.12	0.01
v/s Ratio Perm									0.00			
v/c Ratio	0.76	0.36		0.06	0.65		0.28	0.38	0.01		0.75	0.06
Uniform Delay, d1	27.6	11.8		32.7	19.4		29.7	28.9	26.6		27.5	23.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	6.2	0.6		0.6	2.9		1.1	1.4	0.0		10.6	0.1
Delay (s)	33.7	12.4		33.3	22.3		30.8	30.3	26.6		38.1	23.5
Level of Service	C	B		C	C		C	C	C		D	C
Approach Delay (s)		21.0			22.3			30.0				26.6
Approach LOS		C			C			C				C

Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	68.1	Sum of lost time (s)	18.0
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	445
Future Volume (vph)	445
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.5
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	484
RTOR Reduction (vph)	81
Lane Group Flow (vph)	403
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	22.4
Effective Green, g (s)	22.4
Actuated g/C Ratio	0.33
Clearance Time (s)	4.5
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	625
v/s Ratio Prot	c0.10
v/s Ratio Perm	0.16
v/c Ratio	0.65
Uniform Delay, d1	19.5
Progression Factor	1.00
Incremental Delay, d2	2.3
Delay (s)	21.8
Level of Service	C
Approach Delay (s)	
Approach LOS	

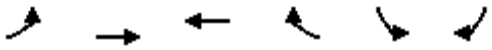
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	821	24	160	824	129	20	2	71	63	1	78
Future Volume (vph)	81	821	24	160	824	129	20	2	71	63	1	78
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
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3524		1770	3467		1770	1863	1583	1770	1863	1583
Flt Permitted	0.20	1.00		0.25	1.00		0.76	1.00	1.00	0.76	1.00	1.00
Satd. Flow (perm)	371	3524		457	3467		1410	1863	1583	1409	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	88	892	26	174	896	140	22	2	77	68	1	85
RTOR Reduction (vph)	0	5	0	0	26	0	0	0	51	0	0	56
Lane Group Flow (vph)	88	913	0	174	1010	0	22	2	26	68	1	29
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	23.9	23.9		23.9	23.9		16.6	16.6	16.6	16.6	16.6	16.6
Effective Green, g (s)	23.9	23.9		23.9	23.9		16.6	16.6	16.6	16.6	16.6	16.6
Actuated g/C Ratio	0.49	0.49		0.49	0.49		0.34	0.34	0.34	0.34	0.34	0.34
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)	182	1736		225	1708		482	637	541	482	637	541
v/s Ratio Prot		0.26			0.29			0.00			0.00	
v/s Ratio Perm	0.24			c0.38			0.02		0.02	c0.05		0.02
v/c Ratio	0.48	0.53		0.77	0.59		0.05	0.00	0.05	0.14	0.00	0.05
Uniform Delay, d1	8.2	8.4		10.1	8.8		10.7	10.5	10.7	11.0	10.5	10.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.0	0.3		15.2	0.6		0.2	0.0	0.2	0.6	0.0	0.2
Delay (s)	10.2	8.7		25.2	9.4		10.8	10.5	10.8	11.6	10.5	10.9
Level of Service	B	A		C	A		B	B	B	B	B	B
Approach Delay (s)		8.8			11.6			10.8			11.2	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	48.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		

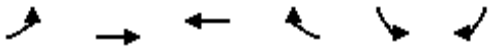
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	30	787	760	91	72	21
Future Volume (vph)	30	787	760	91	72	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3482		1770	1583
Flt Permitted	0.28	1.00	1.00		0.95	1.00
Satd. Flow (perm)	517	3539	3482		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	855	826	99	78	23
RTOR Reduction (vph)	0	0	24	0	0	13
Lane Group Flow (vph)	33	855	901	0	78	10
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	14.4	14.4	14.4		16.1	16.1
Effective Green, g (s)	14.4	14.4	14.4		16.1	16.1
Actuated g/C Ratio	0.37	0.37	0.37		0.42	0.42
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)	193	1323	1302		740	661
v/s Ratio Prot		0.24	c0.26		c0.04	
v/s Ratio Perm	0.06					0.01
v/c Ratio	0.17	0.65	0.69		0.11	0.01
Uniform Delay, d1	8.1	9.9	10.2		6.8	6.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	1.1	1.6		0.3	0.0
Delay (s)	8.5	11.0	11.8		7.1	6.6
Level of Service	A	B	B		A	A
Approach Delay (s)		10.9	11.8		7.0	
Approach LOS		B	B		A	

Intersection Summary			
HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	38.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.6%	ICU Level of Service	A
Analysis Period (min)	15		

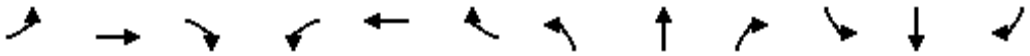
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	26	717	645	136	100	20
Future Volume (vph)	26	717	645	136	100	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.97		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3447		1770	1583
Flt Permitted	0.29	1.00	1.00		0.95	1.00
Satd. Flow (perm)	544	3539	3447		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	779	701	148	109	22
RTOR Reduction (vph)	0	0	47	0	0	13
Lane Group Flow (vph)	28	779	802	0	109	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	13.7	13.7	13.7		16.1	16.1
Effective Green, g (s)	13.7	13.7	13.7		16.1	16.1
Actuated g/C Ratio	0.36	0.36	0.36		0.43	0.43
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)	197	1282	1249		753	674
v/s Ratio Prot		0.22	c0.23		c0.06	
v/s Ratio Perm	0.05					0.01
v/c Ratio	0.14	0.61	0.64		0.14	0.01
Uniform Delay, d1	8.1	9.9	10.0		6.6	6.3
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.3	0.8	1.1		0.4	0.0
Delay (s)	8.4	10.7	11.2		7.0	6.3
Level of Service	A	B	B		A	A
Approach Delay (s)		10.6	11.2		6.9	
Approach LOS		B	B		A	

Intersection Summary			
HCM 2000 Control Delay	10.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	37.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.4%	ICU Level of Service	A
Analysis Period (min)	15		

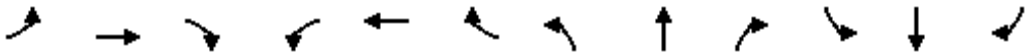
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	670	17	10	604	37	11	1	14	34	2	62
Future Volume (vph)	74	670	17	10	604	37	11	1	14	34	2	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.93			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	3526		1770	3509			1692			1675	
Flt Permitted	0.95	1.00		0.95	1.00			0.84			0.87	
Satd. Flow (perm)	1770	3526		1770	3509			1452			1487	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	80	728	18	11	657	40	12	1	15	37	2	67
RTOR Reduction (vph)	0	2	0	0	7	0	0	14	0	0	60	0
Lane Group Flow (vph)	80	744	0	11	690	0	0	14	0	0	46	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2			6		
Actuated Green, G (s)	2.4	17.5		0.5	15.6			3.4			3.4	
Effective Green, g (s)	2.4	17.5		0.5	15.6			3.4			3.4	
Actuated g/C Ratio	0.07	0.50		0.01	0.45			0.10			0.10	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	121	1768		25	1568			141			144	
v/s Ratio Prot	c0.05	c0.21		0.01	0.20							
v/s Ratio Perm								0.01			c0.03	
v/c Ratio	0.66	0.42		0.44	0.44			0.10			0.32	
Uniform Delay, d1	15.9	5.5		17.1	6.6			14.4			14.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	12.8	0.2		11.9	0.2			0.3			1.3	
Delay (s)	28.6	5.7		28.9	6.8			14.7			15.9	
Level of Service	C	A		C	A			B			B	
Approach Delay (s)		7.9			7.2			14.7			15.9	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	8.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	34.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	40.6%	ICU Level of Service	A
Analysis Period (min)	15		

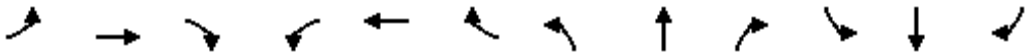
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	254	72	80	51	76	167	69	376	19	85	646	266
Future Volume (vph)	254	72	80	51	76	167	69	376	19	85	646	266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.96	
Flt Protected	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1721	1583	1770	1863	1583	1770	3513		1770	3384	
Flt Permitted	0.95	0.73	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1291	1583	1770	1863	1583	1770	3513		1770	3384	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	276	78	87	55	83	182	75	409	21	92	702	289
RTOR Reduction (vph)	0	0	65	0	0	149	0	4	0	0	48	0
Lane Group Flow (vph)	174	180	22	55	83	33	75	426	0	92	943	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA		Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8						
Actuated Green, G (s)	11.2	30.3	20.8	5.0	14.6	14.6	14.9	14.9		22.8	22.8	
Effective Green, g (s)	11.2	30.3	20.8	5.0	14.6	14.6	14.9	14.9		22.8	22.8	
Actuated g/C Ratio	0.14	0.37	0.26	0.06	0.18	0.18	0.18	0.18		0.28	0.28	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	231	539	404	108	333	283	323	642		495	946	
v/s Ratio Prot	c0.10	0.05		0.03	0.04		0.04	c0.12		0.05	c0.28	
v/s Ratio Perm		c0.08	0.01			0.02						
v/c Ratio	0.75	0.33	0.05	0.51	0.25	0.12	0.23	0.66		0.19	1.00	
Uniform Delay, d1	33.8	18.4	22.9	37.1	28.7	28.0	28.4	31.0		22.3	29.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.0	0.4	0.1	3.7	0.4	0.2	0.4	2.6		0.2	28.4	
Delay (s)	46.8	18.7	23.0	40.8	29.1	28.2	28.8	33.6		22.5	57.7	
Level of Service	D	B	C	D	C	C	C	C		C	E	
Approach Delay (s)		30.6			30.6			32.8			54.7	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	42.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	81.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	194	4	940	0	0	0	0	720	181	217	452	0
Future Volume (vph)	194	4	940	0	0	0	0	720	181	217	452	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.0					4.5	4.5	4.5	4.5	
Lane Util. Factor		1.00	1.00					0.95	1.00	1.00	0.95	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1776	1583					3539	1583	1770	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1776	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	211	4	1022	0	0	0	0	783	197	236	491	0
RTOR Reduction (vph)	0	0	12	0	0	0	0	0	55	0	0	0
Lane Group Flow (vph)	0	215	1010	0	0	0	0	783	142	236	491	0
Turn Type	Split	NA	custom					NA	Perm	Prot	NA	
Protected Phases	4	4	5					2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		13.4	43.5					30.9	30.9	12.7	14.0	
Effective Green, g (s)		13.4	43.5					30.9	30.9	12.7	14.0	
Actuated g/C Ratio		0.19	0.62					0.44	0.44	0.18	0.20	
Clearance Time (s)		4.5	4.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		337	1066					1551	693	318	702	
v/s Ratio Prot		0.12	c0.40					0.22		0.13	c0.14	
v/s Ratio Perm			0.23						0.09			
v/c Ratio		0.64	0.95					0.50	0.20	0.74	0.70	
Uniform Delay, d1		26.3	12.4					14.3	12.2	27.4	26.3	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		3.9	16.3					0.3	0.1	9.0	5.7	
Delay (s)		30.2	28.8					14.5	12.4	36.4	32.0	
Level of Service		C	C					B	B	D	C	
Approach Delay (s)		29.0			0.0			14.1			33.4	
Approach LOS		C			A			B			C	

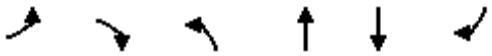
Intersection Summary			
HCM 2000 Control Delay	25.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	70.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	224	50	140	493	324	97	6	445	108
Future Volume (vph)	0	0	0	224	50	140	493	324	97	6	445	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frt					0.95		1.00	0.97		1.00	0.97	
Flt Protected					0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1731		1770	3417		1770	3436	
Flt Permitted					0.97		0.95	1.00		0.95	1.00	
Satd. Flow (perm)					1731		1770	3417		1770	3436	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	243	54	152	536	352	105	7	484	117
RTOR Reduction (vph)	0	0	0	0	29	0	0	36	0	0	31	0
Lane Group Flow (vph)	0	0	0	0	420	0	536	421	0	7	570	0
Turn Type				Split	NA		Prot	NA		Prot	NA	
Protected Phases				8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)					17.3		20.5	36.1		0.8	16.4	
Effective Green, g (s)					17.3		20.5	36.1		0.8	16.4	
Actuated g/C Ratio					0.26		0.30	0.53		0.01	0.24	
Clearance Time (s)					4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)					3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)					442		535	1822		20	832	
v/s Ratio Prot					c0.24		c0.30	0.12		0.00	c0.17	
v/s Ratio Perm												
v/c Ratio					0.95		1.00	0.23		0.35	0.69	
Uniform Delay, d1					24.8		23.6	8.4		33.2	23.3	
Progression Factor					1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2					30.3		39.4	0.1		10.3	2.4	
Delay (s)					55.1		63.0	8.5		43.5	25.7	
Level of Service					E		E	A		D	C	
Approach Delay (s)		0.0			55.1			37.9			25.9	
Approach LOS		A			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	67.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	18	13	548	634	29
Future Volume (Veh/h)	0	18	13	548	634	29
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	20	14	596	689	32
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (ft)				590		
pX, platoon unblocked						
vC, conflicting volume	1031	360	721			
vC1, stage 1 conf vol	705					
vC2, stage 2 conf vol	326					
vCu, unblocked vol	1031	360	721			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	98			
cM capacity (veh/h)	410	636	877			

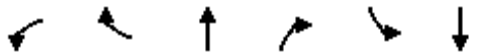
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	20	213	397	459	262
Volume Left	0	14	0	0	0
Volume Right	20	0	0	0	32
cSH	636	877	1700	1700	1700
Volume to Capacity	0.03	0.02	0.23	0.27	0.15
Queue Length 95th (ft)	2	1	0	0	0
Control Delay (s)	10.8	0.8	0.0	0.0	0.0
Lane LOS	B	A			
Approach Delay (s)	10.8	0.3		0.0	
Approach LOS	B				

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	34.5%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	297	12	87	279	14	71
Future Volume (Veh/h)	297	12	87	279	14	71
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	323	13	95	303	15	77
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				898		
pX, platoon unblocked						
vC, conflicting volume			336		816	323
vC1, stage 1 conf vol					323	
vC2, stage 2 conf vol					493	
vCu, unblocked vol			336		816	323
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			92		97	89
cM capacity (veh/h)			1223		509	718

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	323	13	95	303	92
Volume Left	0	0	95	0	15
Volume Right	0	13	0	0	77
cSH	1700	1700	1223	1700	673
Volume to Capacity	0.19	0.01	0.08	0.18	0.14
Queue Length 95th (ft)	0	0	6	0	12
Control Delay (s)	0.0	0.0	8.2	0.0	11.2
Lane LOS			A		B
Approach Delay (s)	0.0		2.0		11.2
Approach LOS					B

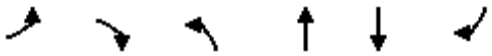
Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	35.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	35	21	60	6	17	72
Future Volume (vph)	35	21	60	6	17	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	23	65	7	18	78

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	61	72	96
Volume Left (vph)	38	0	18
Volume Right (vph)	23	7	0
Hadj (s)	-0.07	-0.02	0.07
Departure Headway (s)	4.2	4.1	4.2
Degree Utilization, x	0.07	0.08	0.11
Capacity (veh/h)	822	850	843
Control Delay (s)	7.5	7.5	7.7
Approach Delay (s)	7.5	7.5	7.7
Approach LOS	A	A	A

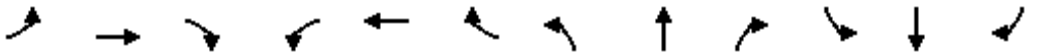
Intersection Summary			
Delay	7.6		
Level of Service	A		
Intersection Capacity Utilization	21.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	26	28	535	711	47
Future Volume (Veh/h)	12	26	28	535	711	47
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	28	30	582	773	51
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (ft)				1170	996	
pX, platoon unblocked	0.80	0.80	0.80			
vC, conflicting volume	1150	412	824			
vC1, stage 1 conf vol	798					
vC2, stage 2 conf vol	351					
vCu, unblocked vol	690	0	283			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	97	97			
cM capacity (veh/h)	510	869	1022			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	41	30	291	291	515	309
Volume Left	13	30	0	0	0	0
Volume Right	28	0	0	0	0	51
cSH	710	1022	1700	1700	1700	1700
Volume to Capacity	0.06	0.03	0.17	0.17	0.30	0.18
Queue Length 95th (ft)	5	2	0	0	0	0
Control Delay (s)	10.4	8.6	0.0	0.0	0.0	0.0
Lane LOS	B	A				
Approach Delay (s)	10.4	0.4			0.0	
Approach LOS	B					

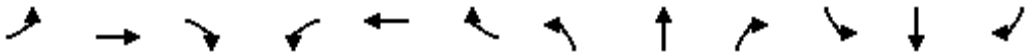
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	1731	86	370	1796	12	268	4	693	8	2	3
Future Volume (vph)	32	1731	86	370	1796	12	268	4	693	8	2	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.0	7.0	7.3	7.0	7.0	7.7	7.7	7.3	7.0	7.0	7.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00
Frt	1.00	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	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	1681	1688	1583	1681	1713	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.97	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	1681	1688	1583	1681	1713	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	35	1882	93	402	1952	13	291	4	753	9	2	3
RTOR Reduction (vph)	0	0	51	0	0	6	0	0	134	0	0	3
Lane Group Flow (vph)	35	1882	42	402	1952	7	148	147	619	5	6	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pm+ov	Split	NA	Perm
Protected Phases	5	2		1	6		8	8	1	7	7	
Permitted Phases			2			6			8			7
Actuated Green, G (s)	2.8	53.3	53.3	16.9	67.4	67.4	15.0	15.0	31.9	4.2	4.2	4.2
Effective Green, g (s)	2.8	53.3	53.3	16.9	67.4	67.4	15.0	15.0	31.9	4.2	4.2	4.2
Actuated g/C Ratio	0.02	0.45	0.45	0.14	0.57	0.57	0.13	0.13	0.27	0.04	0.04	0.04
Clearance Time (s)	7.3	7.0	7.0	7.3	7.0	7.0	7.7	7.7	7.3	7.0	7.0	7.0
Vehicle Extension (s)	2.0	8.0	8.0	2.0	8.0	8.0	3.0	3.0	2.0	3.0	3.0	3.0
Lane Grp Cap (vph)	81	2289	712	490	2894	901	212	213	426	59	60	56
v/s Ratio Prot	0.01	c0.37		0.12	0.38		0.09	0.09	c0.21	0.00	c0.00	
v/s Ratio Perm			0.03			0.00			0.18			0.00
v/c Ratio	0.43	0.82	0.06	0.82	0.67	0.01	0.70	0.69	1.45	0.08	0.10	0.00
Uniform Delay, d1	57.0	28.4	18.4	49.3	17.8	11.0	49.5	49.5	43.2	55.2	55.3	55.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	3.2	0.1	10.1	1.3	0.0	9.6	9.2	216.9	0.6	0.7	0.0
Delay (s)	58.4	31.6	18.5	59.4	19.1	11.1	59.1	58.7	260.2	55.9	56.0	55.1
Level of Service	E	C	B	E	B	B	E	E	F	E	E	E
Approach Delay (s)		31.5			25.9			203.5			55.8	
Approach LOS		C			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	62.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	118.4	Sum of lost time (s)	29.0
Intersection Capacity Utilization	104.1%	ICU Level of Service	G
Analysis Period (min)	15		

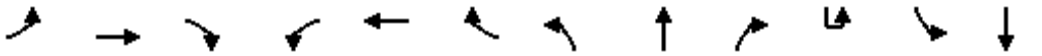
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	694	11	3	411	59	16	15	26	94	7	25
Future Volume (vph)	21	694	11	3	411	59	16	15	26	94	7	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.98			0.94			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.96	
Satd. Flow (prot)	1770	3531		1770	3473			1723			1748	
Flt Permitted	0.46	1.00		0.95	1.00			0.99			0.74	
Satd. Flow (perm)	864	3531		1770	3473			1723			1345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	754	12	3	447	64	17	16	28	102	8	27
RTOR Reduction (vph)	0	1	0	0	15	0	0	20	0	0	13	0
Lane Group Flow (vph)	23	765	0	3	496	0	0	41	0	0	124	0
Turn Type	Perm	NA		Prot	NA		Split	NA		Perm	NA	
Protected Phases		4		3	8		2	2			6	
Permitted Phases	4									6		
Actuated Green, G (s)	17.4	17.4		0.5	22.4			19.3			10.8	
Effective Green, g (s)	17.4	17.4		0.5	22.4			19.3			10.8	
Actuated g/C Ratio	0.27	0.27		0.01	0.34			0.29			0.16	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	229	938		13	1187			507			221	
v/s Ratio Prot		c0.22		0.00	c0.14			c0.02				
v/s Ratio Perm	0.03										c0.09	
v/c Ratio	0.10	0.82		0.23	0.42			0.08			0.56	
Uniform Delay, d1	18.1	22.5		32.3	16.5			16.7			25.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.2	5.5		8.9	0.2			0.3			3.3	
Delay (s)	18.3	28.1		41.2	16.8			17.0			28.4	
Level of Service	B	C		D	B			B			C	
Approach Delay (s)		27.8			16.9			17.0			28.4	
Approach LOS		C			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.5	Sum of lost time (s)	17.5
Intersection Capacity Utilization	40.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



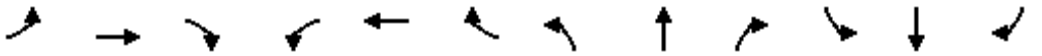
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	766	707	14	9	438	166	11	12	10	26	149	38
Future Volume (vph)	766	707	14	9	438	166	11	12	10	26	149	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	0.95		1.00	0.95		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	0.96		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	3529		1770	3394		1770	1863	1583		1770	1863
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	3529		1770	3394		1770	1863	1583		1770	1863
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	833	768	15	10	476	180	12	13	11	28	162	41
RTOR Reduction (vph)	0	1	0	0	45	0	0	0	11	0	0	0
Lane Group Flow (vph)	833	782	0	10	611	0	12	13	0	0	190	41
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	7	4
Permitted Phases									8			
Actuated Green, G (s)	20.5	40.7		1.5	21.7		0.7	1.2	2.7		11.8	12.3
Effective Green, g (s)	20.5	40.7		1.5	21.7		0.7	1.2	2.7		11.8	12.3
Actuated g/C Ratio	0.28	0.56		0.02	0.30		0.01	0.02	0.04		0.16	0.17
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	961	1962		36	1006		16	30	155		285	313
v/s Ratio Prot	c0.24	0.22		0.01	c0.18		0.01	0.01	0.00		c0.11	0.02
v/s Ratio Perm									0.00			
v/c Ratio	0.87	0.40		0.28	0.61		0.75	0.43	0.00		0.67	0.13
Uniform Delay, d1	25.1	9.3		35.3	22.1		36.2	35.7	34.0		28.9	25.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	8.3	0.6		4.2	2.7		106.0	9.7	0.0		5.8	0.2
Delay (s)	33.4	9.9		39.5	24.8		142.2	45.4	34.0		34.6	26.1
Level of Service	C	A		D	C		F	D	C		C	C
Approach Delay (s)		22.0			25.0			74.2				20.8
Approach LOS		C			C			E				C

Intersection Summary			
HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	73.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	355
Future Volume (vph)	355
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.5
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	386
RTOR Reduction (vph)	110
Lane Group Flow (vph)	276
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	32.8
Effective Green, g (s)	32.8
Actuated g/C Ratio	0.45
Clearance Time (s)	4.5
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	806
v/s Ratio Prot	c0.10
v/s Ratio Perm	0.08
v/c Ratio	0.34
Uniform Delay, d1	13.2
Progression Factor	1.00
Incremental Delay, d2	0.3
Delay (s)	13.4
Level of Service	B
Approach Delay (s)	
Approach LOS	

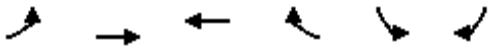
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	1309	16	31	779	32	30	1	201	62	0	81
Future Volume (vph)	98	1309	16	31	779	32	30	1	201	62	0	81
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
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00		1.00
Frt	1.00	1.00		1.00	0.99		1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	1770	3533		1770	3518		1770	1863	1583	1770		1583
Flt Permitted	0.25	1.00		0.19	1.00		0.76	1.00	1.00	0.76		1.00
Satd. Flow (perm)	475	3533		358	3518		1410	1863	1583	1410		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	107	1423	17	34	847	35	33	1	218	67	0	88
RTOR Reduction (vph)	0	2	0	0	6	0	0	0	15	0	0	57
Lane Group Flow (vph)	107	1438	0	34	876	0	33	1	203	67	0	31
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	20.8	20.8		20.8	20.8		16.0	16.0	16.0	16.0		16.0
Effective Green, g (s)	20.8	20.8		20.8	20.8		16.0	16.0	16.0	16.0		16.0
Actuated g/C Ratio	0.46	0.46		0.46	0.46		0.36	0.36	0.36	0.36		0.36
Clearance Time (s)	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
Lane Grp Cap (vph)	220	1640		166	1633		503	665	565	503		565
v/s Ratio Prot		c0.41			0.25			0.00				
v/s Ratio Perm	0.23			0.09			0.02		c0.13	0.05		0.02
v/c Ratio	0.49	0.88		0.20	0.54		0.07	0.00	0.36	0.13		0.06
Uniform Delay, d1	8.3	10.8		7.1	8.6		9.5	9.3	10.6	9.7		9.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.7	5.6		0.6	0.3		0.3	0.0	1.8	0.5		0.2
Delay (s)	10.0	16.5		7.7	8.9		9.7	9.3	12.4	10.3		9.6
Level of Service	A	B		A	A		A	A	B	B		A
Approach Delay (s)		16.0			8.9			12.0			9.9	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	44.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		

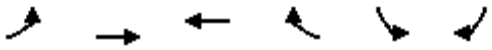
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	1166	777	34	130	28
Future Volume (vph)	10	1166	777	34	130	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3517		1770	1583
Flt Permitted	0.25	1.00	1.00		0.95	1.00
Satd. Flow (perm)	466	3539	3517		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1267	845	37	141	30
RTOR Reduction (vph)	0	0	8	0	0	18
Lane Group Flow (vph)	11	1267	874	0	141	12
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	16.0	16.0	16.0		16.0	16.0
Effective Green, g (s)	16.0	16.0	16.0		16.0	16.0
Actuated g/C Ratio	0.40	0.40	0.40		0.40	0.40
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)	186	1415	1406		708	633
v/s Ratio Prot		c0.36	0.25		c0.08	
v/s Ratio Perm	0.02					0.01
v/c Ratio	0.06	0.90	0.62		0.20	0.02
Uniform Delay, d1	7.4	11.2	9.6		7.8	7.3
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	7.7	0.9		0.6	0.1
Delay (s)	7.5	18.9	10.4		8.5	7.3
Level of Service	A	B	B		A	A
Approach Delay (s)		18.8	10.4		8.3	
Approach LOS		B	B		A	

Intersection Summary			
HCM 2000 Control Delay	14.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		

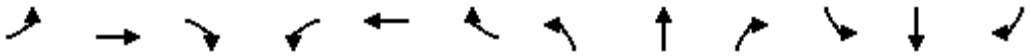
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	12	937	715	111	222	31
Future Volume (vph)	12	937	715	111	222	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3468		1770	1583
Flt Permitted	0.26	1.00	1.00		0.95	1.00
Satd. Flow (perm)	490	3539	3468		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	1018	777	121	241	34
RTOR Reduction (vph)	0	0	32	0	0	20
Lane Group Flow (vph)	13	1018	866	0	241	14
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	15.2	15.2	15.2		16.0	16.0
Effective Green, g (s)	15.2	15.2	15.2		16.0	16.0
Actuated g/C Ratio	0.39	0.39	0.39		0.41	0.41
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)	190	1372	1344		722	646
v/s Ratio Prot		c0.29	0.25		c0.14	
v/s Ratio Perm	0.03					0.01
v/c Ratio	0.07	0.74	0.64		0.33	0.02
Uniform Delay, d1	7.5	10.3	9.8		7.9	6.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	2.2	1.1		1.2	0.1
Delay (s)	7.7	12.5	10.9		9.2	7.0
Level of Service	A	B	B		A	A
Approach Delay (s)		12.5	10.9		8.9	
Approach LOS		B	B		A	

Intersection Summary			
HCM 2000 Control Delay	11.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	39.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

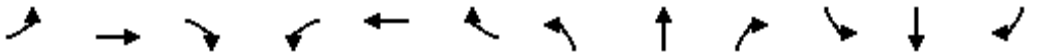
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	712	4	5	675	36	6	3	21	72	7	71
Future Volume (vph)	23	712	4	5	675	36	6	3	21	72	7	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.91			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	3536		1770	3512			1670			1703	
Flt Permitted	0.95	1.00		0.95	1.00			0.91			0.83	
Satd. Flow (perm)	1770	3536		1770	3512			1540			1449	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	774	4	5	734	39	7	3	23	78	8	77
RTOR Reduction (vph)	0	1	0	0	6	0	0	19	0	0	63	0
Lane Group Flow (vph)	25	777	0	5	767	0	0	14	0	0	100	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2			6		
Actuated Green, G (s)	0.5	13.5		0.4	13.4			6.0			6.0	
Effective Green, g (s)	0.5	13.5		0.4	13.4			6.0			6.0	
Actuated g/C Ratio	0.01	0.40		0.01	0.40			0.18			0.18	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	26	1429		21	1409			276			260	
v/s Ratio Prot	c0.01	c0.22		0.00	0.22							
v/s Ratio Perm								0.01			c0.07	
v/c Ratio	0.96	0.54		0.24	0.54			0.05			0.38	
Uniform Delay, d1	16.4	7.6		16.3	7.7			11.3			12.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.0	0.4		5.8	0.4			0.1			0.9	
Delay (s)	175.5	8.0		22.1	8.1			11.4			13.0	
Level of Service	F	A		C	A			B			B	
Approach Delay (s)		13.2			8.2			11.4			13.0	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	11.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	33.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	427	64	107	13	45	80	101	751	50	97	436	164
Future Volume (vph)	427	64	107	13	45	80	101	751	50	97	436	164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.96	
Flt Protected	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1706	1583	1770	1863	1583	1770	3506		1770	3394	
Flt Permitted	0.95	0.54	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	961	1583	1770	1863	1583	1770	3506		1770	3394	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	464	70	116	14	49	87	110	816	54	105	474	178
RTOR Reduction (vph)	0	0	80	0	0	75	0	5	0	0	43	0
Lane Group Flow (vph)	264	270	36	14	49	12	110	865	0	105	609	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA		Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8						
Actuated Green, G (s)	15.5	31.8	26.6	0.7	11.8	11.8	23.3	23.3		17.6	17.6	
Effective Green, g (s)	15.5	31.8	26.6	0.7	11.8	11.8	23.3	23.3		17.6	17.6	
Actuated g/C Ratio	0.18	0.37	0.31	0.01	0.14	0.14	0.27	0.27		0.20	0.20	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	302	488	488	14	255	216	478	947		361	692	
v/s Ratio Prot	c0.16	0.10		0.01	0.03		0.06	c0.25		0.06	c0.18	
v/s Ratio Perm		c0.10	0.02			0.01						
v/c Ratio	0.87	0.55	0.07	1.00	0.19	0.06	0.23	0.91		0.29	0.88	
Uniform Delay, d1	34.4	21.6	21.1	42.8	33.0	32.4	24.5	30.5		29.0	33.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	23.2	1.4	0.1	240.5	0.4	0.1	0.2	12.9		0.4	12.5	
Delay (s)	57.7	22.9	21.1	283.3	33.3	32.5	24.7	43.4		29.5	45.8	
Level of Service	E	C	C	F	C	C	C	D		C	D	
Approach Delay (s)		36.7			56.2			41.3			43.5	
Approach LOS		D			E			D			D	

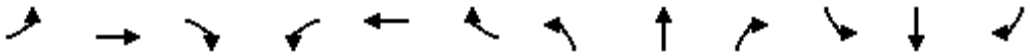
Intersection Summary			
HCM 2000 Control Delay	41.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	86.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	59.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	189	0	630	0	0	0	0	1337	258	193	370	0
Future Volume (vph)	189	0	630	0	0	0	0	1337	258	193	370	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.0					4.5	4.5	4.5	4.5	
Lane Util. Factor		1.00	1.00					0.95	1.00	1.00	0.95	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	1583					3539	1583	1770	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	205	0	685	0	0	0	0	1453	280	210	402	0
RTOR Reduction (vph)	0	0	41	0	0	0	0	0	51	0	0	0
Lane Group Flow (vph)	0	205	644	0	0	0	0	1453	229	210	402	0
Turn Type	Split	NA	custom					NA	Perm	Prot	NA	
Protected Phases	4	4	5					2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		12.6	36.7					29.8	29.8	8.8	15.0	
Effective Green, g (s)		12.6	36.7					29.8	29.8	8.8	15.0	
Actuated g/C Ratio		0.19	0.57					0.46	0.46	0.14	0.23	
Clearance Time (s)		4.5	4.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		344	995					1630	729	240	820	
v/s Ratio Prot		0.12	c0.24					c0.41		c0.12	0.11	
v/s Ratio Perm			0.17						0.14			
v/c Ratio		0.60	0.65					0.89	0.31	0.88	0.49	
Uniform Delay, d1		23.7	9.6					16.0	11.0	27.4	21.5	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.8	1.5					6.6	0.2	27.8	2.1	
Delay (s)		26.5	11.0					22.6	11.3	55.2	23.6	
Level of Service		C	B					C	B	E	C	
Approach Delay (s)		14.6			0.0			20.7			34.5	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	64.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	69.4%	ICU Level of Service	C
Analysis Period (min)	15		

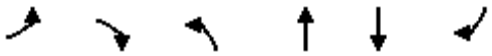
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	175	134	153	693	636	196	23	388	193
Future Volume (vph)	0	0	0	175	134	153	693	636	196	23	388	193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frt					0.96		1.00	0.96		1.00	0.95	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1747		1770	3414		1770	3363	
Flt Permitted					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)					1747		1770	3414		1770	3363	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	190	146	166	753	691	213	25	422	210
RTOR Reduction (vph)	0	0	0	0	20	0	0	29	0	0	66	0
Lane Group Flow (vph)	0	0	0	0	482	0	753	875	0	25	566	0
Turn Type				Split	NA		Prot	NA		Prot	NA	
Protected Phases				8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)					23.0		39.2	54.3		1.8	16.9	
Effective Green, g (s)					23.0		39.2	54.3		1.8	16.9	
Actuated g/C Ratio					0.25		0.42	0.59		0.02	0.18	
Clearance Time (s)					4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)					3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)					433		749	2001		34	613	
v/s Ratio Prot					c0.28		c0.43	0.26		0.01	c0.17	
v/s Ratio Perm												
v/c Ratio					1.11		1.01	0.44		0.74	0.92	
Uniform Delay, d1					34.8		26.7	10.7		45.2	37.2	
Progression Factor					1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2					77.5		34.2	0.2		57.7	19.6	
Delay (s)					112.3		60.9	10.8		102.8	56.8	
Level of Service					F		E	B		F	E	
Approach Delay (s)		0.0			112.3			33.6			58.6	
Approach LOS		A			F			C			E	

Intersection Summary			
HCM 2000 Control Delay	53.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	92.6	Sum of lost time (s)	13.5
Intersection Capacity Utilization	92.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	38	3	1031	556	7
Future Volume (Veh/h)	0	38	3	1031	556	7
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	41	3	1121	604	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (ft)				590		
pX, platoon unblocked						
vC, conflicting volume	1174	306	612			
vC1, stage 1 conf vol	608					
vC2, stage 2 conf vol	566					
vCu, unblocked vol	1174	306	612			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	100			
cM capacity (veh/h)	397	690	963			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	377	747	403	209
Volume Left	0	3	0	0	0
Volume Right	41	0	0	0	8
cSH	690	963	1700	1700	1700
Volume to Capacity	0.06	0.00	0.44	0.24	0.12
Queue Length 95th (ft)	5	0	0	0	0
Control Delay (s)	10.5	0.1	0.0	0.0	0.0
Lane LOS	B	A			
Approach Delay (s)	10.5	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	40.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	395	16	62	347	30	210
Future Volume (Veh/h)	395	16	62	347	30	210
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	429	17	67	377	33	228
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				878		
pX, platoon unblocked						
vC, conflicting volume			446		940	429
vC1, stage 1 conf vol					429	
vC2, stage 2 conf vol					511	
vCu, unblocked vol			446		940	429
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			94		93	64
cM capacity (veh/h)			1114		482	626

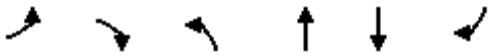
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	429	17	67	377	261
Volume Left	0	0	67	0	33
Volume Right	0	17	0	0	228
cSH	1700	1700	1114	1700	603
Volume to Capacity	0.25	0.01	0.06	0.22	0.43
Queue Length 95th (ft)	0	0	5	0	54
Control Delay (s)	0.0	0.0	8.4	0.0	15.4
Lane LOS			A		C
Approach Delay (s)	0.0		1.3		15.4
Approach LOS					C

Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	11	69	174	73	53	40
Future Volume (vph)	11	69	174	73	53	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	75	189	79	58	43

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	87	268	101
Volume Left (vph)	12	0	58
Volume Right (vph)	75	79	0
Hadj (s)	-0.46	-0.14	0.15
Departure Headway (s)	4.2	4.1	4.5
Degree Utilization, x	0.10	0.30	0.13
Capacity (veh/h)	775	862	764
Control Delay (s)	7.7	8.8	8.2
Approach Delay (s)	7.7	8.8	8.2
Approach LOS	A	A	A

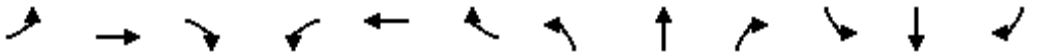
Intersection Summary			
Delay	8.5		
Level of Service	A		
Intersection Capacity Utilization	33.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	62	56	65	1021	755	18
Future Volume (Veh/h)	62	56	65	1021	755	18
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	67	61	71	1110	821	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (ft)				1220	946	
pX, platoon unblocked	0.88	0.88	0.88			
vC, conflicting volume	1528	420	841			
vC1, stage 1 conf vol	831					
vC2, stage 2 conf vol	697					
vCu, unblocked vol	1327	68	546			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	80	93	92			
cM capacity (veh/h)	330	863	897			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	128	71	555	555	547	294
Volume Left	67	71	0	0	0	0
Volume Right	61	0	0	0	0	20
cSH	468	897	1700	1700	1700	1700
Volume to Capacity	0.27	0.08	0.33	0.33	0.32	0.17
Queue Length 95th (ft)	28	6	0	0	0	0
Control Delay (s)	15.6	9.4	0.0	0.0	0.0	0.0
Lane LOS	C	A				
Approach Delay (s)	15.6	0.6			0.0	
Approach LOS	C					

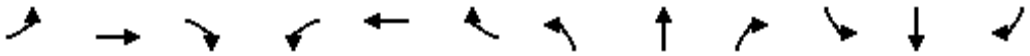
Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	41.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	2527	101	536	2042	17	332	5	888	9	3	3
Future Volume (vph)	36	2527	101	536	2042	17	332	5	888	9	3	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.0	7.0	7.3	7.0	7.0	7.7	7.7	7.3	7.0	7.0	7.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00
Frt	1.00	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	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	1681	1688	1583	1681	1720	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.97	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	1681	1688	1583	1681	1720	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	2747	110	583	2220	18	361	5	965	10	3	3
RTOR Reduction (vph)	0	0	63	0	0	8	0	0	178	0	0	3
Lane Group Flow (vph)	39	2747	47	583	2220	10	184	182	787	6	7	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pm+ov	Split	NA	Perm
Protected Phases	5	2		1	6		8	8	1	7	7	
Permitted Phases			2			6			8			7
Actuated Green, G (s)	3.6	52.0	52.0	18.0	66.4	66.4	17.8	17.8	35.8	4.2	4.2	4.2
Effective Green, g (s)	3.6	52.0	52.0	18.0	66.4	66.4	17.8	17.8	35.8	4.2	4.2	4.2
Actuated g/C Ratio	0.03	0.43	0.43	0.15	0.55	0.55	0.15	0.15	0.30	0.03	0.03	0.03
Clearance Time (s)	7.3	7.0	7.0	7.3	7.0	7.0	7.7	7.7	7.3	7.0	7.0	7.0
Vehicle Extension (s)	2.0	8.0	8.0	2.0	8.0	8.0	3.0	3.0	2.0	3.0	3.0	3.0
Lane Grp Cap (vph)	102	2185	680	510	2790	868	247	248	468	58	59	54
v/s Ratio Prot	0.01	c0.54		0.17	0.44		0.11	0.11	c0.25	0.00	c0.00	
v/s Ratio Perm			0.03			0.01			0.25			0.00
v/c Ratio	0.38	1.26	0.07	1.14	0.80	0.01	0.74	0.73	1.68	0.10	0.12	0.00
Uniform Delay, d1	57.6	34.5	20.3	51.5	21.9	12.4	49.4	49.3	42.6	56.6	56.6	56.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	119.6	0.2	85.6	2.2	0.0	11.5	10.7	315.8	0.8	0.9	0.0
Delay (s)	58.5	154.1	20.5	137.1	24.1	12.4	61.0	60.0	358.4	57.4	57.5	56.4
Level of Service	E	F	C	F	C	B	E	E	F	E	E	E
Approach Delay (s)		147.8			47.4			276.5			57.2	
Approach LOS		F			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	131.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	121.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	131.6%	ICU Level of Service	H
Analysis Period (min)	15		

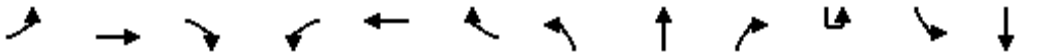
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	727	26	12	702	89	19	16	19	86	24	59
Future Volume (vph)	36	727	26	12	702	89	19	16	19	86	24	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.95			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	3521		1770	3479			1742			1731	
Flt Permitted	0.25	1.00		0.95	1.00			0.98			0.81	
Satd. Flow (perm)	460	3521		1770	3479			1742			1436	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	790	28	13	763	97	21	17	21	93	26	64
RTOR Reduction (vph)	0	3	0	0	13	0	0	15	0	0	27	0
Lane Group Flow (vph)	39	815	0	13	847	0	0	44	0	0	156	0
Turn Type	Perm	NA		Prot	NA		Split	NA		Perm	NA	
Protected Phases		4		3	8		2	2			6	
Permitted Phases	4									6		
Actuated Green, G (s)	20.5	20.5		0.7	25.7			19.3			11.8	
Effective Green, g (s)	20.5	20.5		0.7	25.7			19.3			11.8	
Actuated g/C Ratio	0.29	0.29		0.01	0.37			0.28			0.17	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	135	1034		17	1280			481			242	
v/s Ratio Prot		c0.23		0.01	c0.24			c0.03				
v/s Ratio Perm	0.08										c0.11	
v/c Ratio	0.29	0.79		0.76	0.66			0.09			0.64	
Uniform Delay, d1	19.0	22.7		34.5	18.4			18.7			27.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.2	4.1		106.9	1.3			0.4			5.7	
Delay (s)	20.2	26.7		141.3	19.7			19.1			32.8	
Level of Service	C	C		F	B			B			C	
Approach Delay (s)		26.4			21.5			19.1			32.8	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	69.8	Sum of lost time (s)	17.5
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



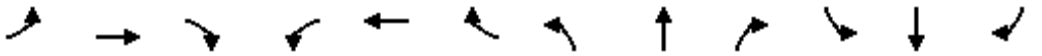
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	375	658	5	2	677	145	35	63	16	12	212	17
Future Volume (vph)	375	658	5	2	677	145	35	63	16	12	212	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	0.95		1.00	0.95		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	0.97		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	3536		1770	3445		1770	1863	1583		1770	1863
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	3536		1770	3445		1770	1863	1583		1770	1863
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	408	715	5	2	736	158	38	68	17	13	230	18
RTOR Reduction (vph)	0	1	0	0	24	0	0	0	15	0	0	0
Lane Group Flow (vph)	408	719	0	2	870	0	38	68	2	0	243	18
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	7	4
Permitted Phases									8			
Actuated Green, G (s)	10.6	31.5		1.4	22.3		5.3	6.6	8.0		11.3	12.6
Effective Green, g (s)	10.6	31.5		1.4	22.3		5.3	6.6	8.0		11.3	12.6
Actuated g/C Ratio	0.15	0.46		0.02	0.32		0.08	0.10	0.12		0.16	0.18
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	528	1618		36	1116		136	178	287		290	341
v/s Ratio Prot	c0.12	0.20		0.00	c0.25		0.02	0.04	0.00		c0.14	0.01
v/s Ratio Perm									0.00			
v/c Ratio	0.77	0.44		0.06	0.78		0.28	0.38	0.01		0.84	0.05
Uniform Delay, d1	27.9	12.7		33.1	21.0		29.9	29.2	26.9		27.9	23.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	6.9	0.9		0.6	5.4		1.1	1.4	0.0		18.6	0.1
Delay (s)	34.9	13.6		33.7	26.4		31.1	30.6	26.9		46.5	23.2
Level of Service	C	B		C	C		C	C	C		D	C
Approach Delay (s)		21.3			26.4			30.2				29.9
Approach LOS		C			C			C				C

Intersection Summary			
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	68.8	Sum of lost time (s)	18.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	446
Future Volume (vph)	446
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.5
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	485
RTOR Reduction (vph)	68
Lane Group Flow (vph)	417
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	23.2
Effective Green, g (s)	23.2
Actuated g/C Ratio	0.34
Clearance Time (s)	4.5
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	637
v/s Ratio Prot	c0.10
v/s Ratio Perm	0.16
v/c Ratio	0.65
Uniform Delay, d1	19.4
Progression Factor	1.00
Incremental Delay, d2	2.4
Delay (s)	21.8
Level of Service	C
Approach Delay (s)	
Approach LOS	

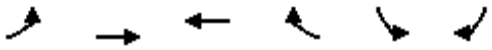
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	944	24	160	918	129	20	2	71	63	1	78
Future Volume (vph)	81	944	24	160	918	129	20	2	71	63	1	78
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
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3526		1770	3474		1770	1863	1583	1770	1863	1583
Flt Permitted	0.18	1.00		0.21	1.00		0.76	1.00	1.00	0.76	1.00	1.00
Satd. Flow (perm)	329	3526		382	3474		1410	1863	1583	1409	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	88	1026	26	174	998	140	22	2	77	68	1	85
RTOR Reduction (vph)	0	3	0	0	21	0	0	0	53	0	0	58
Lane Group Flow (vph)	88	1049	0	174	1117	0	22	2	24	68	1	27
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	28.0		28.0	28.0		16.5	16.5	16.5	16.5	16.5	16.5
Effective Green, g (s)	28.0	28.0		28.0	28.0		16.5	16.5	16.5	16.5	16.5	16.5
Actuated g/C Ratio	0.53	0.53		0.53	0.53		0.31	0.31	0.31	0.31	0.31	0.31
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)	175	1880		203	1852		443	585	497	442	585	497
v/s Ratio Prot		0.30			0.32			0.00			0.00	
v/s Ratio Perm	0.27			c0.46			0.02		0.02	c0.05		0.02
v/c Ratio	0.50	0.56		0.86	0.60		0.05	0.00	0.05	0.15	0.00	0.05
Uniform Delay, d1	7.8	8.1		10.5	8.4		12.5	12.4	12.5	13.0	12.3	12.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.3	0.4		28.1	0.6		0.2	0.0	0.2	0.7	0.0	0.2
Delay (s)	10.1	8.5		38.7	9.0		12.8	12.4	12.7	13.7	12.4	12.8
Level of Service	B	A		D	A		B	B	B	B	B	B
Approach Delay (s)		8.6			12.9			12.7			13.2	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	52.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		

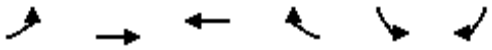
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	30	910	854	91	72	21
Future Volume (vph)	30	910	854	91	72	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3488		1770	1583
Flt Permitted	0.26	1.00	1.00		0.95	1.00
Satd. Flow (perm)	490	3539	3488		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	989	928	99	78	23
RTOR Reduction (vph)	0	0	21	0	0	14
Lane Group Flow (vph)	33	989	1006	0	78	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	15.2	15.2	15.2		16.0	16.0
Effective Green, g (s)	15.2	15.2	15.2		16.0	16.0
Actuated g/C Ratio	0.39	0.39	0.39		0.41	0.41
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)	190	1372	1352		722	646
v/s Ratio Prot		0.28	c0.29		c0.04	
v/s Ratio Perm	0.07					0.01
v/c Ratio	0.17	0.72	0.74		0.11	0.01
Uniform Delay, d1	7.9	10.2	10.3		7.2	6.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	1.9	2.3		0.3	0.0
Delay (s)	8.3	12.1	12.6		7.5	6.9
Level of Service	A	B	B		A	A
Approach Delay (s)		12.0	12.6		7.4	
Approach LOS		B	B		A	

Intersection Summary			
HCM 2000 Control Delay	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	39.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.2%	ICU Level of Service	A
Analysis Period (min)	15		

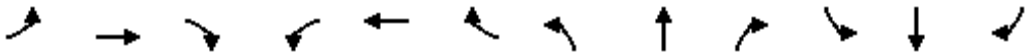
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	26	840	739	136	100	20
Future Volume (vph)	26	840	739	136	100	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3539	3457		1770	1583
Flt Permitted	0.27	1.00	1.00		0.95	1.00
Satd. Flow (perm)	507	3539	3457		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	913	803	148	109	22
RTOR Reduction (vph)	0	0	39	0	0	13
Lane Group Flow (vph)	28	913	912	0	109	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	14.7	14.7	14.7		16.0	16.0
Effective Green, g (s)	14.7	14.7	14.7		16.0	16.0
Actuated g/C Ratio	0.38	0.38	0.38		0.41	0.41
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)	192	1344	1313		731	654
v/s Ratio Prot		0.26	c0.26		c0.06	
v/s Ratio Perm	0.06					0.01
v/c Ratio	0.15	0.68	0.69		0.15	0.01
Uniform Delay, d1	7.9	10.0	10.1		7.1	6.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	1.4	1.6		0.4	0.0
Delay (s)	8.2	11.4	11.7		7.5	6.7
Level of Service	A	B	B		A	A
Approach Delay (s)		11.3	11.7		7.4	
Approach LOS		B	B		A	

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	38.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		

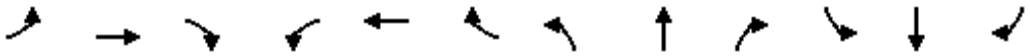
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	793	17	10	698	37	11	1	14	34	2	62
Future Volume (vph)	74	793	17	10	698	37	11	1	14	34	2	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.93			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	3528		1770	3513			1692			1675	
Flt Permitted	0.95	1.00		0.95	1.00			0.85			0.87	
Satd. Flow (perm)	1770	3528		1770	3513			1471			1487	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	80	862	18	11	759	40	12	1	15	37	2	67
RTOR Reduction (vph)	0	2	0	0	5	0	0	14	0	0	61	0
Lane Group Flow (vph)	80	878	0	11	794	0	0	14	0	0	45	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2			6		
Actuated Green, G (s)	2.4	18.7		0.5	16.8			3.4			3.4	
Effective Green, g (s)	2.4	18.7		0.5	16.8			3.4			3.4	
Actuated g/C Ratio	0.07	0.52		0.01	0.47			0.09			0.09	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	117	1827		24	1634			138			140	
v/s Ratio Prot	c0.05	c0.25		0.01	0.23							
v/s Ratio Perm								0.01			c0.03	
v/c Ratio	0.68	0.48		0.46	0.49			0.10			0.32	
Uniform Delay, d1	16.5	5.6		17.7	6.7			15.0			15.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	15.3	0.2		13.2	0.2			0.3			1.3	
Delay (s)	31.7	5.8		30.9	6.9			15.3			16.6	
Level of Service	C	A		C	A			B			B	
Approach Delay (s)		7.9			7.2			15.3			16.6	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	8.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	36.1	Sum of lost time (s)	13.5
Intersection Capacity Utilization	44.0%	ICU Level of Service	A
Analysis Period (min)	15		

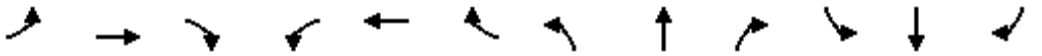
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	254	72	80	51	76	167	69	440	19	85	754	266
Future Volume (vph)	254	72	80	51	76	167	69	440	19	85	754	266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.96	
Flt Protected	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1721	1583	1770	1863	1583	1770	3517		1770	3401	
Flt Permitted	0.95	0.71	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1251	1583	1770	1863	1583	1770	3517		1770	3401	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	276	78	87	55	83	182	75	478	21	92	820	289
RTOR Reduction (vph)	0	0	66	0	0	146	0	3	0	0	39	0
Lane Group Flow (vph)	174	180	21	55	83	36	75	496	0	92	1070	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA		Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8						
Actuated Green, G (s)	7.7	29.2	21.5	3.3	17.1	17.1	16.5	16.5		28.0	28.0	
Effective Green, g (s)	7.7	29.2	21.5	3.3	17.1	17.1	16.5	16.5		28.0	28.0	
Actuated g/C Ratio	0.09	0.33	0.25	0.04	0.20	0.20	0.19	0.19		0.32	0.32	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	148	459	389	66	364	310	334	664		567	1090	
v/s Ratio Prot	c0.10	c0.03		0.03	0.04		0.04	c0.14		0.05	c0.31	
v/s Ratio Perm		c0.10	0.01			0.02						
v/c Ratio	1.18	0.39	0.06	0.83	0.23	0.11	0.22	0.75		0.16	0.98	
Uniform Delay, d1	39.8	22.3	25.1	41.7	29.5	28.9	30.0	33.4		21.2	29.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	129.0	0.6	0.1	56.6	0.3	0.2	0.3	4.6		0.1	22.8	
Delay (s)	168.8	22.8	25.2	98.3	29.9	29.0	30.3	38.0		21.4	52.2	
Level of Service	F	C	C	F	C	C	C	D		C	D	
Approach Delay (s)		80.9			41.2			37.0			49.9	
Approach LOS		F			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	51.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	87.3	Sum of lost time (s)	18.0
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		

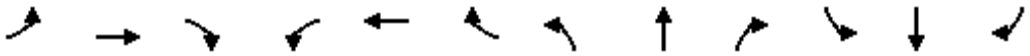
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	4	987	0	0	0	0	762	181	257	485	0
Future Volume (vph)	220	4	987	0	0	0	0	762	181	257	485	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.0					4.5	4.5	4.5	4.5	
Lane Util. Factor		1.00	1.00					0.95	1.00	1.00	0.95	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1775	1583					3539	1583	1770	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1775	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	4	1073	0	0	0	0	828	197	279	527	0
RTOR Reduction (vph)	0	0	9	0	0	0	0	0	54	0	0	0
Lane Group Flow (vph)	0	243	1064	0	0	0	0	828	143	279	527	0
Turn Type	Split	NA	custom					NA	Perm	Prot	NA	
Protected Phases	4	4	5					2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		14.3	44.4					30.1	30.1	13.5	14.0	
Effective Green, g (s)		14.3	44.4					30.1	30.1	13.5	14.0	
Actuated g/C Ratio		0.20	0.62					0.42	0.42	0.19	0.20	
Clearance Time (s)		4.5	4.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		355	1073					1491	667	334	693	
v/s Ratio Prot		0.14	c0.42					0.23		c0.16	0.15	
v/s Ratio Perm			0.25						0.09			
v/c Ratio		0.68	0.99					0.56	0.21	0.84	0.76	
Uniform Delay, d1		26.5	13.3					15.6	13.1	27.9	27.1	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		5.4	25.3					0.5	0.2	16.3	7.7	
Delay (s)		31.8	38.6					16.0	13.3	44.2	34.8	
Level of Service		C	D					B	B	D	C	
Approach Delay (s)		37.4			0.0			15.5			38.1	
Approach LOS		D			A			B			D	

Intersection Summary			
HCM 2000 Control Delay	30.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	71.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		

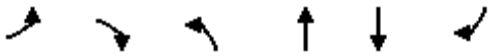
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	295	90	154	513	325	144	15	446	108
Future Volume (vph)	0	0	0	295	90	154	513	325	144	15	446	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frt					0.96		1.00	0.95		1.00	0.97	
Flt Protected					0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1743		1770	3376		1770	3436	
Flt Permitted					0.97		0.95	1.00		0.95	1.00	
Satd. Flow (perm)					1743		1770	3376		1770	3436	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	321	98	167	558	353	157	16	485	117
RTOR Reduction (vph)	0	0	0	0	23	0	0	68	0	0	30	0
Lane Group Flow (vph)	0	0	0	0	563	0	558	442	0	16	572	0
Turn Type				Split	NA		Prot	NA		Prot	NA	
Protected Phases				8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)					21.0		20.5	33.3		0.8	13.6	
Effective Green, g (s)					21.0		20.5	33.3		0.8	13.6	
Actuated g/C Ratio					0.31		0.30	0.49		0.01	0.20	
Clearance Time (s)					4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)					3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)					533		528	1638		20	681	
v/s Ratio Prot					c0.32		c0.32	0.13		0.01	c0.17	
v/s Ratio Perm												
v/c Ratio					1.06		1.06	0.27		0.80	0.84	
Uniform Delay, d1					23.8		24.0	10.5		33.8	26.4	
Progression Factor					1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2					54.7		55.0	0.1		110.1	8.9	
Delay (s)					78.5		79.1	10.5		143.9	35.4	
Level of Service					E		E	B		F	D	
Approach Delay (s)		0.0			78.5			46.4			38.2	
Approach LOS		A			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	52.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	68.6	Sum of lost time (s)	13.5
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	18	13	612	742	29
Future Volume (Veh/h)	0	18	13	612	742	29
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	20	14	665	807	32
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	TWLTL	
Median storage veh)					2	
Upstream signal (ft)				590		
pX, platoon unblocked						
vC, conflicting volume	1184	420	839			
vC1, stage 1 conf vol	823					
vC2, stage 2 conf vol	360					
vCu, unblocked vol	1184	420	839			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	98			
cM capacity (veh/h)	358	582	791			

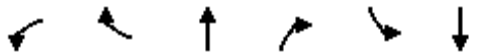
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	20	236	443	538	301
Volume Left	0	14	0	0	0
Volume Right	20	0	0	0	32
cSH	582	791	1700	1700	1700
Volume to Capacity	0.03	0.02	0.26	0.32	0.18
Queue Length 95th (ft)	3	1	0	0	0
Control Delay (s)	11.4	0.8	0.0	0.0	0.0
Lane LOS	B	A			
Approach Delay (s)	11.4	0.3		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	36.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	297	12	87	279	14	71
Future Volume (Veh/h)	297	12	87	279	14	71
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	323	13	95	303	15	77
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				898		
pX, platoon unblocked						
vC, conflicting volume			336		816	323
vC1, stage 1 conf vol					323	
vC2, stage 2 conf vol					493	
vCu, unblocked vol			336		816	323
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			92		97	89
cM capacity (veh/h)			1223		509	718

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	323	13	95	303	92
Volume Left	0	0	95	0	15
Volume Right	0	13	0	0	77
cSH	1700	1700	1223	1700	673
Volume to Capacity	0.19	0.01	0.08	0.18	0.14
Queue Length 95th (ft)	0	0	6	0	12
Control Delay (s)	0.0	0.0	8.2	0.0	11.2
Lane LOS			A		B
Approach Delay (s)	0.0		2.0		11.2
Approach LOS					B

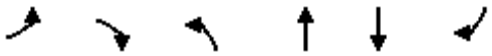
Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	35.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	35	21	60	6	17	72
Future Volume (vph)	35	21	60	6	17	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	23	65	7	18	78

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	61	72	96
Volume Left (vph)	38	0	18
Volume Right (vph)	23	7	0
Hadj (s)	-0.07	-0.02	0.07
Departure Headway (s)	4.2	4.1	4.2
Degree Utilization, x	0.07	0.08	0.11
Capacity (veh/h)	822	850	843
Control Delay (s)	7.5	7.5	7.7
Approach Delay (s)	7.5	7.5	7.7
Approach LOS	A	A	A

Intersection Summary			
Delay	7.6		
Level of Service	A		
Intersection Capacity Utilization	21.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	26	28	600	820	47
Future Volume (Veh/h)	12	26	28	600	820	47
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	28	30	652	891	51
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage veh)				2	2	
Upstream signal (ft)				1170	996	
pX, platoon unblocked	0.75	0.75	0.75			
vC, conflicting volume	1302	471	942			
vC1, stage 1 conf vol	916					
vC2, stage 2 conf vol	386					
vCu, unblocked vol	733	0	252			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	97	97			
cM capacity (veh/h)	485	812	982			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	41	30	326	326	594	348
Volume Left	13	30	0	0	0	0
Volume Right	28	0	0	0	0	51
cSH	669	982	1700	1700	1700	1700
Volume to Capacity	0.06	0.03	0.19	0.19	0.35	0.20
Queue Length 95th (ft)	5	2	0	0	0	0
Control Delay (s)	10.7	8.8	0.0	0.0	0.0	0.0
Lane LOS	B	A				
Approach Delay (s)	10.7	0.4			0.0	
Approach LOS	B					

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	34.2%	ICU Level of Service	A
Analysis Period (min)	15		

APPENDIX D

PROJECT TRIP ASSIGNMENT DETAIL

Planning Areas A & B

Project Traffic

A & B: 1,144 ADT

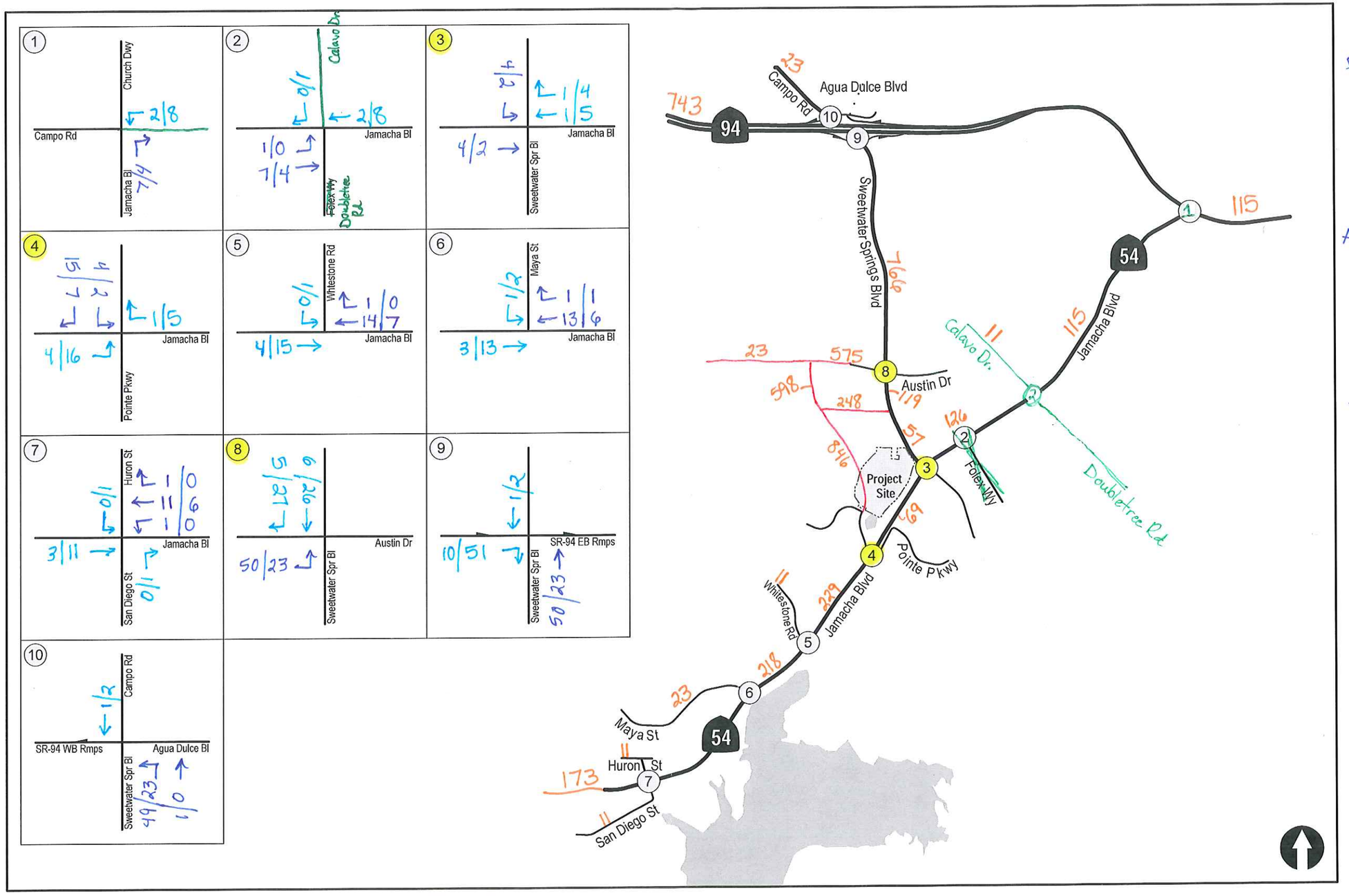
A & B:

	AM	PM
I	18	79
O	74	35

2/2/16

2436 AD

Revisions w/ Reduced Project Traffic



Planning Areas
A+B

Project Traffic

A+B: 1,144 ADT

A+B:

	AM	PM
I	18	79
O	74	35

LINSCOTT LAW & GREENSPAN engineers

N:\2436\Figures
Date: 04/06/15

Figure x

Map Title

SWEETWATER VISTAS

2/2/16

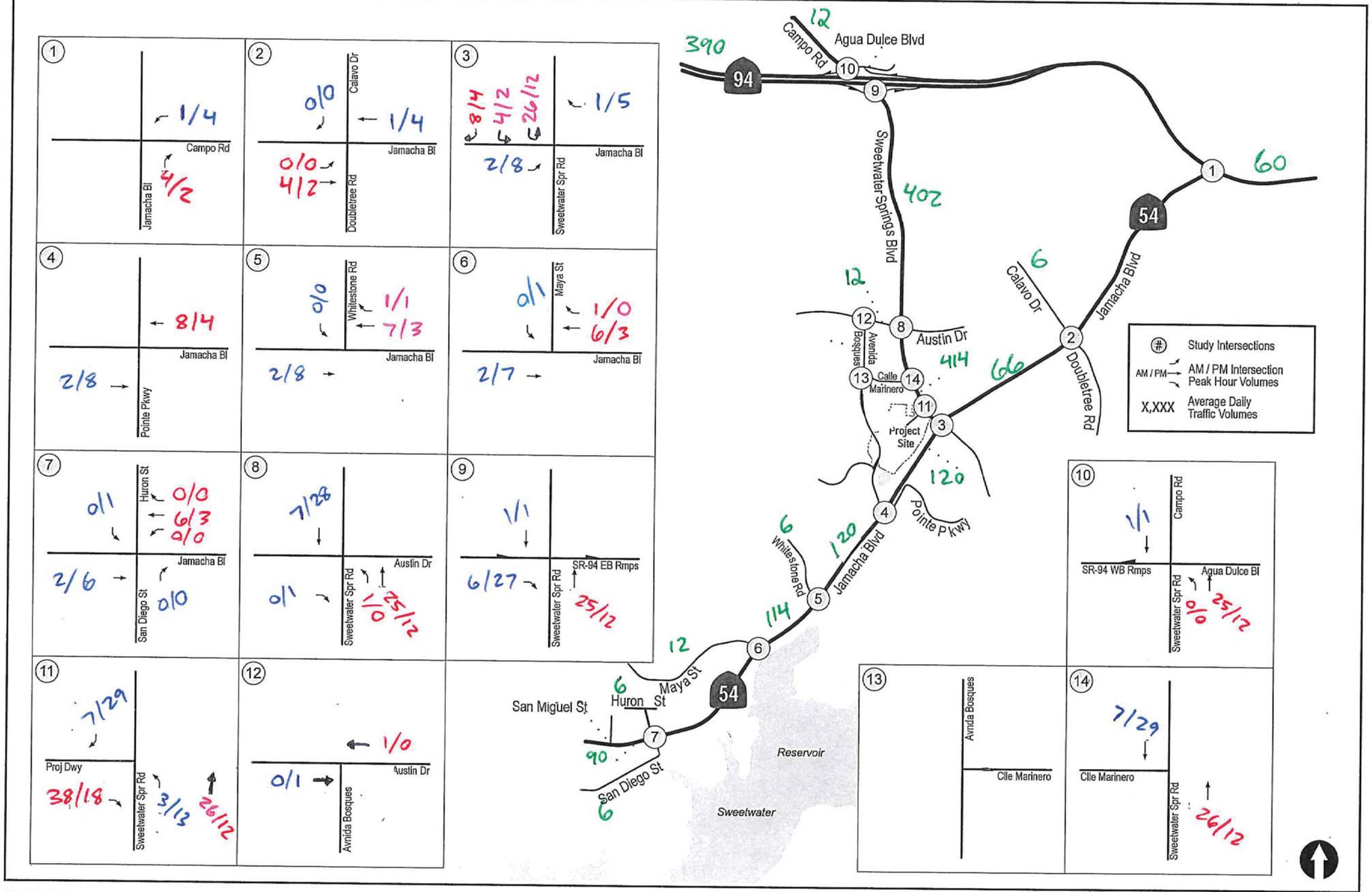
Revisions w/ Reduced Project Traffic

2436 AD

750 DU

LOT 3 →

	AM In	AM Out	PM In	PM Out	ADT
	10	38	42	18	600



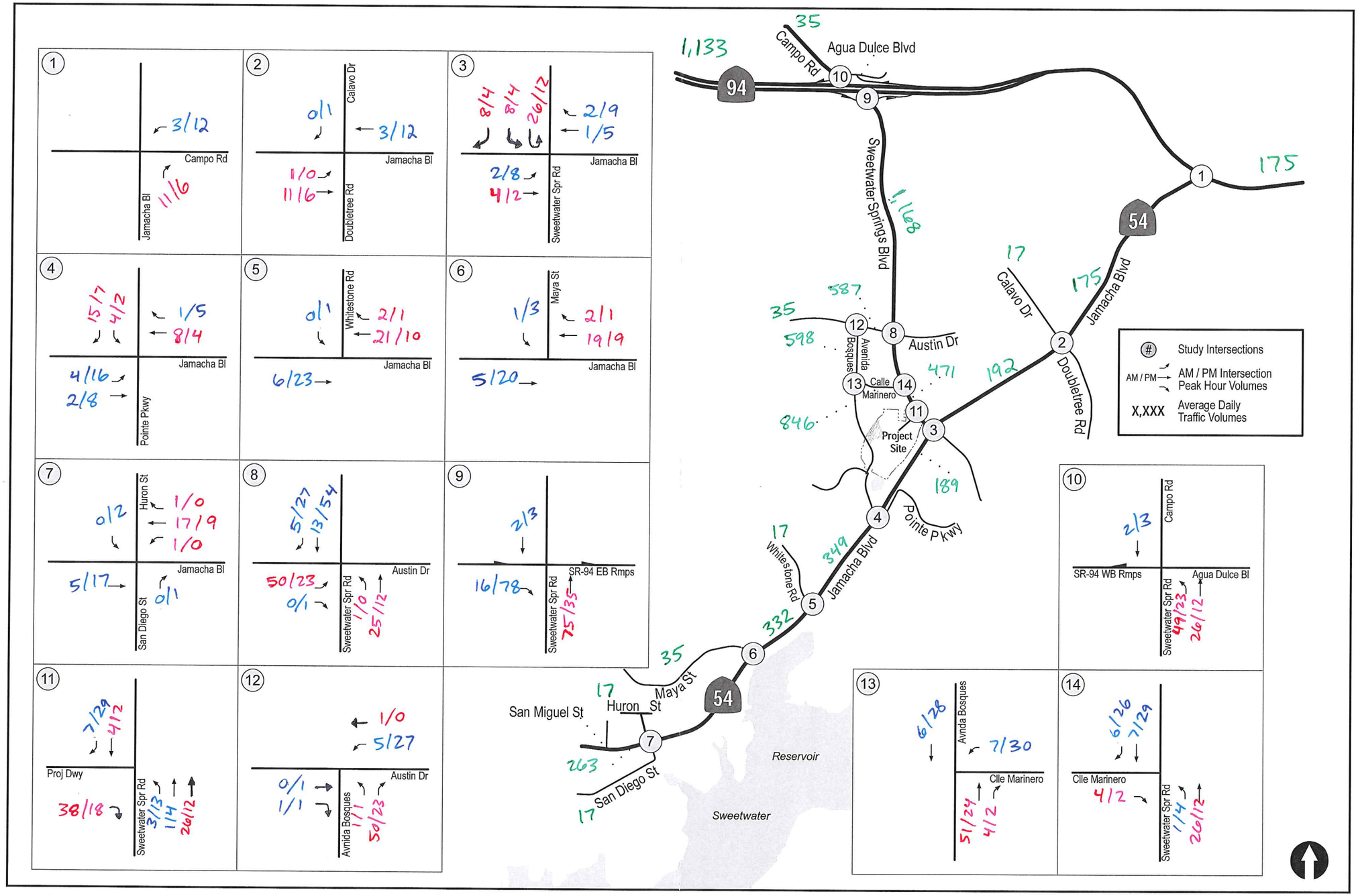
LINSCOTT LAW & GREENSPAN engineers

N:\2436\Figures
Date: 12/01/15

Figure 7-2

Project Traffic Volumes

SWEETWATER VISTAS



Planning Areas
A+B+C

ADT = 1,744

AM Peak hour

In	Out
28	112

PM Peak hour

In	Out
121	53

LINSCOTT LAW & GREENSPAN engineers

N:\2436\Figures
Date: 12/01/15

Figure 7-2

Project Traffic Volumes

SWEETWATER VISTAS