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Pasadena
Irvine
San Diego

TECHNICAL APPENDICES
SANTEE COMMUNITY CENTER

Santee, California
February 23, 2024

LLG Ref. 3-22-3519

APPENDICES

APPENDIX

A. Intersection Manual Count Sheets

B. Bus Route Schedule and Map

C. Existing Intersection Analysis Worksheets

D. Excerpts from the *Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition)* and *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (dated April 2002)*

E. Existing + Project Intersection Analysis Worksheets

F. Existing + Cumulative Projects Intersection Analysis Worksheets

G. Existing + Cumulative Projects + Project Intersection Analysis Worksheets

APPENDIX A

INTERSECTION MANUAL COUNT SHEETS

Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#01	File Name:	ITM-24-004-01
Intersection:	Cuyamaca Street & Mast Boulevard	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Cuyamaca Street Southbound			Mast Boulevard Westbound			Cuyamaca Street Northbound			Mast Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	6	35	73	29	177	3	31	13	23	15	44	11	460
7:15	0	44	99	37	225	0	30	23	25	15	60	32	590
7:30	1	52	90	69	217	2	42	26	27	25	65	27	643
7:45	1	51	77	42	186	3	40	19	33	22	71	35	580
8:00	2	62	82	48	150	2	82	19	46	19	75	45	632
8:15	3	51	68	88	155	2	62	43	67	30	88	41	698
8:30	0	29	57	53	112	3	34	30	37	22	89	40	506
8:45	2	43	37	51	76	1	39	22	53	16	51	30	421
Total	15	367	583	417	1298	16	360	195	311	164	543	261	4530
Approach%	1.6	38.0	60.4	24.1	75.0	0.9	41.6	22.5	35.9	16.9	56.1	27.0	
Total%	0.3	8.1	12.9	9.2	28.7	0.4	7.9	4.3	6.9	3.6	12.0	5.8	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	7	216	317	247	708	9	226	107	173	96	299	148	2,553
Approach%	1.3	40.0	58.7	25.6	73.4	0.9	44.7	21.1	34.2	17.7	55.1	27.3	
Total%	0.3	8.5	12.4	9.7	27.7	0.4	8.9	4.2	6.8	3.8	11.7	5.8	
PHF			0.92			0.84			0.74			0.85	0.91

PM	Cuyamaca Street Southbound			Mast Boulevard Westbound			Cuyamaca Street Northbound			Mast Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	2	25	20	68	75	1	36	43	69	43	124	38	544
16:15	1	53	29	69	57	1	40	56	73	39	127	43	588
16:30	3	34	36	64	72	3	42	61	84	48	109	33	589
16:45	2	47	27	44	83	9	57	55	95	46	147	47	659
17:00	3	40	30	75	67	3	51	51	87	51	140	39	637
17:15	5	39	21	60	82	1	56	53	93	42	134	36	622
17:30	2	40	29	67	75	5	34	39	92	36	109	40	568
17:45	7	34	20	55	63	2	45	39	63	39	111	39	517
Total	25	312	212	502	574	25	361	397	656	344	1001	315	4724
Approach%	4.6	56.8	38.6	45.6	52.1	2.3	25.5	28.1	46.4	20.7	60.3	19.0	
Total%	0.5	6.6	4.5	10.6	12.2	0.5	7.6	8.4	13.9	7.3	21.2	6.7	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	13	160	114	243	304	16	206	220	359	187	530	155	2,507
Approach%	4.5	55.7	39.7	43.2	54.0	2.8	26.2	28.0	45.7	21.4	60.8	17.8	
Total%	0.5	6.4	4.5	9.7	12.1	0.6	8.2	8.8	14.3	7.5	21.1	6.2	
PHF			0.94			0.97			0.95			0.91	0.95

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

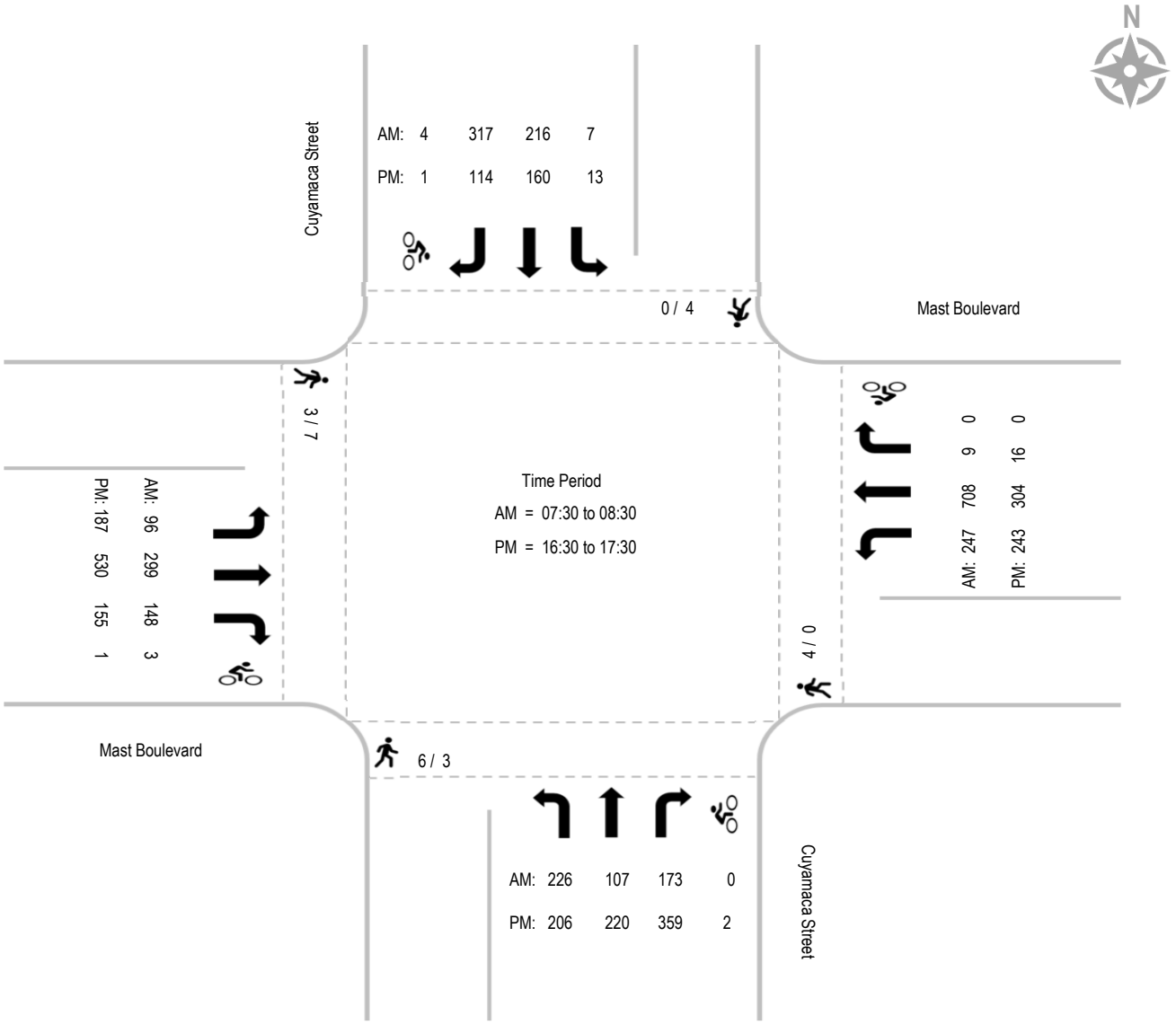
Location:	#01	File Name:	ITM-24-004-01
Intersection:	Cuyamaca Street & Mast Boulevard	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Cuyamaca Street Southbound				Mast Boulevard Westbound				Cuyamaca Street Northbound				Mast Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
8:00	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	4	1
8:15	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
8:45	0	0	1	0	0	0	0	0	1	0	0	0	1	0	3	0	2	4
Ped Total	0				4				6				3				13	
Bike Total		1	3	0		0	0	0		0	0	0		0	3	0		7

PM	Cuyamaca Street Southbound				Mast Boulevard Westbound				Cuyamaca Street Northbound				Mast Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
16:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
16:30	3	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	6	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
17:45	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	0	7	0
Ped Total	4				0				3				7				14	
Bike Total		0	1	0		0	0	0		0	2	0		0	1	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#01	File Name: ITM-24-004-01
	Intersection:	Cuyamaca Street & Mast Boulevard	Project: LLG Ref. 3-22-3519
	Date of Count:	Wednesday January 10, 2024	Santee Community Center



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#02	File Name:	ITM-24-004-02
Intersection:	Park Center Driver & Mast Boulevard	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	- Southbound			Mast Boulevard Westbound			Park Center Drive Northbound			Mast Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	0	0	14	183	0	1	0	10	0	68	6	282
7:15	0	0	0	8	212	0	0	0	10	0	102	3	335
7:30	0	0	0	17	204	0	5	0	12	0	103	3	344
7:45	0	0	0	15	196	0	1	0	6	0	123	8	349
8:00	0	0	0	41	15	0	1	0	10	0	142	13	222
8:15	0	0	0	45	179	0	13	0	41	0	157	17	452
8:30	0	0	0	12	134	0	3	0	8	0	142	2	301
8:45	0	0	0	11	93	0	2	0	14	0	106	3	229
Total	0	0	0	163	1216	0	26	0	111	0	943	55	2514
Approach%	-	-	-	11.8	88.2	-	19.0	-	81.0	-	94.5	5.5	
Total%	-	-	-	6.5	48.4	-	1.0	-	4.4	-	37.5	2.2	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	-	-	-	118	594	-	20	-	69	-	525	41	1,367
Approach%	-	-	-	16.6	83.4	-	22.5	-	77.5	-	92.8	7.2	
Total%	-	-	-	8.6	43.5	-	1.5	-	5.0	-	38.4	3.0	
PHF			#DIV/0!			0.79			0.41			0.81	0.76

PM	- Southbound			Mast Boulevard Westbound			Park Center Drive Northbound			Mast Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	0	0	15	130	0	8	0	16	0	196	3	368
16:15	0	0	0	22	128	0	6	0	28	0	226	2	412
16:30	0	0	0	18	139	0	4	0	24	0	214	8	407
16:45	0	0	0	34	150	0	5	0	20	0	220	5	434
17:00	0	0	0	16	156	0	9	0	28	0	234	2	445
17:15	0	0	0	18	171	0	2	0	13	0	227	5	436
17:30	0	0	0	40	126	0	3	0	18	0	200	2	389
17:45	0	0	0	29	120	0	4	0	21	0	217	6	397
Total	0	0	0	192	1120	0	41	0	168	0	1734	33	3288
Approach%	-	-	-	14.6	85.4	-	19.6	-	80.4	-	98.1	1.9	
Total%	-	-	-	5.8	34.1	-	1.2	-	5.1	-	52.7	1.0	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	-	-	-	86	616	-	20	-	85	-	895	20	1,722
Approach%	-	-	-	12.3	87.7	-	19.0	-	81.0	-	97.8	2.2	
Total%	-	-	-	5.0	35.8	-	1.2	-	4.9	-	52.0	1.2	
PHF			#DIV/0!			0.93			0.71			0.97	0.97

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

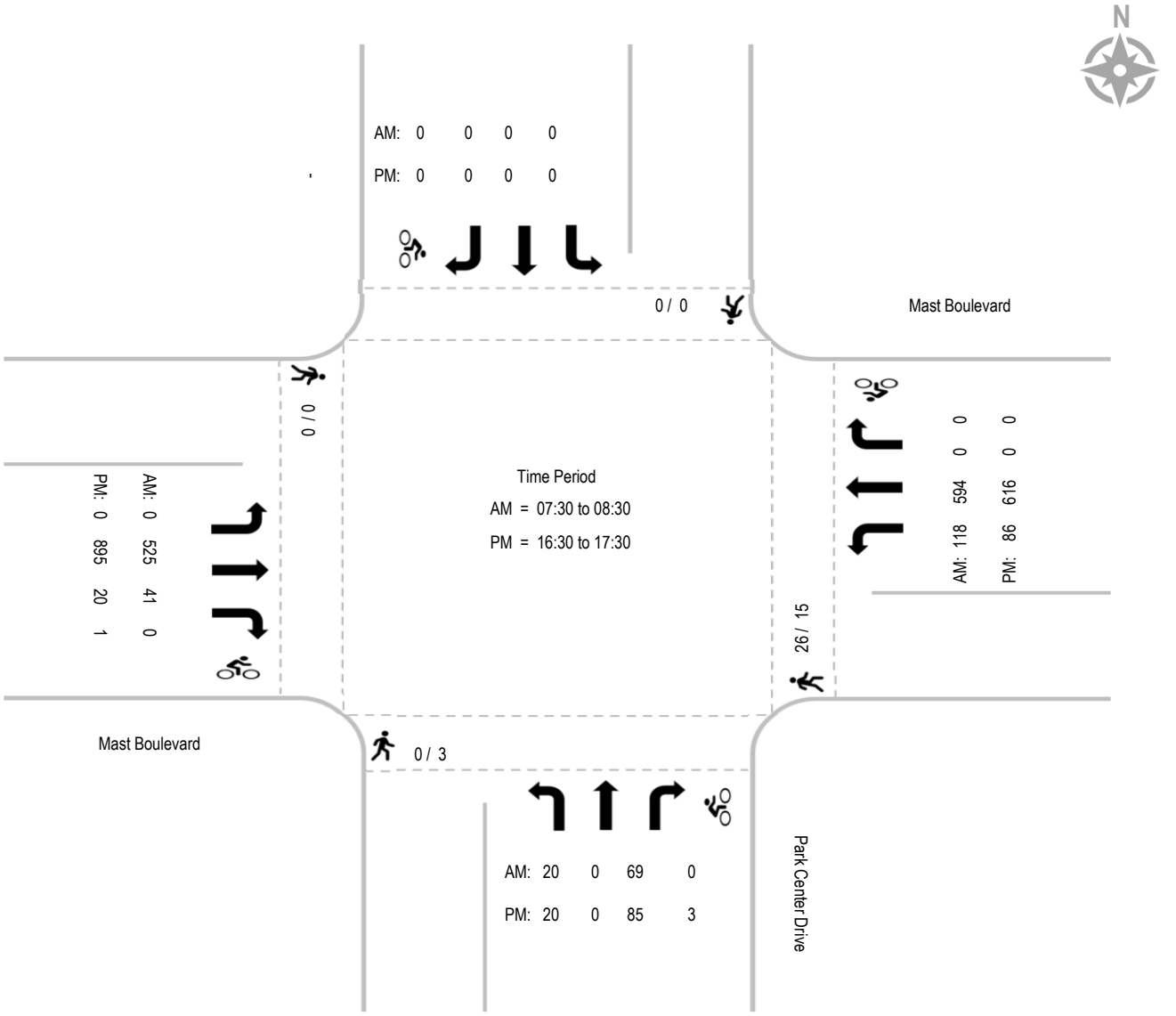
Location:	#02	File Name:	ITM-24-004-02
Intersection:	Park Center Driver & Mast Boulevard	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	- Southbound				Mast Boulevard Westbound				Park Center Drive Northbound				Mast Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
7:45	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
8:00	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
8:15	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
8:30	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
8:45	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
Ped Total	0				26				0				0				26	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	- Southbound				Mast Boulevard Westbound				Park Center Drive Northbound				Mast Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	7	0	0	0	0	0	0	0	0	0	1	0	7	1
16:30	0	0	0	0	4	0	0	0	0	0	0	1	0	0	0	0	4	1
16:45	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	4	0
17:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1
17:15	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	1
17:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				15				3				0				18	
Bike Total		0	0	0		0	0	0		2	0	1		0	1	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#02	File Name:	ITM-24-004-02
	Intersection:	Park Center Driver & Mast Boulevard	Project:	LLG Ref. 3-22-3519
	Date of Count:	Wednesday January 10, 2024		Santee Community Center



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#03	File Name:	ITM-24-004-03
Intersection:	Magnolia Avenue & Mast Boulevard	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Magnolia Avenue Southbound			Mast Boulevard Westbound			Magnolia Avenue Northbound			Mast Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	11	83	75	11	45	3	58	56	6	19	22	34	423
7:15	15	95	75	15	50	6	57	95	8	33	31	47	527
7:30	15	140	72	44	69	14	70	100	9	42	24	37	636
7:45	2	137	66	34	57	5	86	104	7	54	18	61	631
8:00	11	95	67	17	37	0	84	131	16	56	17	38	569
8:15	2	150	67	10	36	2	92	189	14	70	30	53	715
8:30	8	103	43	10	30	4	76	58	10	58	38	51	489
8:45	8	84	45	10	28	2	48	66	7	43	25	28	394
Total	72	887	510	151	352	36	571	799	77	375	205	349	4384
Approach%	4.9	60.4	34.7	28.0	65.3	6.7	39.5	55.2	5.3	40.4	22.1	37.6	
Total%	1.6	20.2	11.6	3.4	8.0	0.8	13.0	18.2	1.8	8.6	4.7	8.0	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	30	522	272	105	199	21	332	524	46	222	89	189	2,551
Approach%	3.6	63.3	33.0	32.3	61.2	6.5	36.8	58.1	5.1	44.4	17.8	37.8	
Total%	1.2	20.5	10.7	4.1	7.8	0.8	13.0	20.5	1.8	8.7	3.5	7.4	
PHF			0.91			0.64			0.76			0.82	0.89

PM	Magnolia Avenue Southbound			Mast Boulevard Westbound			Magnolia Avenue Northbound			Mast Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	5	108	51	17	19	1	56	128	30	95	58	51	619
16:15	10	70	45	12	27	4	69	100	29	66	62	46	540
16:30	16	67	51	12	32	5	75	92	27	94	51	53	575
16:45	21	96	58	9	31	8	74	127	26	81	60	53	644
17:00	16	102	43	20	36	9	58	96	33	88	60	59	620
17:15	9	92	53	17	25	11	87	118	31	89	64	52	648
17:30	9	113	54	28	31	3	63	105	23	76	37	56	598
17:45	14	93	37	21	26	9	76	115	20	86	43	65	605
Total	100	741	392	136	227	50	558	881	219	675	435	435	4849
Approach%	8.1	60.1	31.8	32.9	55.0	12.1	33.7	53.1	13.2	43.7	28.2	28.2	
Total%	2.1	15.3	8.1	2.8	4.7	1.0	11.5	18.2	4.5	13.9	9.0	9.0	

PM Intersection Peak Hour: **16:45 to 17:45**

Volume	55	403	208	74	123	31	282	446	113	334	221	220	2,510
Approach%	8.3	60.5	31.2	32.5	53.9	13.6	33.5	53.0	13.4	43.1	28.5	28.4	
Total%	2.2	16.1	8.3	2.9	4.9	1.2	11.2	17.8	4.5	13.3	8.8	8.8	
PHF			0.95			0.88			0.89			0.94	0.97

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

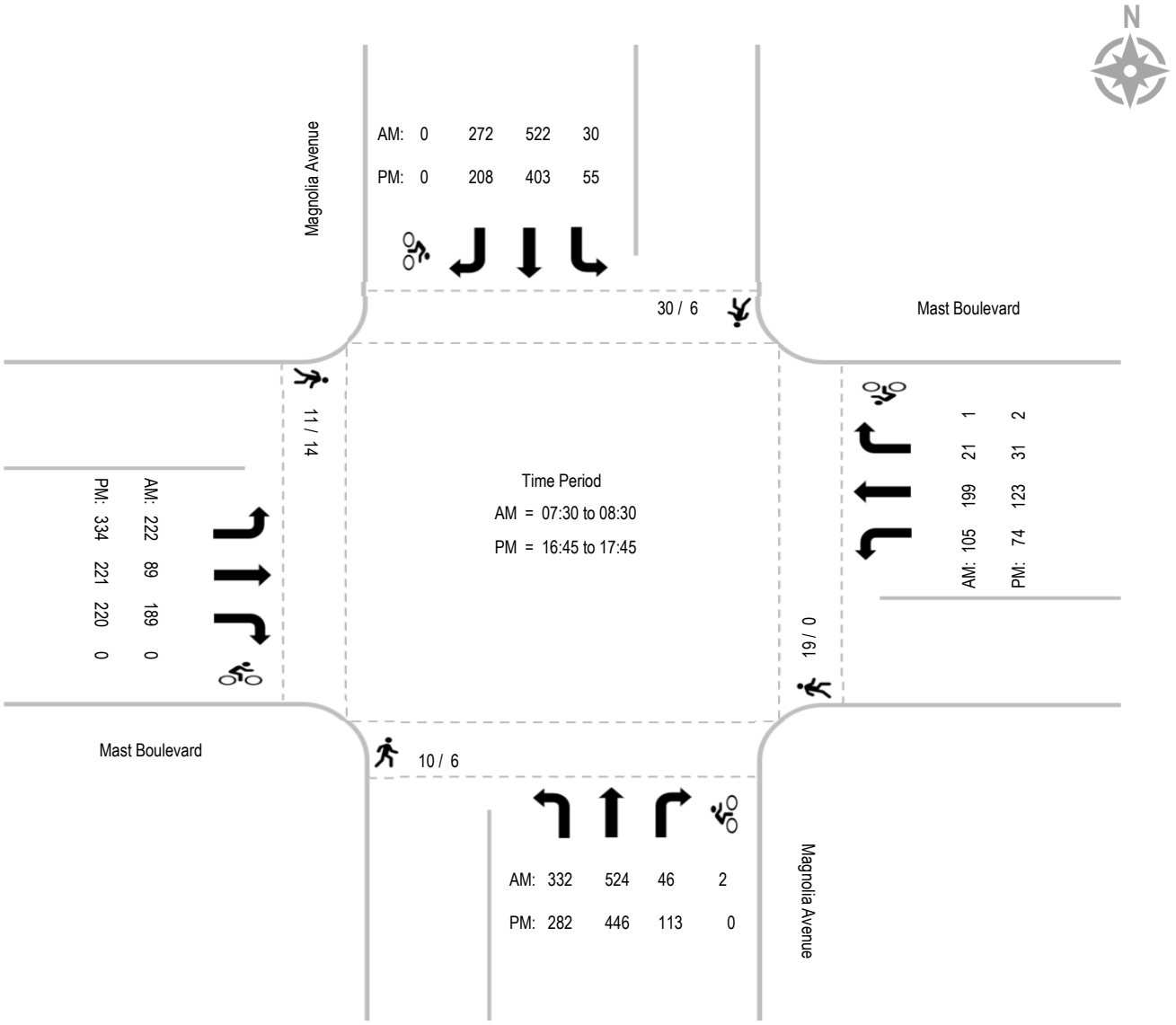
Location:	#03	File Name:	ITM-24-004-03
Intersection:	Magnolia Avenue & Mast Boulevard	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Magnolia Avenue Southbound				Mast Boulevard Westbound				Magnolia Avenue Northbound				Mast Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
7:15	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	4	0
7:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45	7	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	9	1
8:00	9	0	0	0	5	0	0	0	1	0	0	0	2	0	0	0	17	0
8:15	2	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	6	0
8:30	2	0	0	0	4	0	0	0	3	0	1	0	3	0	0	0	12	1
8:45	10	0	0	0	8	0	0	0	3	0	0	0	0	0	0	0	21	0
Ped Total	30				19				10				11				70	
Bike Total		0	0	0		0	1	0		0	2	0		0	0	0		3

PM	Magnolia Avenue Southbound				Mast Boulevard Westbound				Magnolia Avenue Northbound				Mast Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	0	7	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0
16:30	2	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	5	0
16:45	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	1
17:00	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	2	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	4	0
17:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Ped Total	6				0				6				14				26	
Bike Total		0	0	0		2	0	0		0	0	0		0	0	0		2

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#03	File Name:	ITM-24-004-03
	Intersection:	Magnolia Avenue & Mast Boulevard	Project:	LLG Ref. 3-22-3519
	Date of Count:	Wednesday January 10, 2024		Santee Community Center



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#04	File Name:	ITM-24-004-04
Intersection:	Cuyamaca Street & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Tuesday January 16, 2024		Santee Community Center

AM	Cuyamaca Street Southbound			Riverwalk Drive Westbound			Cuyamaca Street Northbound			- Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	5	84	0	18	1	14	0	51	10	0	0	0	183
7:15	5	103	1	17	0	12	7	68	12	0	0	0	225
7:30	10	128	2	29	0	9	4	68	10	0	0	0	260
7:45	1	158	1	27	0	8	15	87	22	0	0	0	319
8:00	25	156	0	17	0	14	36	114	13	0	0	0	375
8:15	45	188	1	21	1	23	52	152	17	0	1	0	501
8:30	11	127	1	12	1	5	45	131	17	0	0	2	352
8:45	11	125	5	20	0	6	9	97	19	0	0	0	292
Total	113	1069	11	161	3	91	168	768	120	0	1	2	2507
Approach%	9.5	89.6	0.9	63.1	1.2	35.7	15.9	72.7	11.4	-	33.3	66.7	
Total%	4.5	42.6	0.4	6.4	0.1	3.6	6.7	30.6	4.8	-	0.0	0.1	

AM Intersection Peak Hour: **07:45 to 08:45**

Volume	82	629	3	77	2	50	148	484	69	-	1	2	1,547
Approach%	11.5	88.1	0.4	59.7	1.6	38.8	21.1	69.0	9.8	-	33.3	66.7	
Total%	5.3	40.7	0.2	5.0	0.1	3.2	9.6	31.3	4.5	-	0.1	0.1	
PHF			0.76			0.72			0.79			0.38	0.77

PM	Cuyamaca Street Southbound			Riverwalk Drive Westbound			Cuyamaca Street Northbound			- Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	16	133	2	33	0	13	7	177	36	3	0	2	422
16:15	11	158	1	30	0	9	4	213	20	0	1	1	448
16:30	19	135	0	27	0	3	7	203	29	5	0	2	430
16:45	18	163	1	27	0	14	6	240	30	4	0	0	503
17:00	10	155	0	41	0	19	7	210	29	7	0	1	479
17:15	30	165	0	17	0	16	2	192	32	1	0	3	458
17:30	23	165	1	22	1	17	3	189	34	2	1	4	462
17:45	17	142	0	24	0	21	1	181	25	1	0	3	415
Total	144	1216	5	221	1	112	37	1605	235	23	2	16	3617
Approach%	10.5	89.1	0.4	66.2	0.3	33.5	2.0	85.5	12.5	56.1	4.9	39.0	
Total%	4.0	33.6	0.1	6.1	0.0	3.1	1.0	44.4	6.5	0.6	0.1	0.4	

PM Intersection Peak Hour: **16:45 to 17:45**

Volume	81	648	2	107	1	66	18	831	125	14	1	8	1,902
Approach%	11.1	88.6	0.3	61.5	0.6	37.9	1.8	85.3	12.8	60.9	4.3	34.8	
Total%	4.3	34.1	0.1	5.6	0.1	3.5	0.9	43.7	6.6	0.7	0.1	0.4	
PHF			0.94			0.73			0.88			0.72	0.95

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

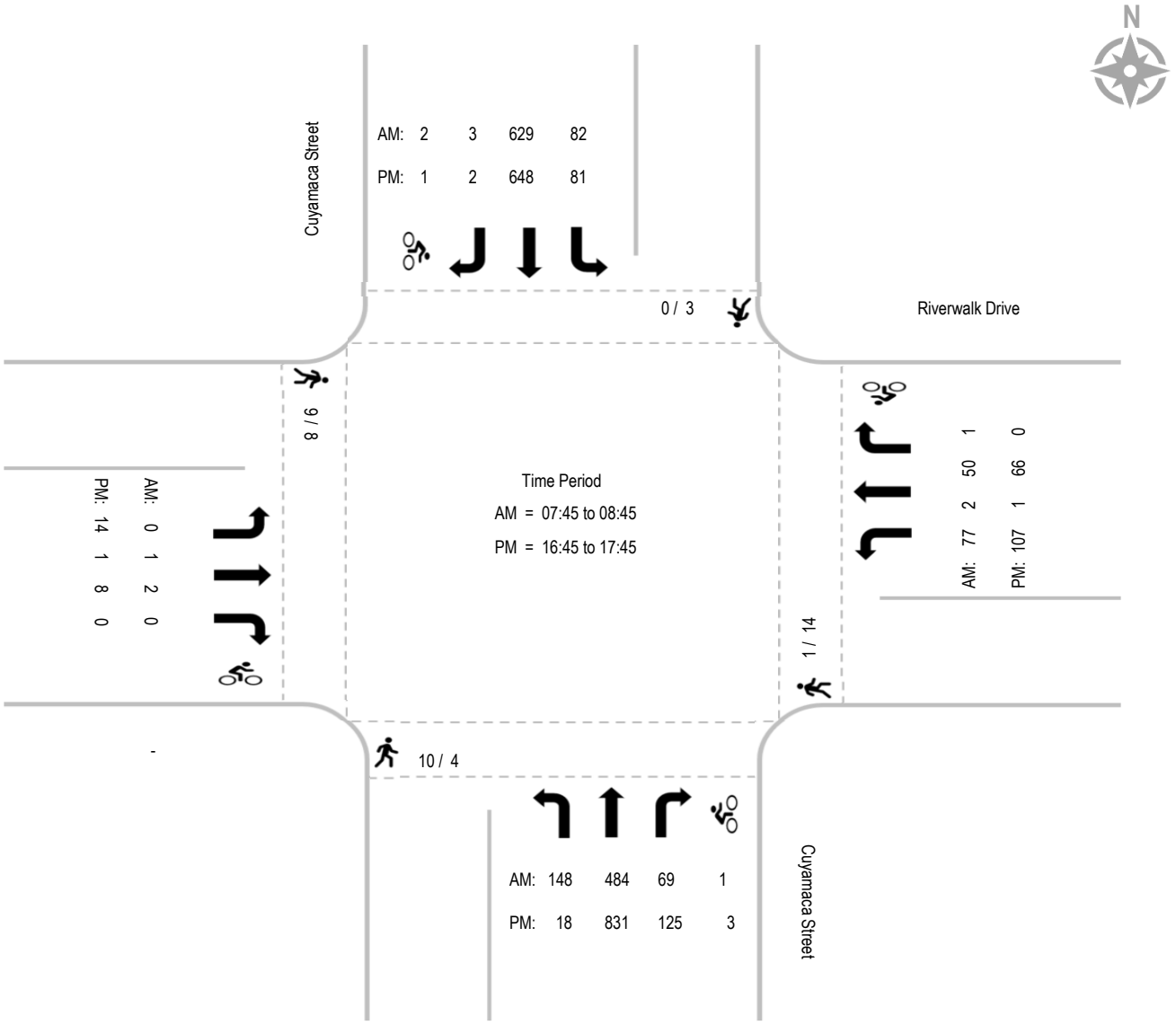
Location:	#04	File Name:	ITM-24-004-04
Intersection:	Cuyamaca Street & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Tuesday January 16, 2024		Santee Community Center

AM	Cuyamaca Street Southbound				Riverwalk Drive Westbound				Cuyamaca Street Northbound				- Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	2	1
8:00	0	0	1	0	1	0	0	0	1	0	0	0	2	0	0	0	4	1
8:15	0	0	0	0	0	1	0	0	4	0	0	1	2	0	0	0	6	2
8:30	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	4	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Ped Total	0				1				10				9				20	
Bike Total		0	2	0		1	0	0		0	0	1		0	0	0		4

PM	Cuyamaca Street Southbound				Riverwalk Drive Westbound				Cuyamaca Street Northbound				- Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	1	0	0	0	0	0	4	0	0	0	2	0	0	0	6	1
16:15	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	6	0
16:30	0	0	0	0	8	0	0	0	0	0	0	0	1	0	0	0	9	0
16:45	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	2
17:00	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	1
17:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
17:30	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
17:45	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
Ped Total	3				14				4				8				29	
Bike Total		0	1	0		0	0	0		0	2	1		0	0	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#04	File Name: ITM-24-004-04
	Intersection:	Cuyamaca Street & Riverwalk Drive	Project: LLG Ref. 3-22-3519
	Date of Count:	Tuesday January 16, 2024	Santee Community Center



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#05	File Name:	ITM-24-004-05
Intersection:	Verde Vista Lane & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Verde Vista Lane Southbound			Riverwalk Drive Westbound			- Northbound			Riverwalk Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	2	0	10	0	17	0	0	0	0	0	18	0	47
7:15	1	0	13	0	21	0	0	0	0	4	12	0	51
7:30	2	0	12	0	35	1	0	0	0	6	13	0	69
7:45	0	0	6	0	16	0	0	0	0	1	28	0	51
8:00	2	0	15	0	38	0	0	0	0	6	20	0	81
8:15	1	0	4	0	56	1	0	0	0	9	62	0	133
8:30	1	0	7	0	17	0	0	0	0	5	19	0	49
8:45	1	0	3	0	17	1	0	0	0	1	22	0	45
Total	10	0	70	0	217	3	0	0	0	32	194	0	526
Approach%	12.5	-	87.5	-	98.6	1.4	-	-	-	14.2	85.8	-	
Total%	1.9	-	13.3	-	41.3	0.6	-	-	-	6.1	36.9	-	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	5	-	37	-	145	2	-	-	-	22	123	-	334
Approach%	11.9	-	88.1	-	98.6	1.4	-	-	-	15.2	84.8	-	
Total%	1.5	-	11.1	-	43.4	0.6	-	-	-	6.6	36.8	-	
PHF			0.62			0.64			#DIV/0!			0.51	0.63

PM	Verde Vista Lane Southbound			Riverwalk Drive Westbound			- Northbound			Riverwalk Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	1	0	4	0	39	0	0	0	0	7	32	0	83
16:15	2	0	6	0	17	1	0	0	0	14	47	0	87
16:30	1	0	7	0	27	4	0	0	0	13	30	0	82
16:45	1	0	4	0	35	0	0	0	0	12	38	0	90
17:00	1	0	5	0	32	1	0	0	0	9	26	0	74
17:15	2	0	3	0	28	1	0	0	0	9	38	0	81
17:30	4	0	9	0	32	2	0	0	0	15	20	0	82
17:45	2	0	4	0	36	4	0	0	0	6	37	0	89
Total	14	0	42	0	246	13	0	0	0	85	268	0	668
Approach%	25.0	-	75.0	-	95.0	5.0	-	-	-	24.1	75.9	-	
Total%	2.1	-	6.3	-	36.8	1.9	-	-	-	12.7	40.1	-	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	5	-	21	-	118	5	-	-	-	46	147	-	342
Approach%	19.2	-	80.8	-	95.9	4.1	-	-	-	23.8	76.2	-	
Total%	1.5	-	6.1	-	34.5	1.5	-	-	-	13.5	43.0	-	
PHF			0.81			0.79			#DIV/0!			0.79	0.95

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

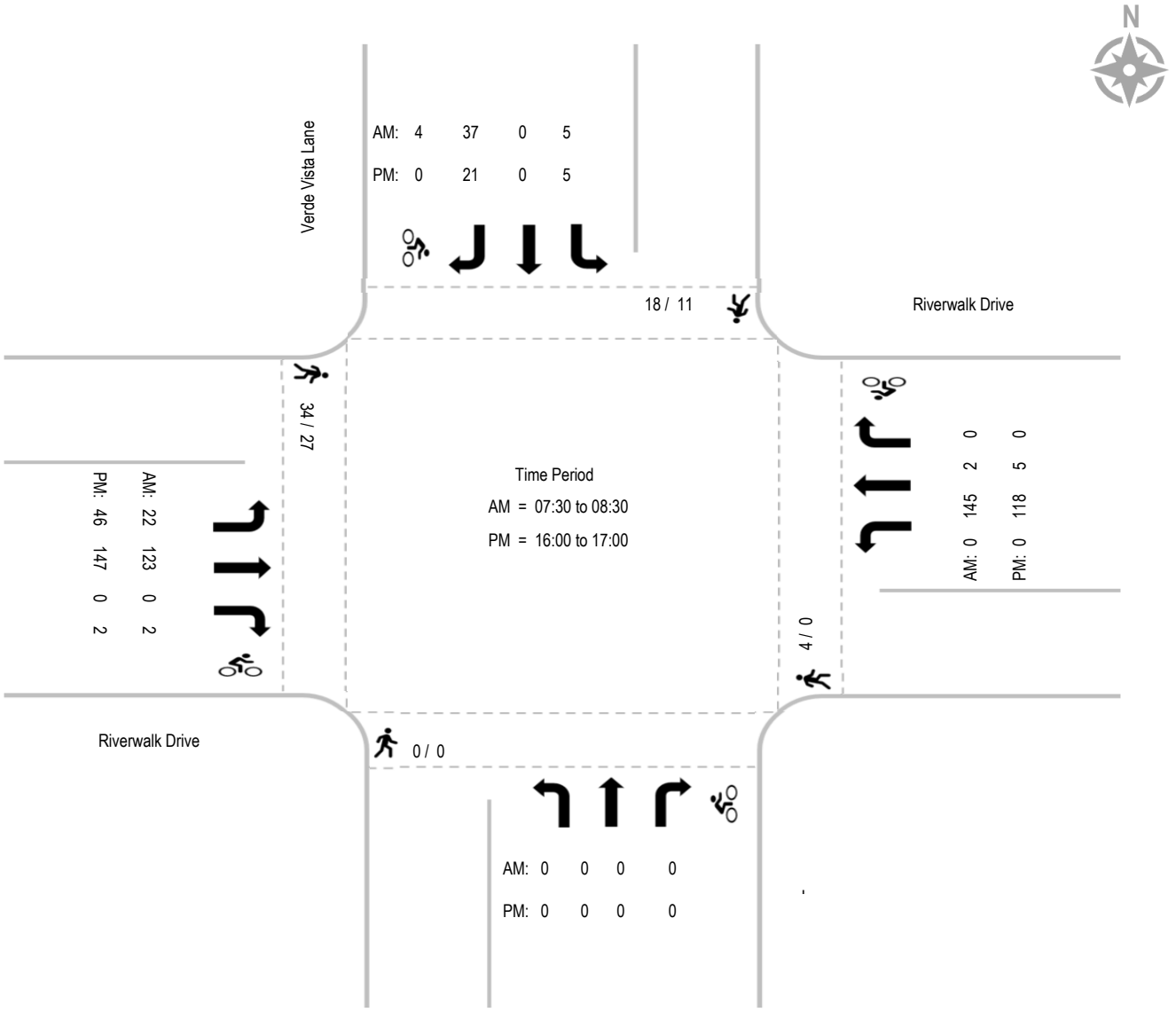
Location:	#05	File Name:	ITM-24-004-05
Intersection:	Verde Vista Lane & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Verde Vista Lane Southbound				Riverwalk Drive Westbound				- Northbound				Riverwalk Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	7	0
7:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	5	0
7:45	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	7	0
8:00	2	0	0	3	4	0	0	0	0	0	0	0	7	0	0	0	13	3
8:15	6	0	0	0	0	0	0	0	0	0	0	0	13	1	0	0	19	1
8:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0
8:45	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1
Ped Total	18				4				0				34				56	
Bike Total		0	0	4		0	0	0		0	0	0		1	1	0		6

PM	Verde Vista Lane Southbound				Riverwalk Drive Westbound				- Northbound				Riverwalk Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:15	2	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	6	0
16:30	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	7	0
16:45	4	0	0	0	0	0	0	0	0	0	0	0	8	0	2	0	12	2
17:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
17:30	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0
Ped Total	11				0				0				27				38	
Bike Total		0	0	0		0	0	0		0	0	0		0	2	0		2

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#05	File Name:	ITM-24-004-05
	Intersection:	Verde Vista Lane & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
	Date of Count:	Wednesday January 10, 2024		Santee Community Center



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#06	File Name:	ITM-24-004-06
Intersection:	Canopy Park Lane & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Canopy Park Lane Southbound			Riverwalk Drive Westbound			Canopy Park Lane Northbound			Riverwalk Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	2	0	4	2	11	2	2	1	4	0	23	1	52
7:15	6	0	5	0	9	1	7	1	1	0	6	8	44
7:30	4	0	7	9	24	1	5	0	0	1	6	6	63
7:45	1	1	7	10	7	4	2	0	2	0	11	18	63
8:00	2	0	12	2	23	3	3	0	0	4	7	6	62
8:15	6	0	5	9	52	3	2	0	3	4	46	8	138
8:30	1	0	4	3	9	0	6	0	1	2	19	10	55
8:45	3	0	2	3	7	0	4	0	2	1	14	7	43
Total	25	1	46	38	142	14	31	2	13	12	132	64	520
Approach%	34.7	1.4	63.9	19.6	73.2	7.2	67.4	4.3	28.3	5.8	63.5	30.8	
Total%	4.8	0.2	8.8	7.3	27.3	2.7	6.0	0.4	2.5	2.3	25.4	12.3	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	13	1	31	30	106	11	12	-	5	9	70	38	326
Approach%	28.9	2.2	68.9	20.4	72.1	7.5	70.6	-	29.4	7.7	59.8	32.5	
Total%	4.0	0.3	9.5	9.2	32.5	3.4	3.7	-	1.5	2.8	21.5	11.7	
PHF			0.80			0.57			0.85			0.50	0.59

PM	Canopy Park Lane Southbound			Riverwalk Drive Westbound			Canopy Park Lane Northbound			Riverwalk Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	2	0	3	10	13	2	22	1	2	3	18	17	93
16:15	2	1	1	1	11	3	9	0	6	1	21	23	79
16:30	5	0	4	4	17	5	9	0	4	8	17	11	84
16:45	5	0	5	8	18	4	12	0	3	9	15	14	93
17:00	1	0	7	4	16	7	10	0	7	3	16	10	81
17:15	3	0	7	6	10	3	13	0	3	8	13	13	79
17:30	0	0	3	6	24	5	5	1	2	3	14	11	74
17:45	7	1	4	3	28	1	9	0	5	8	18	12	96
Total	25	2	34	42	137	30	89	2	32	43	132	111	679
Approach%	41.0	3.3	55.7	20.1	65.6	14.4	72.4	1.6	26.0	15.0	46.2	38.8	
Total%	3.7	0.3	5.0	6.2	20.2	4.4	13.1	0.3	4.7	6.3	19.4	16.3	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	14	1	13	23	59	14	52	1	15	21	71	65	349
Approach%	50.0	3.6	46.4	24.0	61.5	14.6	76.5	1.5	22.1	13.4	45.2	41.4	
Total%	4.0	0.3	3.7	6.6	16.9	4.0	14.9	0.3	4.3	6.0	20.3	18.6	
PHF			0.70			0.80			0.68			0.87	0.94

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

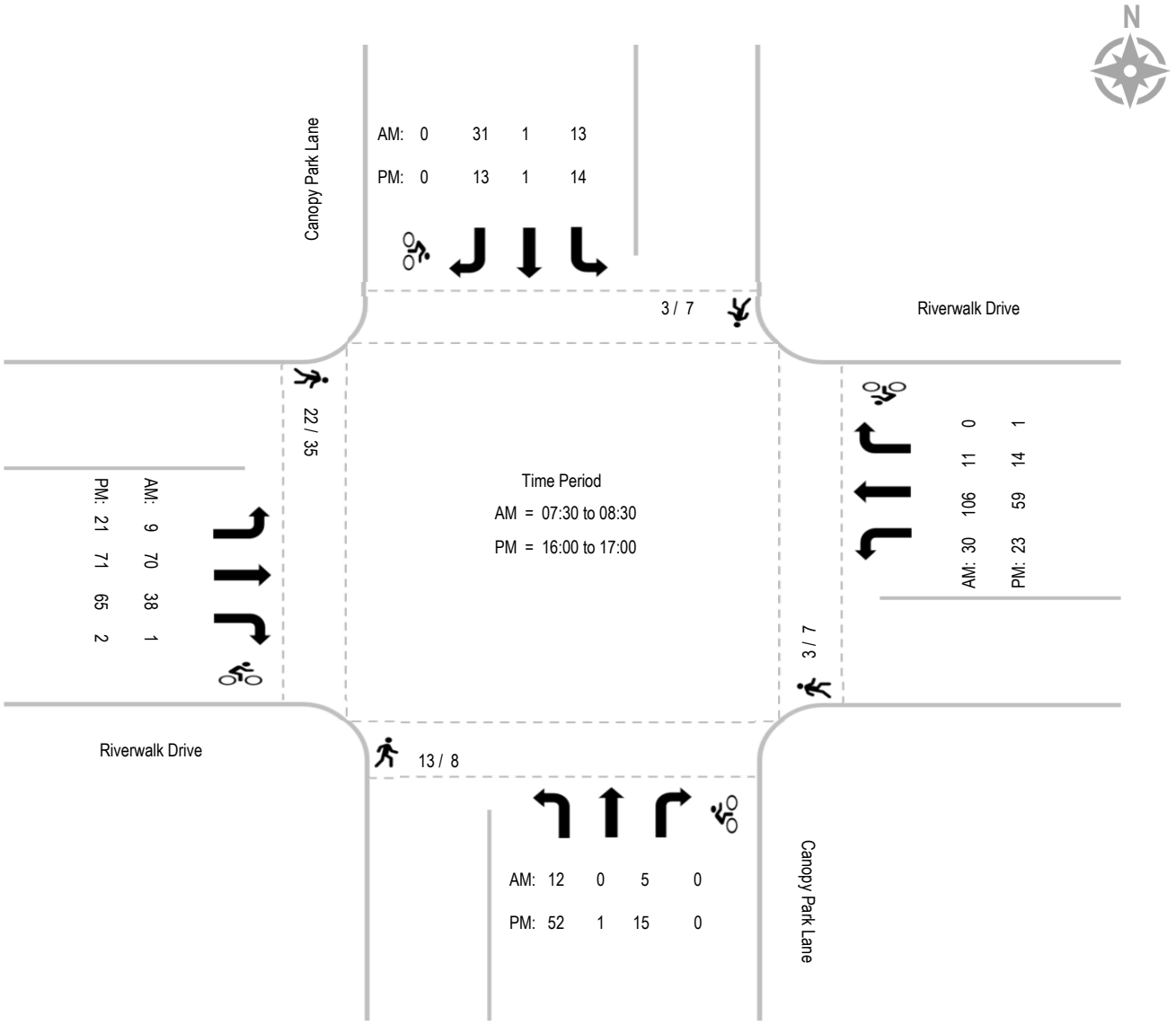
Location:	#06	File Name:	ITM-24-004-06
Intersection:	Canopy Park Lane & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Canopy Park Lane Southbound				Riverwalk Drive Westbound				Canopy Park Lane Northbound				Riverwalk Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0
7:15	1	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	4	0
7:30	0	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0	5	0
7:45	0	0	0	0	1	0	0	0	1	0	0	0	4	0	0	0	6	0
8:00	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	0	7	0
8:15	1	0	0	0	0	0	0	0	2	0	0	0	5	0	0	0	8	0
8:30	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	0	6	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	2	1
Ped Total	3				3				13				22				41	
Bike Total		0	0	0		0	0	0		0	0	0		0	1	0		1

PM	Canopy Park Lane Southbound				Riverwalk Drive Westbound				Canopy Park Lane Northbound				Riverwalk Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0
16:15	2	0	0	0	1	0	0	0	4	0	0	0	5	0	0	0	12	0
16:30	0	0	0	0	2	0	0	0	0	0	0	0	9	0	0	0	11	0
16:45	1	0	0	0	0	0	0	1	1	0	0	0	8	0	2	0	10	3
17:00	2	0	0	0	3	0	0	0	0	0	0	0	4	0	0	0	9	0
17:15	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	3	0
17:30	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0
17:45	0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0	5	0
Ped Total	7				7				8				35				57	
Bike Total		0	0	0		0	0	1		0	0	0		0	2	0		3

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#06	File Name: ITM-24-004-06
	Intersection:	Canopy Park Lane & Riverwalk Drive	Project: LLG Ref. 3-22-3519
	Date of Count:	Wednesday January 10, 2024	Santee Community Center



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#07	File Name:	ITM-24-004-07
Intersection:	Park Center Drive & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Park Center Drive Southbound			Riverwalk Drive Westbound			Park Center Drive Northbound			Riverwalk Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	7	1	7	0	2	2	1	0	0	10	17	1	48
7:15	3	2	7	0	2	0	0	1	0	11	2	0	28
7:30	3	0	16	0	19	8	1	3	0	6	4	0	60
7:45	4	1	14	0	2	0	1	0	0	8	4	2	36
8:00	3	7	34	1	0	0	0	0	0	9	1	2	57
8:15	2	0	54	0	1	2	1	0	0	53	2	5	120
8:30	6	2	9	0	0	0	2	5	0	8	6	2	40
8:45	3	7	10	0	1	1	0	2	0	15	4	2	45
Total	31	20	151	1	27	13	6	11	0	120	40	14	434
Approach%	15.3	9.9	74.8	2.4	65.9	31.7	35.3	64.7	-	69.0	23.0	8.0	
Total%	7.1	4.6	34.8	0.2	6.2	3.0	1.4	2.5	-	27.6	9.2	3.2	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	12	8	118	1	22	10	3	3	-	76	11	9	273
Approach%	8.7	5.8	85.5	3.0	66.7	30.3	50.0	50.0	-	79.2	11.5	9.4	
Total%	4.4	2.9	43.2	0.4	8.1	3.7	1.1	1.1	-	27.8	4.0	3.3	
PHF			0.62			0.31			0.38			0.40	0.57

PM	Park Center Drive Southbound			Riverwalk Drive Westbound			Park Center Drive Northbound			Riverwalk Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	1	2	17	0	4	5	1	2	0	19	0	2	53
16:15	0	7	14	0	2	7	0	4	0	25	1	2	62
16:30	0	4	16	0	5	3	3	1	0	22	0	3	57
16:45	0	13	24	0	2	1	4	8	0	18	0	3	73
17:00	0	2	16	0	5	10	5	7	0	20	0	4	69
17:15	1	3	21	0	0	0	1	2	0	17	1	4	50
17:30	3	6	24	0	1	1	6	7	0	14	0	0	62
17:45	0	11	27	1	4	2	1	3	0	23	2	7	81
Total	5	48	159	1	23	29	21	34	0	158	4	25	507
Approach%	2.4	22.6	75.0	1.9	43.4	54.7	38.2	61.8	-	84.5	2.1	13.4	
Total%	1.0	9.5	31.4	0.2	4.5	5.7	4.1	6.7	-	31.2	0.8	4.9	

PM Intersection Peak Hour: **17:00 to 18:00**

Volume	4	22	88	1	10	13	13	19	-	74	3	15	262
Approach%	3.5	19.3	77.2	4.2	41.7	54.2	40.6	59.4	-	80.4	3.3	16.3	
Total%	1.5	8.4	33.6	0.4	3.8	5.0	5.0	7.3	-	28.2	1.1	5.7	
PHF			0.75			0.40			0.62			0.72	0.81

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#07	File Name:	ITM-24-004-07
Intersection:	Park Center Drive & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

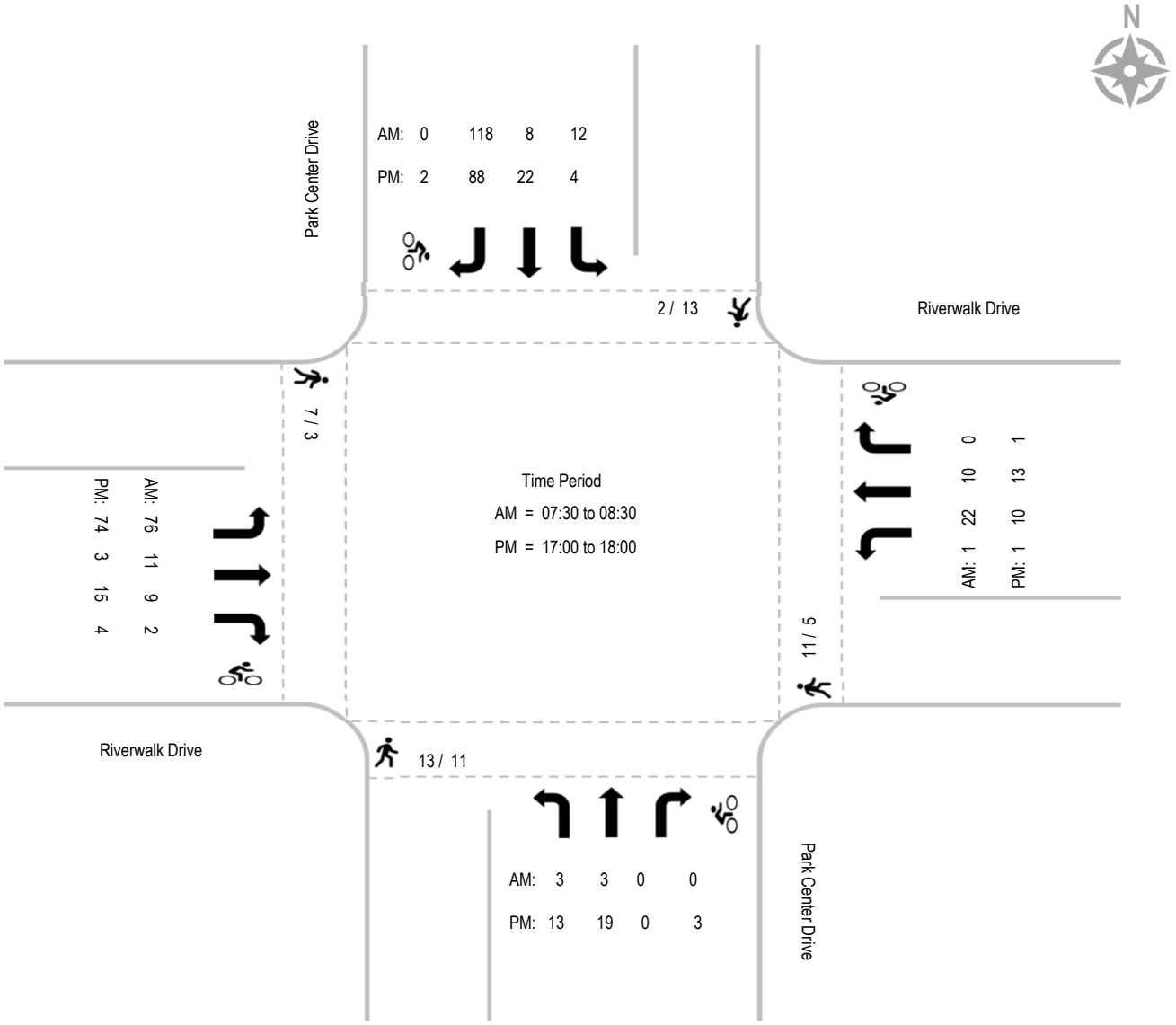
AM	Park Center Drive Southbound				Riverwalk Drive Westbound				Park Center Drive Northbound				Riverwalk Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15	1	0	0	0	1	0	0	0	4	0	0	0	1	0	0	0	7	0
7:30	0	0	0	0	4	0	0	0	3	0	0	0	0	0	0	0	7	0
7:45	0	0	0	0	3	0	0	0	2	0	0	0	3	0	0	0	8	0
8:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
8:15	0	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0	5	0
8:30	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	3	1
8:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1
Ped Total	2				11				13				7				33	
Bike Total		0	0	0		0	0	0		0	0	0		1	0	1		2

PM	Park Center Drive Southbound				Riverwalk Drive Westbound				Park Center Drive Northbound				Riverwalk Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	4	0
16:15	5	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	8	1
16:30	3	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	5	2
16:45	2	0	0	1	1	0	0	0	3	0	0	0	0	0	0	2	6	3
17:00	0	0	1	0	1	0	0	0	1	0	2	0	1	0	0	0	3	3
17:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
17:30	1	0	0	0	1	0	0	0	2	0	1	0	1	0	0	0	5	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	13				5				11				3				32	
Bike Total		0	1	1		0	1	0		0	3	0		2	0	2		10

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#07	File Name:	ITM-24-004-07
Intersection:	Park Center Drive & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center



APPENDIX B

BUS ROUTE SCHEDULE AND MAP

Exact fare, please *Favor de pagar la cantidad exacta*

Fares *Tarifas*	**Adult** *Adulto*	**Senior/Disabled/ Medicare/Youth*** *Personas Mayores/con Discapacidades/Medicare/Jóvenes**
ONE-WAY FARES *Tarifas Sencillas*	**$2.50**	**$1.25**
EARNED DAY PASS *Pase del Día Ganado*	**$6.00**	**$3.00**
MONTH PASS *Pase mensual*	**$72.00**	**$23.00**

Load money into your PRONTO account to earn Day Passes and Month Passes. Tap your PRONTO card ($2) or scan your PRONTO mobile app (free) to ride. *Carga dinero a tu cuenta de PRONTO para ganar Pases del Día y Pases Mensuales. Toca tu tarjeta PRONTO ($2) o escanea tu aplicación móvil PRONTO (gratis) para viajar.*

- **One-ways with PRONTO receive free transfers for two hours. No free transfers for cash.** *Los viajes de ida con PRONTO reciben transbordes gratuitos por dos horas. No se permiten transbordes gratuitos con pagos en efectivo.*
- **Day Passes not sold in advance. Earned with PRONTO.** *Los pases diarios no se venden por adelantado. Se obtienen con PRONTO.*
- **A month pass can be purchased in advanced or earned with PRONTO. Good from first day to last day of the month.** *El Pase Mensual se puede comprar por adelantado o se obtiene mientras viaja con PRONTO. Válido desde el primer día hasta el último día del mes.*

*Proof of eligibility required. Senior Eligibility: Age 65+ or born on or before September 1, 1959. Youth Eligibility: Ages 6-18
**Se requiere verificación de elegibilidad. Elegibilidad para Personas Mayores: Edad 65+ o nacido en o antes del 1 de septiembre, 1959. Elegibilidad para Jóvenes: edades 6-18*

For more information, visit: / *Para más información, visite:* **sdmts.com/fares**

DIRECTORY / *Directorio*

MTS Information & Trip Planning *MTS Información y planeo de viaje*	**511** **or/ó** **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** **or/ó** **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
MTS Security *MTS Seguridad*	**(619) 595-4960**
Lost & Found *Objetos extraviados*	**(619) 233-3004**
Transit Store	**(619) 234-1060** 12th & Imperial Transit Center M–F 8am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at the Transit Store, or visit **sdmts.com.**

Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en la Transit Store, o visita a ***sdmts.com.***

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

Effective SEPTEMBER 1, 2021

832

Santee Town Center – North Santee

via Cuyamaca St. / Woodglen Vista Dr. / Magnolia Av.

DESTINATIONS
- Santana High School
- Santee Trolley Square
- Woodglen Vista Park

TROLLEY CONNECTIONS
- Santee Town Center

09/21

sdmts.com
Route Alerts, Updated Schedules, Connections & More

Alternative formats available upon request. Please call: (619) 557-4555 / *Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555*

Route 832 – Monday through Friday / *lunes a viernes*

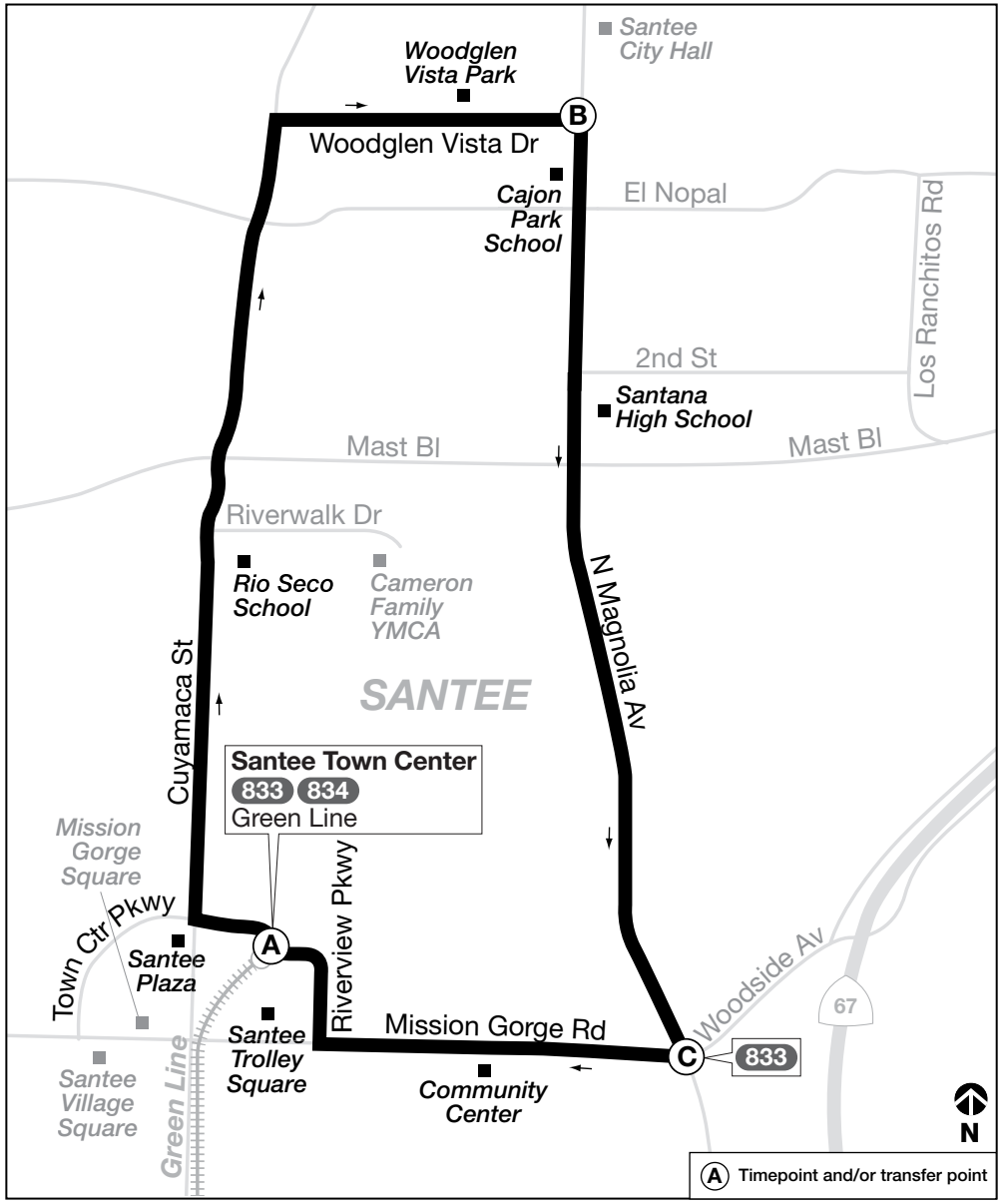
Santee Town Center ➡ North Santee ➡ Santee Town Center

Ⓐ Santee Town Center **DEPART**	Ⓑ Magnolia Av. & Woodglen Vista Dr.	Ⓒ Mission Gorge Rd. & Magnolia Av.	Ⓐ Santee Town Center **ARRIVE**
6:05a	6:14a	6:21a	6:24a
6:50	6:59	7:06	7:09
7:35	7:44	7:52	7:56
8:20	8:29	8:37	8:41
9:20	9:29	9:36	9:39
10:20	10:29	10:36	10:39
11:20	11:29	11:36	11:39
12:20p	**12:29p**	**12:36p**	**12:39p**
1:20	**1:29**	**1:37**	**1:41**
2:08	**2:17**	**2:25**	**2:29**
2:53	**3:02**	**3:10**	**3:14**
3:38	**3:47**	**3:55**	**3:59**
4:23	**4:32**	**4:39**	**4:42**
5:21	**5:30**	**5:37**	**5:40**
6:21	**6:30**	**6:37**	**6:40**
7:21	**7:30**	**7:37**	**7:40**

Route 832 – Saturday and Sunday / *sábado y domingo*

Santee Town Center ➡ North Santee ➡ Santee Town Center

	Ⓐ Santee Town Center **DEPART**	Ⓑ Magnolia Av. & Woodglen Vista Dr.	Ⓒ Mission Gorge Rd. & Magnolia Av.	Ⓐ Santee Town Center **ARRIVE**	
	8:21a	8:29a	8:36a	8:39a	**B**
	9:21	9:30	9:37	9:41	**B**
A	10:21	10:30	10:37	10:41	**B**
A	11:21	11:30	11:37	11:41	**B**
A	**12:21p**	**12:30p**	**12:37p**	**12:41p**	**B**
A	**1:21**	**1:30**	**1:37**	**1:41**	**B**
A	**2:21**	**2:30**	**2:37**	**2:41**	**B**
A	**3:21**	**3:30**	**3:37**	**3:41**	**B**
A	**4:21**	**4:30**	**4:37**	**4:41**	



A = Bus arrives from El Cajon as Route 833 and continues as Route 832. / *El Viaje llega de El Cajon como la ruta 833 y continua como la ruta 832.*
B = Bus continues as Route 833 to El Cajon. / *El viaje continua hacia El Cajon como la ruta 833.*

A Saturday/Sunday schedule will be operated on the following holidays and observed holidays
Se operará con horario de sábado/domingo durante los siguientes días festivos y feriados observados >>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

FARES / *Tarifas*

Exact fare, please / *Favor de pagar la cantidad exacta*

Fares *Tarifas*	Adult *Adulto*	Senior/Disabled/ Medicare/Youth* *Personas Mayores/con Discapacidades/Medicare/ Jóvenes**
ONE-WAY FARES *Tarifas Sencillas*	**$2.50**	**$1.25**
EARNED DAY PASS *Pase del Día Ganado*	**$6.00**	**$3.00**
MONTH PASS *Pase mensual*	**$72.00**	**$23.00**
Child (5 and under) / *Niño (5 años o menos):* **FREE** / *GRATIS*		

*Proof of eligibility required. Senior Eligibility: Age 65+ or born on or before September 1, 1959.
**Se requiere verificación de elegibilidad. Elegibilidad para Personas Mayores: Edad 65+ o nacido en o antes del 1 de septiembre, 1959.*

For more information, visit: / *Para más información, visite:*

sdmts.com/fares

Load money into your PRONTO account to earn Day Passes and Month Passes. Tap your PRONTO card ($2) or scan your PRONTO mobile app (free) to ride. *Carga dinero a tu cuenta de PRONTO para ganar Pases del Día y Pases Mensuales. Toca tu tarjeta PRONTO ($2) o escanea tu aplicación móvil PRONTO (gratis) para viajar.*

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- **Day Passes not sold in advance. Earned with PRONTO.** *Los pases diarios no se venden por adelantado. Se obtienen con PRONTO.*
- **A month pass can be purchased in advanced or earned with PRONTO. Good from first day to last day of the month.** *El Pase Mensual se puede comprar por adelantado o se obtiene mientras viaja con PRONTO. Válido desde el primer día hasta el último día del mes.*

TRANSIT FARE / *Tarifa de Transporte Público*

Tap or Scan, Every Time You Ride: Riders must tap their PRONTO card or scan their PRONTO mobile app at station validators every trip. It's the only way to earn a two hour free transfer, day and month passes.

Toca o Escanea Cada Vez que Viajes: *Los pasajeros deben tocar su tarjeta PRONTO o escanear la aplicación móvil PRONTO en validadores de estación antes de cada viaje. Es la única manera de ganar transbordes gratis por dos horas, pases del día y del mes.*

PRONTO Card: PRONTO cards cost $2 at ticket machines, retail outlets or the MTS Transit Store. At the time of purchase, riders will need to load a minimum value onto their PRONTO card ($3 at the Transit Store or ticket machine, $5 at retail outlets). Riders can reload money (or pre-pay for a Month Pass) instantly online at RidePRONTO.com, at ticket machines, retail outlets or the MTS Transit Store.

Tarjeta PRONTO: *Las Tarjetas PRONTO tienen un costo de $2 en las máquinas expendedoras de boletos, establecimientos comerciales o en la tienda MTS Transit Store. Al comprarla, los pasajeros deberán cargar un valor mínimo en su tarjeta PRONTO ($3 en la tienda Transit Store o en máquinas de boletos, $5 en establecimientos comerciales). Los pasajeros pueden recargar dinero (o comprar un pase mensual por adelantado) instantáneamente en línea en ridePRONTO.com, en máquinas de boletos, en establecimientos comerciales o en la tienda MTS Transit Store.*

Aplicación Móvil PRONTO: *La aplicación móvil PRONTO está disponible para descargar en teléfonos Apple y Android.*

PRONTO Mobile App: The PRONTO mobile app is available for download on Apple and Android phones.

Paga mientras viajas y Adquiere la Mejor Tarifa: *Gracias a una nueva función de limitación de tarifas, los pasajeros pueden cargar dinero en su cuenta PRONTO y pagar a su medida para obtener siempre la mejor tarifa. Carga dinero a tu tarjeta o aplicación móvil PRONTO, luego toca o escanea cada vez que viajes.*
Se deducirá una tarifa de viaje sencillo cada vez que toques o escanees, hasta alcanzar el valor de un Pase de Día o Mes. ¡Nunca pagarás más del valor de un Pase de un Día—$6 para adultos, $3 para Adultos Mayores/con Discapacidades/ Medicare (SDM, por sus siglas en inglés) y Jóvenes en un día, o el valor de un Pase Mensual ($72 para Adultos, $23 para SDM y Jóvenes) en un mes del calendario!

Pay-As-You-Go & Earn the Best Fare: Thanks to best fare capabilities, riders can load money to their PRONTO account and pay-as-they-go to always get the best fare! Load money onto your PRONTO card or mobile app, then tap or scan every time you ride.
A one-way fare will be deducted with each tap or scan, up to the value of a Day or Month Pass. You'll never pay more than the value of a Day Pass ($6 Adult, $3 Senior/Disabled/ Medicare and Youth), in a day, or the value of a Month Pass ($72 Adult, $23 SDM/Youth) in a calendar month.

Carga Dinero a PRONTO: *Los pasajeros pueden cargar dinero a su cuenta PRONTO a través de la aplicación móvil, en línea en ridePRONTO.com, en la tienda MTS Transit Store, en las máquinas expendedoras de boletos, en establecimientos comerciales, o teléfono* 619-595-5636. *(No está disponible cargar pases o dinero a cuentas PRONTO a bordo de los autobuses).*

Loading Money to PRONTO: Riders can load money to PRONTO through the mobile app, online at RidePRONTO.com, at the MTS Transit Store, ticket machines, participating retail outlets, or over the phone at 619-595-5636. (Loading passes or money to PRONTO on board buses is not available.)

Transbordes Gratis: *Con la tarjeta o la aplicación móvil PRONTO, las tarifas de viaje sencillo son válidas para transbordes ilimitados dentro de dos horas después de su activación. (Los pasajeros deben seguir tocando su tarjeta o escaneando la aplicación cada vez que aborden, pero no se les cobrará una tarifa dentro de las dos horas después del primer toque o escaneo).*

Free Transfers: With the PRONTO card or mobile app, one-way fares are valid for unlimited transfers within two hours of activation. (Riders should tap or scan their card or app every time they board, but they will not be charged for a fare within two hours of a previous tap or scan.)

Usando Efectivo: *Los pasajeros pueden comprar tarifas de viaje sencillo con efectivo en las máquinas de boletos y a bordo de autobuses. Sin embargo, las tarifas de viaje sencillo en efectivo no son elegibles para transbordes y no contribuyen hacia la ganancia de un Pase de Día o Mes.*

Using Cash: Riders can purchase one-way fares using cash at ticket machines and onboard buses. Cash one-way fares are not eligible for transfers, and do not contribute towards earning a Day Pass or Month Pass.

Reduced Fares: All PRONTO cards will look the same. Reduced fare designations (Senior, Disabled, Medicare, or Youth) are identified at the account level. Riders can have their PRONTO card or mobile app account switched to a reduced fare category by visiting the MTS Transit Store, or calling the PRONTO Support Team at 619-595-5636. Riders with a reduced fare must travel with proof of eligibility at all times. A PRONTO Photo ID card is encouraged, but not required (available at the Transit Store). Approved IDs include: Government-issue Photo ID with birth date (seniors), student school photo ID, Medicare card & Government Photo ID, California DMV Placard ID & Government Photo ID, California Senior ID card, MTS Senior/Disabled Photo ID, NCTD Senior/Disabled Photo ID. **Senior Eligibility: Age 65+ or born on or before September 1, 1959. Youth Eligibility: Age 18 & Under (kids five and under ride free).**

Tarifas Reducidas: *Todas las tarjetas PRONTO tendrán el mismo aspecto. Las designaciones de tarifas reducidas (SDM o Jóvenes) se identifican a nivel de cuenta. Los pasajeros pueden cambiar su tarjeta PRONTO o su cuenta de aplicación móvil a una categoría de tarifa reducida visitando la tienda MTS Transit Store o llamando al equipo de asistencia de PRONTO al 619-595-5636. Los pasajeros con tarifa reducida deben viajar con prueba de elegibilidad en todo momento. Se recomienda una tarjeta de identificación PRONTO con fotografía, pero no es obligatoria. Las identificaciones aprobadas incluyen: identificación con fotografía con fecha de nacimiento emitida por el gobierno (para personas mayores), identificación con fotografía de la escuela del estudiante, tarjeta de Medicare junto con una identificación gubernamental con fotografía, placa de discapacidad del DMV de California junto con identificación gubernamental con fotografía, tarjeta de identificación para personas mayores de California, identificación con fotografía para personas mayores/con discapacidades de MTS, identificación con fotografía para personas mayores/con discapacidades de NCTD.* ***Elegibilidad para Personas Mayores: mayores de 65 años o nacidos el 1 de septiembre de 1959 o antes. Elegibilidad para Jóvenes: menores de 18 años (los niños menores de cinco años viajan gratis).***

Scan for PRONTO information.
Escanea este código para ver información sobre PRONTO.
RidePRONTO.com

ACCESSIBLE SERVICE
Accesibilidad de los servicios

All Trolleys are equipped with ramps. Seats closest to the doors are reserved for senior and disabled riders.
Todos los Trolleys cuentan con rampas para sillas de ruedas. Los asientos más cercanos a las puertas están reservados por gentileza para pasajeros mayores o discapacitados.

ANIMALS / *Animales*

A trained service animal may accompany a rider with disabilities. Non-service animals must be in enclosed carriers and transported by passengers without the assistance of drivers or operators.
Se permite que un animal de servicio entrenado acompañe a un pasajero discapacitado. Los pasajeros deben transportar los animales que no sean de servicio en una jaula cerrada, sin ayuda de los conductores ni de los choferes.

BIKES / *Bicicletas*

On Trolleys with stairs, board at rear doors of each car. Board low-floor cars at any door. Stay with bike to keep it secure One bike is allowed per car during weekday rush hours, two bikes per car at all other times. MTS is not responsible for loss or damage to bicycles.
En los Trolleys con escaleras, aborde en las puertas traseras. Aborde los Trolleys de piso bajo en cualquiera puerta. Por seguridad, manténgase junto a la bicicleta En las horas pico durante la semana, sólo se admite una bicicleta por unidad. En otros tiempos, se admiten dos bicicletas. MTS no es responsable por el extravío o daño de bicicletas.

DIRECTORY / *Directorio*

MTS Information & Trip Planning *MTS Información y planeo de viaje*	**(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / *Servicio al cliente*	**(619) 557-4555**
MTS Security / *Seguridad de MTS*	**(619) 595-4960**
PRONTO Support Center	**(619) 595-5636**
Lost & Found / *Objetos extraviados*	**(619) 233-3004**
Transit Store	**(619) 234-1060**

sdmts.com
Trip planning, route alerts, updated schedules, connections and more! *¡Planificación de viajes, alertas de ruta, horarios actualizados, conexiones y más!*

Alternative formats available upon request. Please call (619) 557-4555. *Formato alternativo disponible al preguntar. Favor de llamar (619) 557-4555*

Effective September 4, 2022

Trolley

UC San Diego Blue Line
San Ysidro ↔ America Plaza ↔ UTC

Orange Line
Arnele Ave. ↔ Courthouse (Downtown)

Green Line
Santee ↔ 12th & Imperial (Downtown)

Silver Line
Downtown San Diego Loop

MTS

10/23

Trolley System / *sistema de Trolley*

LEGEND

- Connecting Bus Routes — *Conexión de rutas de autobús*
- Rapid — Connecting *Rapid* Routes — *Conexión de rutas de Rapid*
- Amtrak and COASTER
- Service to Airport — *Transferencia al Aeropuerto*
- P — Parking (Free) — *Estacionamiento (Gratis)*
- $P — Pay Parking — *Estacionamiento de cuota*

DOWNTOWN DETAIL / *Detalle del centro*

PROMOTIONS & DISCOUNTS / *Promociones y descuentos*

Family Weekends / *Fines de semana para la familia*
Two children (12 and under) ride free Saturdays and Sundays with a fare-paying adult (18 or older).
Dos menores (de hasta 12 años) viajan gratis los sábados y domingos con sólo abonar la tarifa de un adulto (de 18 años o más).

Holiday Friends Ride Free / *Los días festivos, los amigos viajan gratis*
On New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day, two people may ride any MTS bus or Trolley with one fare or pass.
En New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, y día de Navidad, dos personas pueden viajar en cualquier ruta de autobús o Trolley de MTS con un pase o pasaje.

RIDE ASSURED / *Viaje Tranquilo*

Contact MTS Security for issues of harassment, suspicious or illegal behavior.
Contáctenos en situaciones de hostigamiento y comportamiento sospechoso o ilegal.
Text (619) 318-1338
Call (619) 595-4960

CART POLICY / *Política de carritos*

YES / *Sí*

Smaller than 30" high, 18" wide, 18" deep
Menos de 30" de alto, 18" de ancho, 18" de grueso

Load does not exceed capacity
Carga no sobrepasa de capacidad

Can be loaded in a single trip
Se puede cargar en un solo viaje

Does not block aisle
No obstruye el pasillo

No more than two carry-on items
No más que dos piezas de equipaje de mano

More details on *Más detalles en* **sdmts.com**

NO / *No*

Larger than 30" high, 18" wide, 18" deep
Mayor de 30" de alto, 18" de ancho, 18" de grueso

Load exceeds capacity
Carga sobrepasa de capacidad

Cannot be loaded in a single trip
No se puede cargar en un solo viaje

Blocks aisle
Obstruye el pasillo

More than two carry-on items
Más que dos piezas de equipaje de mano

Bags of cans/ Leaking items
Bolsa de latas/ objetos goteando

Think **FAST**

Fun **A**nd **S**afe **T**ransit

sdmts.com/Think-FAST

Safety at the Station

Stay Behind the Line
Mantente Detrás de la Línea

No Jumping or Climbing between Trolleys
No Brincar o Escalar entre Trolleys

Stay Alert for Vehicles
Mantente Alerta para los Vehículos

Keep Off Tracks
Mantente Fuera de las Vías

Don't Chase a Moving Vehicle
No Persigas un Vehículo en Movimiento

Walk, Don't Ride
Bájate y Camina

Use Crosswalks
Usa los Cruces

Safety On Board

Always Hold On
Agárrate Siempre

Remain Seated
Permanece en tu Asiento

Keep Aisles Clear
Mantén Despejados los Pasillos

Don't Block Doors
Mantén las puertas despejadas

Pull Carts Behind You
Jala tu Carrito Detrás de Ti

Watch Your Step
Cuida Donde Pisas

Stay Awake
No te Duermas

UC San Diego Blue Line

Monday through Friday / *lunes a viernes*

SAN YSIDRO ➡ AMERICA PLAZA ➡ UTC

San Ysidro	Iris Avenue	H Street	8th Street	12th & Imperial	City College	America Plaza	Santa Fe Depot	Old Town	Balboa Avenue	UCSD Central Campus	UTC
—	—	—	—	4:23a	4:28a	4:34a	4:37a	4:46a	4:55a	5:06a	5:12a
—	—	—	—	4:38	4:43	4:49	4:52	5:01	5:10	5:21	5:27
—	4:26a	4:35a	4:43a	4:53	4:58	5:04	5:07	5:16	5:25	5:36	5:42
4:28a	4:35	4:44	4:52	5:02	5:07	5:13	—	—	—	—	—
4:34	4:41	4:50	4:58	5:08	5:13	5:19	5:22	5:31	5:40	5:51	5:57
4:43	4:50	4:59	5:07	5:17	5:22	5:28	—	—	—	—	—
4:49	4:56	5:05	5:13	5:23	5:28	5:34	5:37	5:46	5:55	6:06	6:12
AND THEN EVERY 6/9 & 15 MINUTES AT: / *Y LUEGO CADA 6/9 & 15 MINUTOS A LA:*											
:58	:05	:14	:22	:32	:37	:43	—	—	—	—	—
:04	:11	:20	:28	:38	:43	:49	:52	:01	:10	:21	:27
:13	:20	:29	:37	:47	:52	:58	—	—	—	—	—
:19	:26	:35	:43	:53	:58	:04	:07	:16	:25	:36	:42
:28	:35	:44	:52	:02	:07	:13	—	—	—	—	—
:34	:41	:50	:58	:08	:13	:19	:22	:31	:40	:51	:57
:43	:50	:59	:07	:17	:22	:28	—	—	—	—	—
:49	:56	:05	:13	:23	:28	:34	:37	:46	:55	:06	:12
UNTIL: / *HASTA:*											
7:49p	**7:56p**	**8:05p**	**8:13p**	**8:23p**	**8:28p**	**8:34p**	**8:37p**	**8:46p**	**8:55p**	**9:06p**	**9:12p**
7:58	**8:05**	**8:14**	**8:22**	**8:32**	**8:37**	**8:43**	—	—	—	—	—
8:04	**8:11**	**8:20**	**8:28**	**8:38**	**8:43**	**8:49**	**8:52**	**9:01**	**9:10**	**9:21**	**9:27**
8:13	**8:20**	**8:29**	**8:37**	**8:47**	**8:52**	**8:58**	—	—	—	—	—
8:19	**8:26**	**8:35**	**8:43**	**8:53**	**8:58**	**9:04**	**9:07**	**9:16**	**9:25**	**9:36**	**9:42**
8:34	**8:41**	**8:50**	**8:58**	**9:08**	**9:13**	**9:19**	**9:22**	**9:31**	**9:40**	**9:51**	**9:57**
8:49	**8:56**	**9:05**	**9:13**	**9:23**	**9:28**	**9:34**	—	—	—	—	—
9:04	**9:11**	**9:20**	**9:28**	**9:38**	**9:43**	**9:49**	**9:52**	**10:01**	**10:10**	**10:21**	**10:27**
9:19	**9:26**	**9:35**	**9:43**	**9:53**	**9:58**	**10:04**	—	—	—	—	—
9:34	**9:41**	**9:50**	**9:58**	**10:08**	**10:13**	**10:19**	**10:22**	**10:31**	**10:40**	**10:51**	**10:57**
9:49	**9:56**	**10:05**	**10:13**	**10:23**	**10:28**	**10:34**	—	—	—	—	—
10:04	**10:11**	**10:20**	**10:28**	**10:38**	**10:43**	**10:49**	**10:52**	**11:01**	**11:10**	**11:21**	**11:27**
10:19	**10:26**	**10:35**	**10:43**	**10:53**	**10:58**	**11:04**	—	—	—	—	—
10:34	**10:41**	**10:50**	**10:58**	**11:08**	**11:13**	**11:19**	**11:22**	**11:31**	**11:40**	**11:51**	**11:57**
10:49	**10:56**	**11:05**	**11:13**	**11:23**	**11:28**	**11:34**	—	—	—	—	—
11:04	**11:11**	**11:20**	**11:28**	**11:38**	**11:43**	**11:49**	—	—	—	—	—
11:19	**11:26**	**11:35**	**11:43**	**11:53**	**11:58**	12:04a	—	—	—	—	—
11:34	**11:41**	**11:50**	**11:58**	12:08a	12:13a	12:19	—	—	—	—	—
11:49	**11:56**	12:05a	12:13a	12:23	12:28	12:34	—	—	—	—	—
12:04a	12:11a	12:20	12:28	12:38	12:43	12:49	—	—	—	—	—
12:19	12:26	12:35	12:43	12:53	12:58	1:04	—	—	—	—	—
12:49	12:56	1:05	1:13	1:23	1:28	1:34	—	—	—	—	—

B = Trip begins at Barrio Logan Station six minutes earlier than time shown. / *Viaje comienza en la estación de Barrio Logan seis minutos antes del tiempo indicado.*

UTC ➡ AMERICA PLAZA ➡ SAN YSIDRO

UTC	UCSD Central Campus	Balboa Avenue	Old Town	Santa Fe Depot	America Plaza	City College	12th & Imperial	8th Street	H Street	Iris Avenue	San Ysidro
—	—	—	—	—	—	—	—	**B** 4:24a	4:32a	4:41a	4:48a
—	—	—	—	—	—	—	—	**B** 4:31	4:39	4:48	4:55
—	—	—	—	—	—	—	—	**B** 4:39	4:47	4:56	5:03
—	—	—	—	—	—	—	—	**B** 4:46	4:54	5:03	5:10
—	—	—	—	—	—	—	—	**B** 4:54	5:02	5:11	5:18
—	—	—	—	—	—	—	—	**B** 5:01	5:09	5:18	5:25
—	—	—	—	—	4:48a	4:54a	5:00a	5:09	5:17	5:26	5:33
—	—	—	—	—	—	—	—	**B** 5:16	5:14	5:33	5:40
—	—	—	—	—	5:03	5:09	5:15	5:24	5:32	5:41	5:48
—	—	—	—	—	5:10	5:16	5:22	5:31	5:39	5:48	5:55
—	—	—	—	—	5:18	5:24	5:30	5:39	5:47	5:56	6:03
—	—	5:04a	5:13a	5:22a	5:25	5:31	5:37	5:46	5:54	6:03	6:10
—	—	—	—	—	5:33	5:39	5:45	5:54	6:02	6:11	6:18
5:03a	5:09a	5:19	5:28	5:37	5:40	5:46	5:52	6:01	6:09	6:18	6:25
AND THEN EVERY 7/8 & 15 MINUTES AT: / *Y LUEGO CADA 7/8 & 15 MINUTOS A LA:*											
—	—	—	—	—	:48	:54	:00	:09	:17	:26	:33
:18	:24	:34	:43	:52	:55	:01	:07	:16	:24	:33	:40
—	—	—	—	—	:03	:09	:15	:24	:32	:41	:48
:33	:39	:49	:58	:07	:10	:16	:22	:31	:39	:48	:55
—	—	—	—	—	:18	:24	:30	:39	:47	:56	:03
:48	:54	:04	:13	:22	:25	:31	:37	:46	:54	:03	:10
—	—	—	—	—	:33	:39	:45	:54	:02	:11	:18
:03	:09	:19	:28	:37	:40	:46	:52	:01	:09	:18	:25
UNTIL: / *HASTA:*											
7:18p	**7:24p**	**7:34p**	**7:43p**	**7:52p**	**7:55p**	**8:01p**	**8:07p**	**8:16p**	**8:24p**	**8:33p**	**8:40p**
7:33	**7:39**	**7:49**	**7:58**	**8:07**	**8:10**	**8:16**	**8:22**	**8:31**	**8:39**	**8:48**	**8:55**
7:48	**7:54**	**8:04**	**8:13**	**8:22**	**8:25**	**8:31**	**8:37**	**8:46**	**8:54**	**9:03**	**9:10**
8:03	**8:09**	**8:19**	**8:28**	**8:37**	**8:40**	**8:46**	**8:52**	**9:01**	**9:09**	**9:18**	**9:25**
8:18	**8:24**	**8:34**	**8:43**	**8:52**	**8:55**	**9:01**	**9:07**	**9:16**	**9:24**	**9:33**	**9:40**
8:33	**8:39**	**8:49**	**8:58**	**9:07**	**9:10**	**9:16**	**9:22**	**9:31**	**9:39**	**9:48**	**9:55**
8:48	**8:54**	**9:04**	**9:13**	**9:22**	**9:25**	**9:31**	**9:37**	**9:46**	**9:54**	**10:03**	**10:10**
9:03	**9:09**	**9:19**	**9:28**	**9:37**	**9:40**	**9:46**	**9:52**	**10:01**	**10:09**	**10:18**	**10:25**
9:18	**9:24**	**9:34**	**9:43**	**9:52**	**9:55**	**10:01**	**10:07**	**10:16**	**10:24**	**10:33**	**10:40**
9:33	**9:39**	**9:49**	**9:58**	**10:07**	**10:10**	**10:16**	**10:22**	**10:31**	**10:39**	**10:48**	**10:55**
9:48	**9:54**	**10:04**	**10:13**	**10:22**	**10:25**	**10:31**	**10:37**	**10:46**	**10:54**	**11:03**	**11:10**
10:03	**10:09**	**10:19**	**10:28**	**10:37**	**10:40**	**10:46**	**10:52**	**11:01**	**11:09**	**11:18**	**11:25**
10:18	**10:24**	**10:34**	**10:43**	**10:52**	**10:55**	**11:01**	**11:07**	**11:16**	**11:24**	**11:33**	**11:40**
—	**—**	**—**	**—**	**—**	**11:10**	**11:16**	**11:22**	**11:31**	**11:39**	**11:48**	**11:55**
10:48	**10:54**	**11:04**	**11:13**	**11:22**	**11:25**	**11:31**	**11:37**	**11:46**	**11:54**	12:03a	12:10a
11:18	**11:24**	**11:34**	**11:43**	**11:52**	**11:55**	12:01a	12:07a	12:16a	12:24a	12:33	12:40
11:48	**11:54**	12:04a	12:13a	12:22a	12:25a	12:31	12:37	—	—	—	—
12:18a	12:24a	12:34	12:43	12:52	12:55	1:01	1:07	—	—	—	—

Saturday & Sunday / *sábado & domingo*

SAN YSIDRO ➡ AMERICA PLAZA ➡ UTC

San Ysidro	Iris Avenue	H Street	8th Street	12th & Imperial	City College	America Plaza	Santa Fe Depot	Old Town	Balboa Avenue	UCSD Central Campus	UTC
—	—	—	—	—	—	—	4:52a	5:01a	5:10a	5:21a	5:27a
—	—	—	—	4:53a	4:58a	5:04a	5:07	5:16	5:25	5:36	5:42
4:34a	4:41a	4:50a	4:58a	5:08	5:13	5:19	5:22	5:31	5:40	5:51	5:57
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*											
:49	:56	:05	:13	:23	:28	:34	:37	:46	:55	:06	:12
:04	:11	:20	:28	:38	:43	:49	:52	:01	:10	:21	:27
:19	:26	:35	:43	:53	:58	:04	:07	:16	:25	:36	:42
:34	:41	:50	:58	:08	:13	:19	:22	:31	:40	:51	:57
UNTIL: / *HASTA:*											
7:34p	**7:41p**	**7:50p**	**7:58p**	**8:08p**	**8:13p**	**8:19p**	**8:22p**	**8:31p**	**8:40p**	**8:51p**	**8:57p**
7:49	**7:56**	**8:05**	**8:13**	**8:23**	**8:28**	**8:34**	—	—	—	—	—
8:04	**8:11**	**8:20**	**8:28**	**8:38**	**8:43**	**8:49**	**8:52**	**9:01**	**9:10**	**9:21**	**9:27**
8:19	**8:26**	**8:35**	**8:43**	**8:53**	**8:58**	**9:04**	—	—	—	—	—
8:34	**8:41**	**8:50**	**8:58**	**9:08**	**9:13**	**9:19**	**9:22**	**9:31**	**9:40**	**9:51**	**9:57**
8:49	**8:56**	**9:05**	**9:13**	**9:23**	**9:28**	**9:34**	—	—	—	—	—
9:04	**9:11**	**9:20**	**9:28**	**9:38**	**9:43**	**9:49**	**9:52**	**10:01**	**10:10**	**10:21**	**10:27**
9:19	**9:26**	**9:35**	**9:43**	**9:53**	**9:58**	**10:04**	—	—	—	—	—
9:34	**9:41**	**9:50**	**9:58**	**10:08**	**10:13**	**10:19**	**10:22**	**10:31**	**10:40**	**10:51**	**10:57**
9:49	**9:56**	**10:05**	**10:13**	**10:23**	**10:28**	**10:34**	—	—	—	—	—
10:04	**10:11**	**10:20**	**10:28**	**10:38**	**10:43**	**10:49**	**10:52**	**11:01**	**11:10**	**11:21**	**11:27**
10:19	**10:26**	**10:35**	**10:43**	**10:53**	**10:58**	**11:04**	—	—	—	—	—
10:34	**10:41**	**10:50**	**10:58**	**11:08**	**11:13**	**11:19**	**11:22**	**11:31**	**11:40**	**11:51**	**11:57**
10:49	**10:56**	**11:05**	**11:13**	**11:23**	**11:28**	**11:34**	—	—	—	—	—
11:04	**11:11**	**11:20**	**11:28**	**11:38**	**11:43**	**11:49**	—	—	—	—	—
11:19	**11:26**	**11:35**	**11:43**	**11:53**	**11:58**	12:04a	—	—	—	—	—
11:34	**11:41**	**11:50**	**11:58**	12:08a	12:13a	12:19	—	—	—	—	—
11:49	**11:56**	12:05a	12:13a	12:23	12:28	12:34	—	—	—	—	—
12:04a	12:11a	12:20	12:28	12:38	12:43	12:49	—	—	—	—	—
12:19	12:26	12:35	12:43	12:53	12:58	1:04	—	—	—	—	—
12:49	12:56	1:05	1:13	1:23	1:28	1:34	—	—	—	—	—

UTC ➡ AMERICA PLAZA ➡ SAN YSIDRO

UTC	UCSD Central Campus	Balboa Avenue	Old Town	Santa Fe Depot	America Plaza	City College	12th & Imperial	8th Street	H Street	Iris Avenue	San Ysidro
—	—	—	—	—	—	—	—	**B** 4:31a	4:39a	4:48a	4:55a
—	—	—	—	—	—	—	—	**B** 4:46	4:54	5:03	5:10
—	—	—	—	—	—	—	—	**B** 5:01	5:09	5:18	5:25
—	—	—	—	—	4:55a	5:01a	5:07a	5:16	5:24	5:33	5:40
—	—	—	—	—	5:10	5:16	5:22	5:31	5:39	5:48	5:55
—	—	5:04a	5:13a	5:22a	5:25	5:31	5:37	5:46	5:54	6:03	6:10
5:03a	5:09a	5:19	5:28	5:37	5:40	5:46	5:52	6:01	6:09	6:18	6:25
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*											
:18	:24	:34	:43	:52	:55	:01	:07	:16	:24	:33	:40
:33	:39	:49	:58	:07	:10	:16	:22	:31	:39	:48	:55
:48	:54	:04	:13	:22	:25	:31	:37	:46	:54	:03	:10
:03	:09	:19	:28	:37	:40	:46	:52	:01	:09	:18	:25
UNTIL: / *HASTA:*											
9:18p	**9:24p**	**9:34p**	**9:43p**	**9:52p**	**9:55p**	**10:01p**	**10:07p**	**10:16p**	**10:24p**	**10:33p**	**10:40p**
—	**—**	**—**	**—**	**—**	**10:10**	**10:16**	**10:22**	**10:31**	**10:39**	**10:48**	**10:55**
9:48	**9:54**	**10:04**	**10:13**	**10:22**	**10:25**	**10:31**	**10:37**	**10:46**	**10:54**	**11:03**	**11:10**
—	**—**	**—**	**—**	**—**	**10:40**	**10:46**	**10:52**	**11:01**	**11:09**	**11:18**	**11:25**
10:18	**10:24**	**10:34**	**10:43**	**10:52**	**10:55**	**11:01**	**11:07**	**11:16**	**11:24**	**11:33**	**11:40**
—	**—**	**—**	**—**	**—**	**11:10**	**11:16**	**11:22**	**11:31**	**11:39**	**11:48**	**11:55**
10:48	**10:54**	**11:04**	**11:13**	**11:22**	**11:25**	**11:31**	**11:37**	**11:46**	**11:54**	12:03a	12:10a
11:18	**11:24**	**11:34**	**11:43**	**11:52**	**11:55**	12:01a	12:07a	12:16a	12:24a	12:33	12:40
11:48	**11:54**	12:04a	12:13a	12:22a	12:25a	12:31	12:37	—	—	—	—
12:18a	12:24a	12:34	12:43	12:52	12:55	1:01	1:07	—	—	—	—

B = Trip begins at Barrio Logan Station six minutes earlier than time shown. / *Viaje comienza en la estación de Barrio Logan seis minutos antes del tiempo indicado.*

Orange Line

Monday through Friday / *lunes a viernes*

ARNELE AVE. ➡ DOWNTOWN

Arnele Ave.	El Cajon	Grossmont	Spring Street	Euclid Avenue	12th & Imperial	City College	Courthouse
—	—	—	—	**D** 4:58a	5:12a	5:17a	5:23a
4:45a	4:48a	4:54a	5:00a	5:13	5:27	5:32	5:38
5:00	5:03	5:09	5:15	5:28	5:42	5:47	5:53
5:15	5:18	5:24	5:30	5:43	5:57	6:02	6:08
5:30	5:33	5:39	5:45	5:58	6:12	6:17	6:23
5:45	5:48	5:54	6:00	6:13	6:27	6:32	6:38
6:00	6:03	6:09	6:15	6:28	6:42	6:47	6:53
6:15	6:18	6:24	6:30	6:43	6:57	7:02	7:08
6:30	6:33	6:39	6:45	6:58	7:12	7:17	7:23
—	—	—	6:53	7:06	7:20	7:25	—
6:45	6:48	6:54	7:00	7:13	7:27	7:32	7:38
—	—	—	7:08	7:21	7:35	7:40	—
7:00	7:03	7:09	7:15	7:28	7:42	7:47	7:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:18	:24	:30	:43	:57	:02	:08
:30	:33	:39	:45	:58	:12	:17	:23
:45	:48	:54	:00	:13	:27	:32	:38
:00	:03	:09	:15	:28	:42	:47	:53
UNTIL: / *HASTA:*							
8:15p	**8:18p**	**8:24p**	**8:30p**	**8:43p**	**8:57p**	**9:02p**	**9:08p**
8:45	**8:48**	**8:54**	**9:00**	**9:13**	**9:27**	**9:32**	**9:38**
9:15	**9:18**	**9:24**	**9:30**	**9:43**	**9:57**	**10:02**	**10:08**
9:45	**9:48**	**9:54**	**10:00**	**10:13**	**10:27**	**10:32**	**10:38**
10:15	**10:18**	**10:24**	**10:30**	**10:43**	**10:57**	**11:02**	**11:08**
10:45	**10:48**	**10:54**	**11:00**	**11:13**	**11:27**	**11:32**	**11:38**
11:15	**11:18**	**11:24**	**11:30**	**11:43**	**11:57**	12:02a	12:08a
11:45	**11:48**	**11:54**	12:00a	12:13a	12:27a	12:27	12:38
12:15a	12:18a	12:24a	12:30	12:43	12:57	1:02	1:08
12:45	12:48	12:54	1:00	1:13	1:27	1:32	1:38

DOWNTOWN ➡ ARNELE AVE.

Courthouse	City College	12th & Imperial	Euclid Avenue	Spring Street	Grossmont	El Cajon	Arnele Ave.
—	—	—	**E** 4:09a	4:23a	4:29a	4:36a	4:38a
—	—	—	**E** 4:24	4:38	4:44	4:51	4:53
—	—	—	**E** 4:39	4:53	4:59	5:06	5:08
—	—	—	**E** 4:54	5:08	5:14	5:21	5:23
—	—	—	**E** 5:09	5:23	5:29	5:36	5:38
5:00a	5:05a	5:11a	5:24	5:38	5:44	5:51	5:53
5:15	5:20	5:26	5:39	5:53	5:59	6:06	6:08
5:30	5:35	5:41	5:54	6:08	6:14	6:21	6:23
5:45	5:50	5:56	6:09	6:23	6:29	6:36	6:38
6:00	6:05	6:11	6:24	6:38	6:44	6:51	6:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:20	:26	:39	:53	:59	:06	:08
:30	:35	:41	:54	:08	:14	:21	:23
:45	:50	:56	:09	:23	:29	:36	:38
:00	:05	:11	:24	:38	:44	:51	:53
UNTIL: / *HASTA:*							
7:15p	**7:20p**	**7:26p**	**7:39p**	**7:53p**	**7:59p**	**8:06p**	**8:08p**
7:45	**7:50**	**7:56**	**8:09**	**8:23**	**8:29**	**8:36**	**8:38**
8:15	**8:20**	**8:26**	**8:39**	**8:53**	**8:59**	**9:06**	**9:08**
8:45	**8:50**	**8:56**	**9:09**	**9:23**	**9:29**	**9:36**	**9:38**
9:15	**9:20**	**9:26**	**9:39**	**9:53**	**9:59**	**10:06**	**10:08**
9:45	**9:50**	**9:56**	**10:09**	**10:23**	**10:29**	**10:36**	**10:38**
10:15	**10:20**	**10:26**	**10:39**	**10:53**	**10:59**	**11:06**	**11:08**
10:45	**10:50**	**10:56**	**11:09**	**11:23**	**11:29**	**11:36**	**11:38**
11:15	**11:20**	**11:26**	**11:39**	**11:53**	**11:59**	12:06a	12:08a
11:45	**11:50**	**11:56**	12:09a	12:23a	12:29a	12:36	12:38

Saturday / *sábado*

ARNELE AVE. ➡ DOWNTOWN

Arnele Ave.	El Cajon	Grossmont	Spring Street	Euclid Avenue	12th & Imperial	City College	Courthouse
5:15a	5:18a	5:24a	5:30a	5:43a	5:57a	6:02a	6:08a
5:45	5:48	5:54	6:00	6:13	6:27	6:32	6:38
6:15	6:18	6:24	6:30	6:43	6:57	7:02	7:08
6:45	6:48	6:54	7:00	7:13	7:27	7:32	7:38
—	—	—	—	—	7:42	7:47	7:53
7:15	7:18	7:24	7:30	7:43	7:57	8:02	8:08
7:30	7:33	7:39	7:45	7:58	8:12	8:17	8:23
7:45	7:48	7:54	8:00	8:13	8:27	8:32	8:38
8:00	8:03	8:09	8:15	8:28	8:42	8:47	8:53
8:15	8:18	8:24	8:30	8:43	8:57	9:02	9:08
8:30	8:33	8:39	8:45	8:58	9:12	9:17	9:23
8:45	8:48	8:54	9:00	9:13	9:27	9:32	9:38
9:00	9:03	9:09	9:15	9:28	9:42	9:47	9:53
9:15	9:18	9:24	9:30	9:43	9:57	10:02	10:08
9:30	9:33	9:39	9:45	9:58	10:12	10:17	10:23
9:45	9:48	9:54	10:00	10:13	10:27	10:32	10:38
10:00	10:03	10:09	10:15	10:28	10:42	10:47	10:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:18	:24	:30	:43	:57	:02	:08
:30	:33	:39	:45	:58	:12	:17	:23
:45	:48	:54	:00	:13	:27	:32	:38
:00	:03	:09	:15	:28	:42	:47	:53
UNTIL: / *HASTA:*							
7:15p	**7:18p**	**7:24p**	**7:30p**	**7:43p**	**7:57p**	**8:02p**	**8:08p**
7:45	**7:48**	**7:54**	**8:00**	**8:13**	**8:27**	**8:32**	**8:38**
8:15	**8:18**	**8:24**	**8:30**	**8:43**	**8:57**	**9:02**	**9:08**
8:45	**8:48**	**8:54**	**9:00**	**9:13**	**9:27**	**9:32**	**9:38**
9:15	**9:18**	**9:24**	**9:30**	**9:43**	**9:57**	**10:02**	**10:08**
9:45	**9:48**	**9:54**	**10:00**	**10:13**	**10:27**	**10:32**	**10:38**
10:15	**10:18**	**10:24**	**10:30**	**10:43**	**10:57**	**11:02**	**11:08**
10:45	**10:48**	**10:54**	**11:00**	**11:13**	**11:27**	**11:32**	**11:38**
11:15	**11:18**	**11:24**	**11:30**	**11:43**	**11:57**	12:02a	12:08a
11:45	**11:48**	**11:54**	12:00a	12:13a	12:27a	12:32	12:38
12:15a	12:18a	12:24a	12:30	12:43	12:57	1:02	1:08
12:45	12:48	12:54	1:00	1:13	1:27	1:32	1:38

DOWNTOWN ➡ ARNELE AVE.

Courthouse	City College	12th & Imperial	Euclid Avenue	Spring Street	Grossmont	El Cajon	Arnele Ave.
—	—	—	**E** 4:39a	4:53a	4:59a	5:06a	5:08a
—	—	—	**E** 5:09	5:23	5:29	5:36	5:38
5:15a	5:20a	5:26a	5:39	5:53	5:59	6:06	6:08
5:45	5:50	5:56	6:09	6:23	6:29	6:36	6:38
6:15	6:20	6:26	6:39	6:53	6:59	7:06	7:08
—	—	—	**E** 6:54	7:08	7:14	7:21	7:23
6:45	6:50	6:56	7:09	7:23	7:29	7:36	7:38
—	—	—	**E** 7:24	7:38	7:44	7:51	7:53
7:15	7:20	7:26	7:39	7:53	7:59	8:06	8:08
—	—	—	**E** 7:54	8:08	8:14	8:21	8:23
7:45	7:50	7:56	8:09	8:23	8:29	8:36	8:38
8:00	8:05	8:11	8:24	8:38	8:44	8:51	8:53
8:15	8:20	8:26	8:39	8:53	8:59	9:06	9:08
8:30	8:35	8:41	8:54	9:08	9:14	9:21	9:23
8:45	8:50	8:56	9:09	9:23	9:29	9:36	9:38
9:00	9:05	9:11	9:24	9:38	9:44	9:51	9:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:20	:26	:39	:53	:59	:06	:08
:30	:35	:41	:54	:08	:14	:21	:23
:45	:50	:56	:09	:23	:29	:36	:38
:00	:05	:11	:24	:38	:44	:51	:53
UNTIL: / *HASTA:*							
6:15p	**6:20p**	**6:26p**	**6:39p**	**6:53p**	**6:59p**	**7:06p**	**7:08p**
6:45	**6:50**	**6:56**	**7:09**	**7:23**	**7:29**	**7:36**	**7:38**
7:15	**7:20**	**7:26**	**7:39**	**7:53**	**7:59**	**8:06**	**8:08**
7:45	**7:50**	**7:56**	**8:09**	**8:23**	**8:29**	**8:36**	**8:38**
8:15	**8:20**	**8:26**	**8:39**	**8:53**	**8:59**	**9:06**	**9:08**
8:45	**8:50**	**8:56**	**9:09**	**9:23**	**9:29**	**9:36**	**9:38**
9:15	**9:20**	**9:26**	**9:39**	**9:53**	**9:59**	**10:06**	**10:08**
9:45	**9:50**	**9:56**	**10:09**	**10:23**	**10:29**	**10:36**	**10:38**
10:15	**10:20**	**10:26**	**10:39**	**10:53**	**10:59**	**11:06**	**11:08**
10:45	**10:50**	**10:56**	**11:09**	**11:23**	**11:29**	**11:36**	**11:38**
11:15	**11:20**	**11:26**	**11:39**	**11:53**	**11:59**	12:06a	12:08a
11:45	**11:50**	**11:56**	12:09a	12:23a	12:29a	12:36	12:38

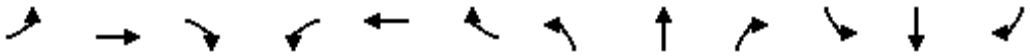
Sunday / *domingo*

ARNELE AVE. ➡ DOWNTOWN

Arnele Ave.	El Cajon	Grossmont	Spring Street	Euclid Avenue	12th & Imperial	City College	Courthouse
5:15a	5:18a	5:24a	5:30a	5:43a	5:57a	6:02a	6:08a
5:45	5:48	5:54	6:00	6:13	6:27	6:32	6:38
6:15	6:18	6:24	6:30	6:43	6:57	7:02	7:08
6:45	6:48	6:54	7:00	7:13	7:27	7:32	7:38
7:15	7:18	7:24	7:30	7:43	7:57	8:02	8:08
7:45	7:48	7:54	8:00	8:13	8:27	8:32	8:38
8:15	8:18	8:24	8:30	8:43	8:57	9:02	9:08
8:45	8:48	8:54	9:00	9:13	9:27	9:32	9:38
9:15	9:18	9:24	9:30	9:43	9:57	10:02	10:08
9:45	9:48	9:54	10:00	10:13	10:27	10:32	10:38
10:15	10:18	10:24	10:30	10:43	10:57	11:02	11:08
10:45	10:48	10:54	11:00	11:13	11:27	11:32	11:38
11:15	11:18	11:24	11:30	11:43	11:57	12:02a	12:08a
11:45	11:48	11:54	12:00a	12:13a	12:27a	12:32	12:38
12:15a	12:18a	12:24a	12:30	12:43	12:57	1:02	1:08
12:45	12:48	12:54	1:00	1:13	1:27	1:32	1:38
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:18	:24	:30	:43	:57	:02	:08
:30	:33	:39	:45	:58	:12	:17	:23
:45	:48	:54	:00	:13	:27	:32	:38
:00	:03	:09	:15	:28	:42	:47	:53
UNTIL: / *HASTA:*							
7:15p	**7:18p**	**7:24p**	**7:30p**	**7:43p**	**7:57p**	**8:02p**	**8:

APPENDIX C

EXISTING INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	299	148	247	708	9	226	107	173	7	215	317
Future Volume (veh/h)	96	299	148	247	708	9	226	107	173	7	215	317
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	113	352	174	294	843	11	305	145	234	8	234	345
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.84	0.74	0.74	0.74	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	173	991	429	391	1058	14	401	1294	741	71	511	442
Arrive On Green	0.10	0.28	0.28	0.11	0.30	0.30	0.12	0.37	0.37	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1525	3428	3562	46	3428	3526	1532	1767	1763	1526
Grp Volume(v), veh/h	113	352	174	294	417	437	305	145	234	8	234	345
Grp Sat Flow(s),veh/h/ln	1767	1763	1525	1714	1763	1846	1714	1763	1532	1767	1763	1526
Q Serve(g_s), s	6.2	8.0	9.3	8.3	21.8	21.8	8.6	2.7	9.4	0.4	10.9	20.7
Cycle Q Clear(g_c), s	6.2	8.0	9.3	8.3	21.8	21.8	8.6	2.7	9.4	0.4	10.9	20.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	991	429	391	524	548	401	1294	741	71	511	442
V/C Ratio(X)	0.65	0.36	0.41	0.75	0.80	0.80	0.76	0.11	0.32	0.11	0.46	0.78
Avail Cap(c_a), veh/h	173	994	430	391	543	568	401	1294	741	71	511	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	0.86	0.86	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	28.7	29.2	42.9	32.4	32.4	42.8	20.9	15.9	46.3	29.1	32.6
Incr Delay (d2), s/veh	17.5	1.0	2.8	12.0	11.4	10.9	11.1	0.2	1.0	3.2	2.9	12.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	3.4	3.6	4.1	10.5	10.9	4.2	1.1	3.3	0.3	4.9	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.0	29.7	32.0	54.9	43.8	43.3	53.9	21.0	16.9	49.5	32.0	45.3
LnGrp LOS	E	C	C	D	D	D	D	C	B	D	C	D
Approach Vol, veh/h		639			1148			684			587	
Approach Delay, s/veh		35.9			46.4			34.3			40.1	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	34.4	15.9	34.1	14.0	36.0	8.2	41.8
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 11	28.2	* 12	* 29	* 9.8	* 31	* 4	36.6
Max Q Clear Time (g_c+I1), s	10.3	11.3	10.6	22.7	8.2	23.8	2.4	11.4
Green Ext Time (p_c), s	0.1	3.7	0.1	2.6	0.0	3.4	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	525	41	118	594	20	69
Future Volume (veh/h)	525	41	118	594	20	69
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	648	51	149	752	49	168
Peak Hour Factor	0.81	0.81	0.79	0.79	0.41	0.41
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1130	89	200	1974	279	248
Arrive On Green	0.34	0.34	0.11	0.56	0.16	0.16
Sat Flow, veh/h	3391	259	1767	3618	1767	1572
Grp Volume(v), veh/h	346	353	149	752	49	168
Grp Sat Flow(s),veh/h/ln	1763	1794	1767	1763	1767	1572
Q Serve(g_s), s	6.5	6.5	3.3	4.8	1.0	4.1
Cycle Q Clear(g_c), s	6.5	6.5	3.3	4.8	1.0	4.1
Prop In Lane		0.14	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	604	615	200	1974	279	248
V/C Ratio(X)	0.57	0.57	0.74	0.38	0.18	0.68
Avail Cap(c_a), veh/h	1993	2029	1084	6602	1482	1319
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.9	10.9	17.3	5.0	14.7	16.0
Incr Delay (d2), s/veh	0.9	0.8	5.4	0.1	0.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.9	1.4	0.8	0.4	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.7	11.7	22.7	5.1	15.0	19.2
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	699			901	217	
Approach Delay, s/veh	11.7			8.0	18.3	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	8.8	20.2				28.9	11.5
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 4.6	45.7				* 76	33.9
Max Q Clear Time (g_c+I1), s	5.3	8.5				6.8	6.1
Green Ext Time (p_c), s	0.3	4.5				5.8	0.7

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	89	189	105	199	21	332	524	46	30	522	272
Future Volume (veh/h)	222	89	189	105	199	21	332	524	46	30	522	272
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	271	109	230	164	311	33	437	689	61	33	574	299
Peak Hour Factor	0.82	0.82	0.82	0.64	0.64	0.64	0.76	0.76	0.76	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	442	775	325	296	897	378	626	1247	110	106	940	402
Arrive On Green	0.13	0.22	0.22	0.17	0.25	0.25	0.18	0.38	0.38	0.06	0.27	0.27
Sat Flow, veh/h	3428	3526	1476	1767	3526	1486	3565	3266	289	1767	3526	1508
Grp Volume(v), veh/h	271	109	230	164	311	33	437	372	378	33	574	299
Grp Sat Flow(s),veh/h/ln	1714	1763	1476	1767	1763	1486	1783	1763	1792	1767	1763	1508
Q Serve(g_s), s	8.7	2.9	16.7	9.9	8.4	2.0	13.4	19.2	19.2	2.1	16.6	21.1
Cycle Q Clear(g_c), s	8.7	2.9	16.7	9.9	8.4	2.0	13.4	19.2	19.2	2.1	16.6	21.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	442	775	325	296	897	378	626	673	684	106	940	402
V/C Ratio(X)	0.61	0.14	0.71	0.55	0.35	0.09	0.70	0.55	0.55	0.31	0.61	0.74
Avail Cap(c_a), veh/h	442	888	372	296	1010	426	626	673	684	106	940	402
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.9	36.5	41.9	44.4	35.5	33.1	45.0	28.1	28.2	52.3	37.4	39.0
Incr Delay (d2), s/veh	6.2	0.1	5.2	7.3	0.2	0.1	6.4	3.2	3.2	7.4	3.0	11.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	1.2	6.4	4.9	3.6	0.7	6.4	8.4	8.6	1.1	7.4	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.1	36.6	47.1	51.7	35.7	33.2	51.4	31.4	31.4	59.8	40.3	50.8
LnGrp LOS	D	D	D	D	D	C	D	C	C	E	D	D
Approach Vol, veh/h		610			508			1187			906	
Approach Delay, s/veh		48.3			40.7			38.8			44.5	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	31.1	24.9	36.3	20.0	35.1	11.5	49.7
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	9.5	29.3	20.4	31.0	15.0	33.3	7.0	44.4
Max Q Clear Time (g_c+I1), s	11.9	18.7	15.4	23.1	10.7	10.4	4.1	21.2
Green Ext Time (p_c), s	0.2	1.0	0.7	2.9	0.4	2.0	0.0	4.5

Intersection Summary	
HCM 6th Ctrl Delay	42.5
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	2	77	2	50	148	484	69	82	629	3
Future Volume (veh/h)	0	1	2	77	2	50	148	484	69	82	629	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	3	5	107	3	69	187	613	87	108	828	4
Peak Hour Factor	0.38	0.38	0.38	0.72	0.72	0.72	0.79	0.79	0.79	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	100	34	57	298	11	245	231	1175	166	139	1184	6
Arrive On Green	0.00	0.06	0.06	0.17	0.17	0.17	0.13	0.38	0.38	0.08	0.33	0.33
Sat Flow, veh/h	1767	606	1010	1767	63	1455	1767	3081	436	1767	3597	17
Grp Volume(v), veh/h	0	0	8	107	0	72	187	350	350	108	406	426
Grp Sat Flow(s),veh/h/ln	1767	0	1617	1767	0	1518	1767	1763	1754	1767	1763	1851
Q Serve(g_s), s	0.0	0.0	0.3	3.6	0.0	2.7	6.8	10.2	10.2	4.0	13.3	13.3
Cycle Q Clear(g_c), s	0.0	0.0	0.3	3.6	0.0	2.7	6.8	10.2	10.2	4.0	13.3	13.3
Prop In Lane	1.00		0.63	1.00		0.96	1.00		0.25	1.00		0.01
Lane Grp Cap(c), veh/h	100	0	92	298	0	256	231	672	669	139	580	610
V/C Ratio(X)	0.00	0.00	0.09	0.36	0.00	0.28	0.81	0.52	0.52	0.78	0.70	0.70
Avail Cap(c_a), veh/h	746	0	682	719	0	618	368	874	870	298	808	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	29.7	24.4	0.0	24.1	28.1	15.8	15.9	30.0	19.4	19.4
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.9	0.0	0.8	3.1	0.9	0.9	3.5	2.4	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.5	0.0	1.0	2.9	3.8	3.8	1.7	5.3	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	30.3	25.3	0.0	24.8	31.2	16.7	16.8	33.5	21.8	21.7
LnGrp LOS	A	A	C	C	A	C	C	B	B	C	C	C
Approach Vol, veh/h		8			179			887			940	
Approach Delay, s/veh		30.3			25.1			19.8			23.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	30.4		10.1	12.9	26.9		16.5
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 11	32.9		28.0	* 14	* 30		27.0
Max Q Clear Time (g_c+I1), s	6.0	12.2		2.3	8.8	15.3		5.6
Green Ext Time (p_c), s	0.1	5.9		0.0	0.1	6.5		0.9

Intersection Summary	
HCM 6th Ctrl Delay	21.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	123	145	2	5	37
Future Vol, veh/h	22	123	145	2	5	37
Peak Hour Factor	0.51	0.51	0.64	0.64	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	43	241	227	3	8	60
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.7	9.1	8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	0%	12%
Vol Thru, %	85%	99%	0%
Vol Right, %	0%	1%	88%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	145	147	42
LT Vol	22	0	5
Through Vol	123	145	0
RT Vol	0	2	37
Lane Flow Rate	284	230	68
Geometry Grp	1	1	1
Degree of Util (X)	0.346	0.28	0.086
Departure Headway (Hd)	4.378	4.396	4.572
Convergence, Y/N	Yes	Yes	Yes
Cap	825	820	784
Service Time	2.395	2.413	2.598
HCM Lane V/C Ratio	0.344	0.28	0.087
HCM Control Delay	9.7	9.1	8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.6	1.1	0.3

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	70	38	30	106	11	12	0	5	13	1	31
Future Vol, veh/h	9	70	38	30	106	11	12	0	5	13	1	31
Peak Hour Factor	0.50	0.50	0.50	0.57	0.57	0.57	0.85	0.85	0.85	0.80	0.80	0.80
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	18	140	76	53	186	19	14	0	6	16	1	39
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.9	9.4	8.7	8.2
HCM LOS	A	A	A	A

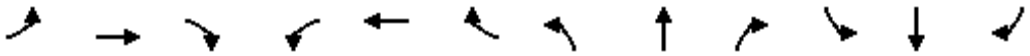
Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	8%	20%	29%
Vol Thru, %	0%	0%	60%	72%	2%
Vol Right, %	0%	100%	32%	7%	69%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	5	117	147	45
LT Vol	12	0	9	30	13
Through Vol	0	0	70	106	1
RT Vol	0	5	38	11	31
Lane Flow Rate	14	6	234	258	56
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.024	0.008	0.275	0.314	0.075
Departure Headway (Hd)	6.195	4.982	4.235	4.377	4.799
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	578	717	849	823	746
Service Time	3.932	2.719	2.254	2.395	2.832
HCM Lane V/C Ratio	0.024	0.008	0.276	0.313	0.075
HCM Control Delay	9.1	7.8	8.9	9.4	8.2
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.1	0	1.1	1.3	0.2

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	76	11	9	1	22	10	3	3	0	12	8	118
Future Vol, veh/h	76	11	9	1	22	10	3	3	0	12	8	118
Peak Hour Factor	0.40	0.40	0.40	0.31	0.31	0.31	0.38	0.38	0.38	0.62	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	190	28	23	3	71	32	8	8	0	19	13	190
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.9	8.4	8.3	8.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	50%	79%	3%	9%
Vol Thru, %	50%	11%	67%	6%
Vol Right, %	0%	9%	30%	86%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	96	33	138
LT Vol	3	76	1	12
Through Vol	3	11	22	8
RT Vol	0	9	10	118
Lane Flow Rate	16	240	106	223
Geometry Grp	1	1	1	1
Degree of Util (X)	0.023	0.314	0.136	0.266
Departure Headway (Hd)	5.142	4.708	4.594	4.298
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	694	761	777	835
Service Time	3.19	2.747	2.639	2.329
HCM Lane V/C Ratio	0.023	0.315	0.136	0.267
HCM Control Delay	8.3	9.9	8.4	8.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	1.3	0.5	1.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	530	155	243	304	16	206	220	359	13	160	114
Future Volume (veh/h)	187	530	155	243	304	16	206	220	359	13	160	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	205	582	170	251	313	16	217	232	378	14	170	121
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.95	0.95	0.95	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	279	1044	452	439	906	46	302	1192	718	71	580	386
Arrive On Green	0.16	0.30	0.30	0.13	0.27	0.27	0.09	0.34	0.34	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1526	3428	3407	173	3428	3526	1530	1767	2002	1329
Grp Volume(v), veh/h	205	582	170	251	161	168	217	232	378	14	148	143
Grp Sat Flow(s),veh/h/ln	1767	1763	1526	1714	1763	1818	1714	1763	1530	1767	1763	1568
Q Serve(g_s), s	11.0	13.9	8.8	6.9	7.4	7.5	6.2	4.7	17.5	0.8	6.5	7.1
Cycle Q Clear(g_c), s	11.0	13.9	8.8	6.9	7.4	7.5	6.2	4.7	17.5	0.8	6.5	7.1
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		0.85
Lane Grp Cap(c), veh/h	279	1044	452	439	469	484	302	1192	718	71	511	455
V/C Ratio(X)	0.73	0.56	0.38	0.57	0.34	0.35	0.72	0.19	0.53	0.20	0.29	0.31
Avail Cap(c_a), veh/h	279	1047	453	439	488	504	302	1192	718	71	511	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	0.64	0.64	0.64	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	29.7	27.9	41.0	29.6	29.7	44.4	23.5	18.9	46.4	27.5	27.7
Incr Delay (d2), s/veh	15.7	2.2	2.4	5.2	1.9	1.9	9.1	0.2	1.8	6.2	1.4	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	6.0	3.4	3.1	3.3	3.4	3.0	1.9	6.2	0.5	2.9	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	31.8	30.3	46.2	31.6	31.6	53.5	23.7	20.7	52.6	29.0	29.5
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		957			580			827			305	
Approach Delay, s/veh		36.7			37.9			30.2			30.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	35.9	13.0	34.1	20.0	32.9	8.2	38.9
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 13	29.7	* 8.8	* 29	* 16	* 28	* 4	33.7
Max Q Clear Time (g_c+I1), s	8.9	15.9	8.2	9.1	13.0	9.5	2.8	19.5
Green Ext Time (p_c), s	0.2	5.0	0.0	2.4	0.1	2.1	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	895	20	86	616	20	85
Future Volume (veh/h)	895	20	86	616	20	85
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	923	21	92	662	28	120
Peak Hour Factor	0.97	0.97	0.93	0.93	0.71	0.71
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1489	34	119	2082	243	216
Arrive On Green	0.42	0.42	0.07	0.59	0.14	0.14
Sat Flow, veh/h	3613	80	1767	3618	1767	1572
Grp Volume(v), veh/h	462	482	92	662	28	120
Grp Sat Flow(s),veh/h/ln	1763	1837	1767	1763	1767	1572
Q Serve(g_s), s	8.6	8.6	2.1	4.0	0.6	3.0
Cycle Q Clear(g_c), s	8.6	8.6	2.1	4.0	0.6	3.0
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	746	777	119	2082	243	216
V/C Ratio(X)	0.62	0.62	0.77	0.32	0.12	0.56
Avail Cap(c_a), veh/h	2344	2443	709	6539	1346	1197
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.4	9.4	19.2	4.3	15.8	16.9
Incr Delay (d2), s/veh	0.8	0.8	10.2	0.1	0.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.4	1.1	0.6	0.2	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.3	10.3	29.4	4.4	16.1	19.1
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	944			754	148	
Approach Delay, s/veh	10.3			7.5	18.5	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.0	24.0				31.0	10.8
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 13	55.7				* 78	31.9
Max Q Clear Time (g_c+I1), s	4.1	10.6				6.0	5.0
Green Ext Time (p_c), s	0.1	6.7				4.9	0.4

Intersection Summary		
HCM 6th Ctrl Delay		9.8
HCM 6th LOS		A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	221	220	74	123	31	282	446	113	55	403	208
Future Volume (veh/h)	334	221	220	74	123	31	282	446	113	55	403	208
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	355	235	234	84	140	35	317	501	127	58	424	219
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	639	741	319	217	499	212	577	1049	264	166	1097	473
Arrive On Green	0.19	0.21	0.21	0.12	0.14	0.14	0.16	0.38	0.38	0.09	0.31	0.31
Sat Flow, veh/h	3428	3526	1515	1767	3526	1497	3565	2771	698	1767	3526	1522
Grp Volume(v), veh/h	355	235	234	84	140	35	317	318	310	58	424	219
Grp Sat Flow(s),veh/h/ln	1714	1763	1515	1767	1763	1497	1783	1763	1706	1767	1763	1522
Q Serve(g_s), s	9.6	5.7	14.7	4.5	3.6	2.1	8.3	13.9	14.1	3.1	9.6	11.8
Cycle Q Clear(g_c), s	9.6	5.7	14.7	4.5	3.6	2.1	8.3	13.9	14.1	3.1	9.6	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	639	741	319	217	499	212	577	668	646	166	1097	473
V/C Ratio(X)	0.56	0.32	0.73	0.39	0.28	0.17	0.55	0.48	0.48	0.35	0.39	0.46
Avail Cap(c_a), veh/h	639	1366	587	217	1124	477	577	668	646	166	1097	473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.6	34.1	37.6	41.2	39.1	38.5	39.3	24.0	24.0	43.2	27.5	28.3
Incr Delay (d2), s/veh	3.5	0.2	3.3	5.2	0.3	0.4	3.7	2.4	2.6	5.7	1.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	2.4	5.6	2.2	1.5	0.8	3.8	6.0	5.9	1.6	4.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.1	34.3	40.9	46.3	39.4	38.8	43.0	26.4	26.6	48.9	28.5	31.5
LnGrp LOS	D	C	D	D	D	D	D	C	C	D	C	C
Approach Vol, veh/h		824			259			945			701	
Approach Delay, s/veh		39.1			41.6			32.0			31.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	26.9	21.0	37.0	24.0	19.9	14.1	43.9
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	12.5	39.5	16.5	31.7	19.0	32.5	9.6	38.6
Max Q Clear Time (g_c+I1), s	10.5	16.7	10.3	13.8	11.6	5.6	5.1	16.1
Green Ext Time (p_c), s	0.1	2.2	0.6	3.2	0.7	0.9	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	1	8	107	1	66	18	831	125	81	648	2
Future Volume (veh/h)	14	1	8	107	1	66	18	831	125	81	648	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	19	1	11	147	1	90	20	944	142	86	689	2
Peak Hour Factor	0.72	0.72	0.72	0.73	0.73	0.73	0.88	0.88	0.88	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	168	12	132	277	3	233	32	1234	186	110	1617	5
Arrive On Green	0.09	0.09	0.09	0.16	0.16	0.16	0.02	0.40	0.40	0.06	0.45	0.45
Sat Flow, veh/h	1767	127	1392	1767	17	1489	1767	3051	459	1767	3605	10
Grp Volume(v), veh/h	19	0	12	147	0	91	20	545	541	86	337	354
Grp Sat Flow(s),veh/h/ln	1767	0	1519	1767	0	1506	1767	1763	1747	1767	1763	1853
Q Serve(g_s), s	0.7	0.0	0.5	5.7	0.0	4.0	0.8	19.8	19.8	3.6	9.7	9.7
Cycle Q Clear(g_c), s	0.7	0.0	0.5	5.7	0.0	4.0	0.8	19.8	19.8	3.6	9.7	9.7
Prop In Lane	1.00		0.92	1.00		0.99	1.00		0.26	1.00		0.01
Lane Grp Cap(c), veh/h	168	0	144	277	0	236	32	713	707	110	791	831
V/C Ratio(X)	0.11	0.00	0.08	0.53	0.00	0.39	0.62	0.76	0.77	0.78	0.43	0.43
Avail Cap(c_a), veh/h	667	0	573	645	0	550	138	879	871	167	910	956
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.7	0.0	30.6	28.8	0.0	28.1	36.2	19.1	19.1	34.3	13.9	13.9
Incr Delay (d2), s/veh	0.4	0.0	0.4	2.0	0.0	1.3	7.1	3.8	3.8	6.0	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.2	2.5	0.0	1.5	0.4	8.0	7.9	1.6	3.6	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.2	0.0	31.0	30.8	0.0	29.4	43.3	22.8	22.9	40.3	14.5	14.5
LnGrp LOS	C	A	C	C	A	C	D	C	C	D	B	B
Approach Vol, veh/h		31			238			1106			777	
Approach Delay, s/veh		31.1			30.3			23.2			17.4	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.8	35.1		13.3	5.6	38.4		16.9
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 5	37.0		28.0	* 5.8	* 38		27.1
Max Q Clear Time (g_c+I1), s	5.6	21.8		2.7	2.8	11.7		7.7
Green Ext Time (p_c), s	0.0	8.2		0.1	0.0	6.9		1.2

Intersection Summary	
HCM 6th Ctrl Delay	22.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	46	147	118	5	5	21
Future Vol, veh/h	46	147	118	5	5	21
Peak Hour Factor	0.79	0.79	0.79	0.79	0.81	0.81
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	58	186	149	6	6	26
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.9	8.2	7.5
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	24%	0%	19%
Vol Thru, %	76%	96%	0%
Vol Right, %	0%	4%	81%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	193	123	26
LT Vol	46	0	5
Through Vol	147	118	0
RT Vol	0	5	21
Lane Flow Rate	244	156	32
Geometry Grp	1	1	1
Degree of Util (X)	0.283	0.18	0.039
Departure Headway (Hd)	4.173	4.167	4.371
Convergence, Y/N	Yes	Yes	Yes
Cap	855	850	824
Service Time	2.229	2.244	2.371
HCM Lane V/C Ratio	0.285	0.184	0.039
HCM Control Delay	8.9	8.2	7.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.2	0.7	0.1

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	71	65	23	59	14	52	1	15	14	1	13
Future Vol, veh/h	21	71	65	23	59	14	52	1	15	14	1	13
Peak Hour Factor	0.87	0.87	0.87	0.80	0.80	0.80	0.68	0.68	0.68	0.70	0.70	0.70
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	82	75	29	74	18	76	1	22	20	1	19
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.4	8.3	8.9	8
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	98%	0%	13%	24%	50%
Vol Thru, %	2%	0%	45%	61%	4%
Vol Right, %	0%	100%	41%	15%	46%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	53	15	157	96	28
LT Vol	52	0	21	23	14
Through Vol	1	0	71	59	1
RT Vol	0	15	65	14	13
Lane Flow Rate	78	22	180	120	40
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.124	0.028	0.212	0.149	0.052
Departure Headway (Hd)	5.748	4.55	4.234	4.473	4.682
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	624	787	850	803	764
Service Time	3.477	2.278	2.25	2.492	2.713
HCM Lane V/C Ratio	0.125	0.028	0.212	0.149	0.052
HCM Control Delay	9.3	7.4	8.4	8.3	8
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.4	0.1	0.8	0.5	0.2

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	3	15	1	10	13	13	19	0	4	22	88
Future Vol, veh/h	74	3	15	1	10	13	13	19	0	4	22	88
Peak Hour Factor	0.72	0.72	0.72	0.40	0.40	0.40	0.62	0.62	0.62	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	103	4	21	3	25	33	21	31	0	5	29	117
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	7.6	8	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	41%	80%	4%	4%
Vol Thru, %	59%	3%	42%	19%
Vol Right, %	0%	16%	54%	77%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	32	92	24	114
LT Vol	13	74	1	4
Through Vol	19	3	10	22
RT Vol	0	15	13	88
Lane Flow Rate	52	128	60	152
Geometry Grp	1	1	1	1
Degree of Util (X)	0.066	0.16	0.07	0.168
Departure Headway (Hd)	4.62	4.516	4.218	3.987
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	777	796	851	903
Service Time	2.635	2.532	2.235	1.998
HCM Lane V/C Ratio	0.067	0.161	0.071	0.168
HCM Control Delay	8	8.4	7.6	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.6	0.2	0.6

APPENDIX D

EXCERPTS FROM THE ITE AND SANDAG TRIP GENERATION MANUAL

Recreational Community Center
(495)

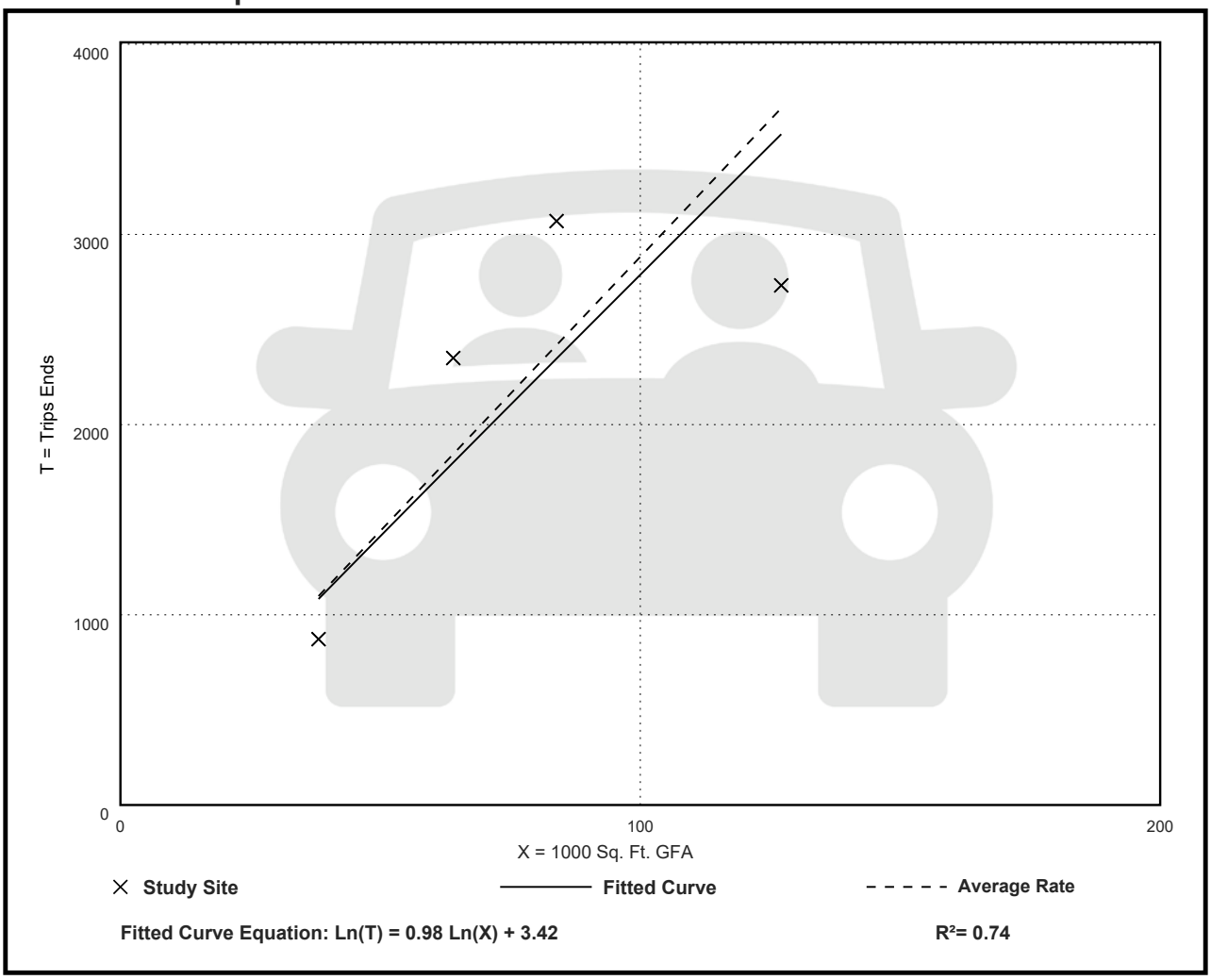
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. 1000 Sq. Ft. GFA: 78
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
28.82	21.49 - 36.71	8.56

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.98 Ln(X) + 3.42

R^2= 0.74

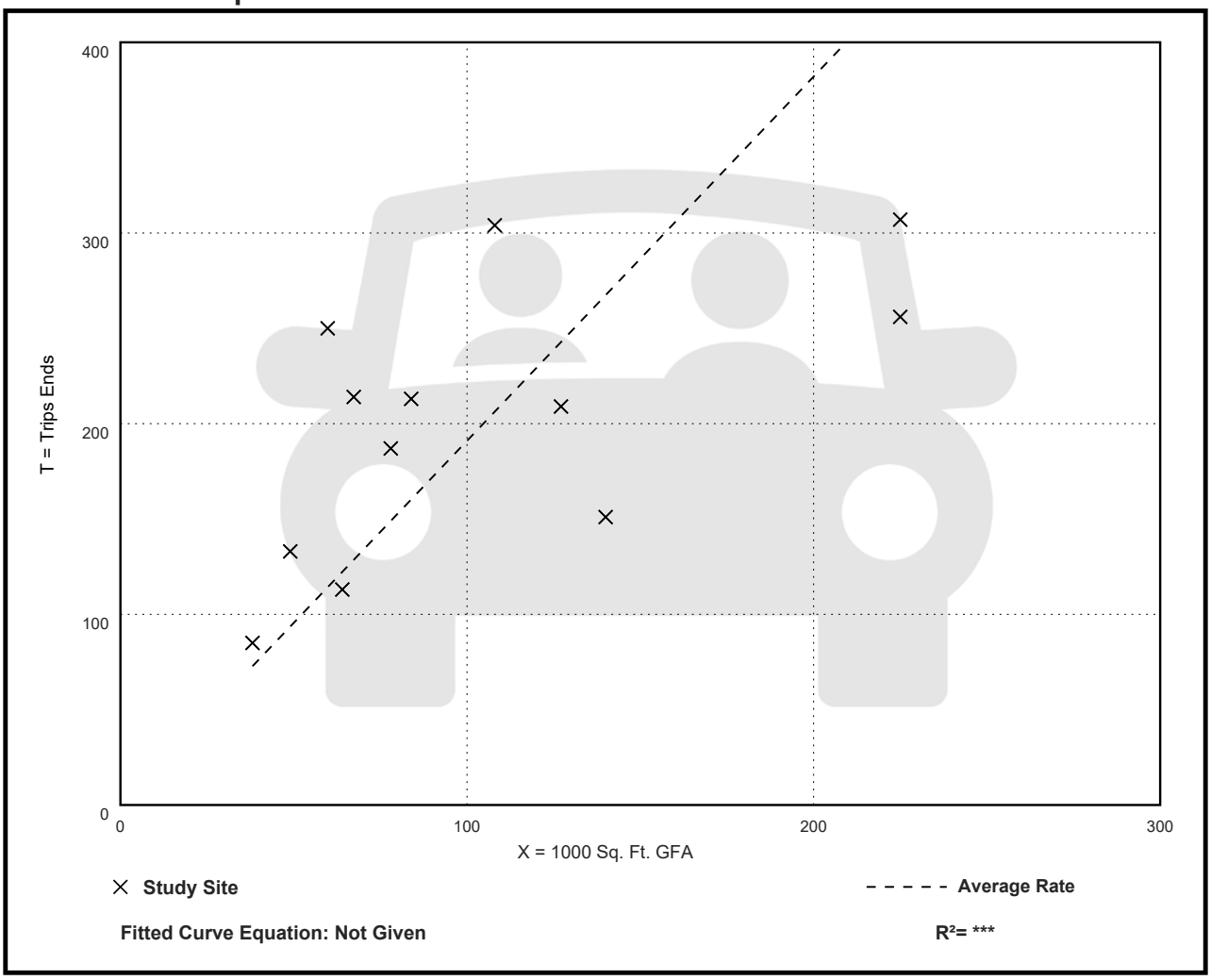
Recreational Community Center
(495)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 12
Avg. 1000 Sq. Ft. GFA: 105
Directional Distribution: 66% entering, 34% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.91	1.08 - 4.18	0.88

Data Plot and Equation



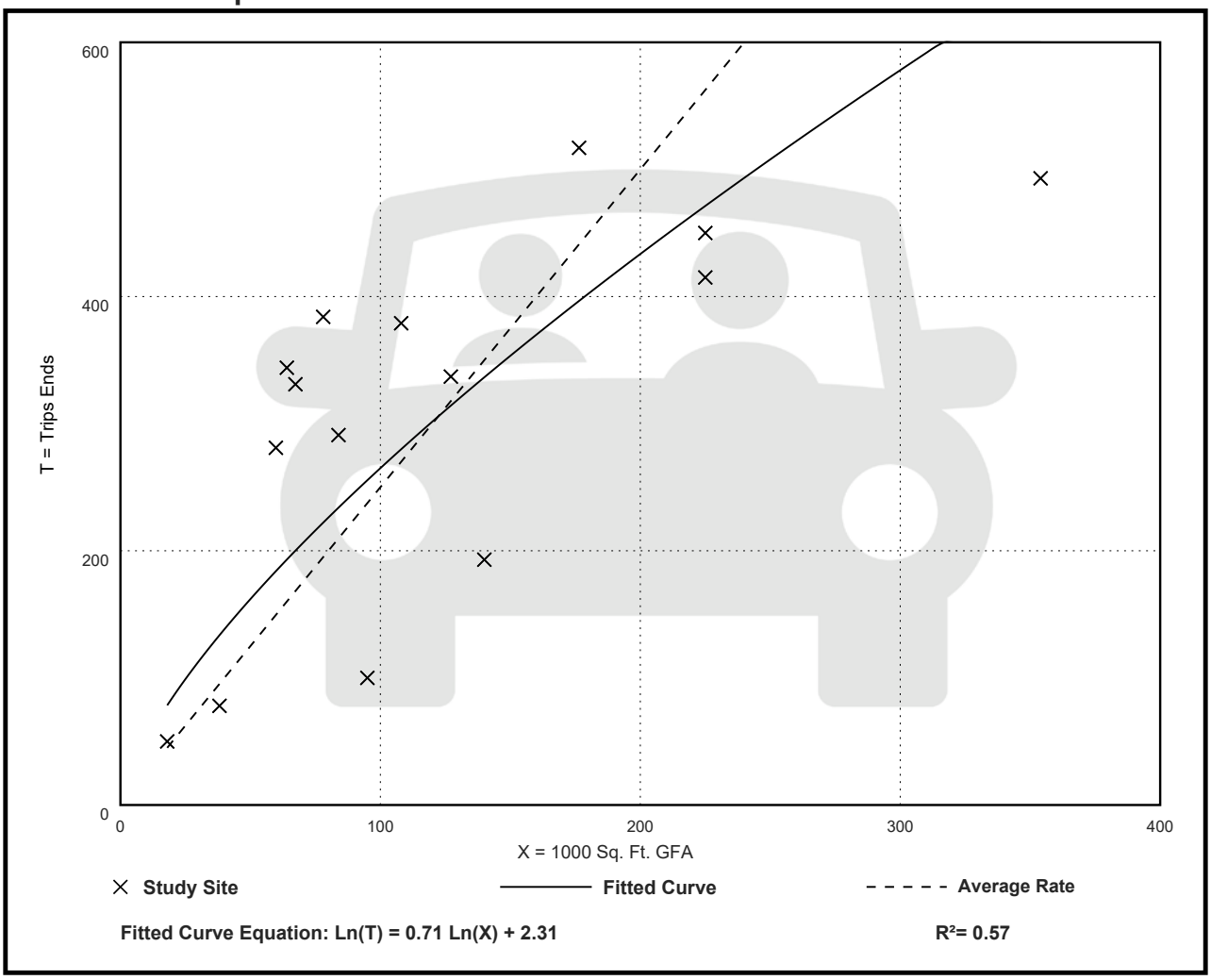
Recreational Community Center
(495)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 15
Avg. 1000 Sq. Ft. GFA: 124
Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.50	1.05 - 5.37	1.28

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.71 Ln(X) + 2.31

R^2= 0.57

(NOT SO)

BRIEF GUIDE OF VEHICULAR TRAFFIC GENERATION RATES FOR THE SAN DIEGO REGION

APRIL 2002

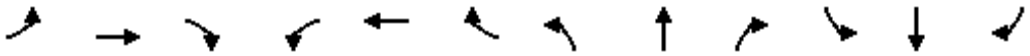
401 B Street, Suite 800
San Diego, California 92101
(619) 699-1900 • Fax (619) 699-1950

NOTE: This listing only represents a ***guide*** of average, or estimated, traffic generation "driveway" rates and some very general trip data for land uses (emphasis on acreage and building square footage) in the San Diego region. These rates (both local and national) are subject to change as future documentation becomes available, or as regional sources are updated. For more specific information regarding traffic data and trip rates, please refer to the San Diego Traffic Generators manual. ***Always check with local jurisdictions for their preferred or applicable rates.***

LAND USE	TRIP CATEGORIES [PRIMARY:DIVERTED:PASS-BY][P]	ESTIMATED WEEKDAY VEHICLE TRIP GENERATION RATE (DRIVEWAY)	HIGHEST PEAK HOUR % (plus IN:OUT ratio) Between 6:00-9:30 A.M.		Between 3:00-6:30 P.M.		TRIP LENGTH (Miles)[L]
AGRICULTURE (Open Space)	[80:18:2]	2/acre**					10.8
AIRPORT	[78:20:2]						12.5
Commercial		60/acre, 100/flight, 70/1000 sq. ft.* **	5%	(6:4)	6%	(5:5)	
General Aviation		6/acre, 2/flight, 6/based aircraft* **	9%	(7:3)	15%	(5:5)	
Heliports		100/acre**					
AUTOMOBILE[S]							
Car Wash							
Automatic		900/site, 600/acre**	4%	(5:5)	9%	(5:5)	
Self-serve		100/wash stall**	4%	(5:5)	8%	(5:5)	
Gasoline	[21:51:28]						2.8
with/Food Mart		160/vehicle fueling space**	7%	(5:5)	8%	(5:5)	
with/Food Mart & Car Wash		155/vehicle fueling space**	8%	(5:5)	9%	(5:5)	
Older Service Station Design		150/vehicle fueling space, 900/station**	7%	(5:5)	9%	(5:5)	
Sales (Dealer & Repair)		50/1000 sq. ft., 300/acre, 60/service stall* **	5%	(7:3)	8%	(4:6)	
Auto Repair Center		20/1000 sq. ft., 400/acre, 20/service stall*	8%	(7:3)	11%	(4:6)	
Auto Parts Sales		60/1000 sq. ft. **	4%		10%		
Quick Lube		40/service stall**	7%	(6:4)	10%	(5:5)	
Tire Store		25/1000 sq. ft., 30/service stall**	7%	(6:4)	11%	(5:5)	
CEMETERY		5/acre*					
CHURCH (or Synagogue)	[64:25:11]	9/1000 sq. ft., 30/acre** (quadruple rates for Sunday, or days of assembly)	5%	(6:4)	8%	(5:5)	5.1
COMMERCIAL/RETAIL[S]							
Super Regional Shopping Center (More than 80 acres, more than 800,000 sq. ft., w/usually 3 + major stores)		35/1000 sq. ft.,[C] 400/acre*	4%	(7:3)	10%	(5:5)	
Regional Shopping Center (40-80acres, 400,000-800,000 sq. ft., w/usually 2 + major stores)	[54:35:11]	50/1000 sq. ft.,[C] 500/acre*	4%	(7:3)	9%	(5:5)	5.2

APPENDIX E

EXISTING + PROJECT INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	299	161	247	708	9	232	109	173	7	218	317
Future Volume (veh/h)	96	299	161	247	708	9	232	109	173	7	218	317
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	113	352	189	294	843	11	314	147	234	8	237	345
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.84	0.74	0.74	0.74	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	173	991	429	391	1058	14	401	1294	741	71	511	442
Arrive On Green	0.10	0.28	0.28	0.11	0.30	0.30	0.12	0.37	0.37	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1525	3428	3562	46	3428	3526	1532	1767	1763	1526
Grp Volume(v), veh/h	113	352	189	294	417	437	314	147	234	8	237	345
Grp Sat Flow(s),veh/h/ln	1767	1763	1525	1714	1763	1846	1714	1763	1532	1767	1763	1526
Q Serve(g_s), s	6.2	8.0	10.2	8.3	21.8	21.8	8.9	2.8	9.4	0.4	11.0	20.7
Cycle Q Clear(g_c), s	6.2	8.0	10.2	8.3	21.8	21.8	8.9	2.8	9.4	0.4	11.0	20.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	991	429	391	524	548	401	1294	741	71	511	442
V/C Ratio(X)	0.65	0.36	0.44	0.75	0.80	0.80	0.78	0.11	0.32	0.11	0.46	0.78
Avail Cap(c_a), veh/h	173	994	430	391	543	568	401	1294	741	71	511	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	28.7	29.5	42.9	32.4	32.4	42.9	20.9	15.9	46.3	29.1	32.6
Incr Delay (d2), s/veh	17.5	1.0	3.3	12.0	11.4	10.9	11.8	0.1	0.9	3.2	3.0	12.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	3.4	4.0	4.1	10.5	10.9	4.4	1.1	3.3	0.3	5.0	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.0	29.7	32.8	54.9	43.8	43.3	54.7	21.1	16.8	49.5	32.1	45.3
LnGrp LOS	E	C	C	D	D	D	D	C	B	D	C	D
Approach Vol, veh/h		654			1148			695			590	
Approach Delay, s/veh		36.0			46.4			34.8			40.1	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	34.4	15.9	34.1	14.0	36.0	8.2	41.8
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 11	28.2	* 12	* 29	* 9.8	* 31	* 4	36.6
Max Q Clear Time (g_c+I1), s	10.3	12.2	10.9	22.7	8.2	23.8	2.4	11.4
Green Ext Time (p_c), s	0.1	3.7	0.1	2.6	0.0	3.4	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	40.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	525	43	140	594	21	81
Future Volume (veh/h)	525	43	140	594	21	81
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.95	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	648	53	177	752	51	198
Peak Hour Factor	0.81	0.81	0.79	0.79	0.41	0.41
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1094	89	237	1987	308	274
Arrive On Green	0.33	0.33	0.13	0.56	0.17	0.17
Sat Flow, veh/h	3379	268	1767	3618	1767	1572
Grp Volume(v), veh/h	347	354	177	752	51	198
Grp Sat Flow(s),veh/h/ln	1763	1792	1767	1763	1767	1572
Q Serve(g_s), s	7.1	7.1	4.2	5.1	1.1	5.2
Cycle Q Clear(g_c), s	7.1	7.1	4.2	5.1	1.1	5.2
Prop In Lane		0.15	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	587	597	237	1987	308	274
V/C Ratio(X)	0.59	0.59	0.75	0.38	0.17	0.72
Avail Cap(c_a), veh/h	1852	1883	1008	6137	1378	1226
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.0	12.1	18.1	5.3	15.3	17.0
Incr Delay (d2), s/veh	1.0	0.9	4.7	0.1	0.3	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	2.2	1.7	1.0	0.4	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.0	13.0	22.8	5.4	15.5	20.6
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	701			929	249	
Approach Delay, s/veh	13.0			8.7	19.5	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	10.0	20.8				30.8	12.7
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 5.8	45.7				* 76	33.9
Max Q Clear Time (g_c+I1), s	6.2	9.1				7.1	7.2
Green Ext Time (p_c), s	0.4	4.5				5.8	0.8

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	91	197	105	202	21	348	524	46	30	522	275
Future Volume (veh/h)	224	91	197	105	202	21	348	524	46	30	522	275
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	273	111	240	164	316	33	458	689	61	33	574	302
Peak Hour Factor	0.82	0.82	0.82	0.64	0.64	0.64	0.76	0.76	0.76	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	441	783	328	296	904	381	624	1244	110	106	937	401
Arrive On Green	0.13	0.22	0.22	0.17	0.26	0.26	0.17	0.38	0.38	0.06	0.27	0.27
Sat Flow, veh/h	3428	3526	1477	1767	3526	1487	3565	3266	289	1767	3526	1508
Grp Volume(v), veh/h	273	111	240	164	316	33	458	372	378	33	574	302
Grp Sat Flow(s),veh/h/ln	1714	1763	1477	1767	1763	1487	1783	1763	1792	1767	1763	1508
Q Serve(g_s), s	8.8	2.9	17.6	9.9	8.5	2.0	14.2	19.3	19.3	2.1	16.6	21.4
Cycle Q Clear(g_c), s	8.8	2.9	17.6	9.9	8.5	2.0	14.2	19.3	19.3	2.1	16.6	21.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	441	783	328	296	904	381	624	671	682	106	937	401
V/C Ratio(X)	0.62	0.14	0.73	0.55	0.35	0.09	0.73	0.55	0.55	0.31	0.61	0.75
Avail Cap(c_a), veh/h	441	886	371	296	1007	425	624	671	682	106	937	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	36.4	42.1	44.6	35.4	33.0	45.5	28.3	28.3	52.5	37.5	39.3
Incr Delay (d2), s/veh	6.4	0.1	6.3	7.3	0.2	0.1	7.5	3.3	3.2	7.5	3.0	12.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	1.3	6.8	4.9	3.7	0.7	6.8	8.5	8.6	1.1	7.4	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.5	36.5	48.5	51.9	35.6	33.1	53.0	31.6	31.6	60.0	40.5	51.6
LnGrp LOS	D	D	D	D	D	C	D	C	C	E	D	D
Approach Vol, veh/h		624			513			1208			909	
Approach Delay, s/veh		49.0			40.7			39.7			44.9	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	31.4	24.9	36.3	20.0	35.4	11.5	49.7
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	19.5	29.3	20.4	31.0	15.0	33.3	7.0	44.4
Max Q Clear Time (g_c+I1), s	11.9	19.6	16.2	23.4	10.8	10.5	4.1	21.3
Green Ext Time (p_c), s	0.2	1.0	0.7	2.9	0.4	2.0	0.0	4.5

Intersection Summary	
HCM 6th Ctrl Delay	43.1
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	2	89	2	58	148	484	90	98	629	3
Future Volume (veh/h)	0	1	2	89	2	58	148	484	90	98	629	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	3	5	124	3	81	187	613	114	129	828	4
Peak Hour Factor	0.38	0.38	0.38	0.72	0.72	0.72	0.79	0.79	0.79	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	100	34	57	301	9	249	230	1078	200	164	1183	6
Arrive On Green	0.00	0.06	0.06	0.17	0.17	0.17	0.13	0.37	0.37	0.09	0.33	0.33
Sat Flow, veh/h	1767	606	1010	1767	54	1463	1767	2945	546	1767	3597	17
Grp Volume(v), veh/h	0	0	8	124	0	84	187	366	361	129	406	426
Grp Sat Flow(s),veh/h/ln	1767	0	1616	1767	0	1517	1767	1763	1728	1767	1763	1851
Q Serve(g_s), s	0.0	0.0	0.3	4.2	0.0	3.2	6.9	11.1	11.1	4.8	13.4	13.4
Cycle Q Clear(g_c), s	0.0	0.0	0.3	4.2	0.0	3.2	6.9	11.1	11.1	4.8	13.4	13.4
Prop In Lane	1.00		0.63	1.00		0.96	1.00		0.32	1.00		0.01
Lane Grp Cap(c), veh/h	100	0	92	301	0	258	230	646	633	164	580	609
V/C Ratio(X)	0.00	0.00	0.09	0.41	0.00	0.33	0.81	0.57	0.57	0.79	0.70	0.70
Avail Cap(c_a), veh/h	743	0	680	717	0	615	366	871	854	297	805	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	29.8	24.6	0.0	24.3	28.2	16.9	16.9	29.5	19.5	19.5
Incr Delay (d2), s/veh	0.0	0.0	0.6	1.2	0.0	0.9	3.2	1.1	1.2	3.1	2.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.8	0.0	1.2	2.9	4.2	4.1	2.0	5.3	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	30.4	25.8	0.0	25.2	31.4	18.0	18.1	32.7	22.0	21.8
LnGrp LOS	A	A	C	C	A	C	C	B	B	C	C	C
Approach Vol, veh/h		8			208			914			961	
Approach Delay, s/veh		30.4			25.6			20.8			23.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.4	29.5		10.1	12.9	27.0		16.6
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 11	32.9		28.0	* 14	* 30		27.0
Max Q Clear Time (g_c+I1), s	6.2	13.1		2.3	8.9	15.4		6.2
Green Ext Time (p_c), s	0.1	6.1		0.0	0.1	6.5		1.1

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	160	165	2	6	37
Future Vol, veh/h	22	160	165	2	6	37
Peak Hour Factor	0.51	0.51	0.64	0.64	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	43	314	258	3	10	60
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	10.9	9.7	8.3
HCM LOS	B	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	0%	14%
Vol Thru, %	88%	99%	0%
Vol Right, %	0%	1%	86%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	182	167	43
LT Vol	22	0	6
Through Vol	160	165	0
RT Vol	0	2	37
Lane Flow Rate	357	261	69
Geometry Grp	1	1	1
Degree of Util (X)	0.438	0.325	0.093
Departure Headway (Hd)	4.419	4.484	4.813
Convergence, Y/N	Yes	Yes	Yes
Cap	817	801	743
Service Time	2.442	2.509	2.85
HCM Lane V/C Ratio	0.437	0.326	0.093
HCM Control Delay	10.9	9.7	8.3
HCM Lane LOS	B	A	A
HCM 95th-tile Q	2.2	1.4	0.3

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	70	76	54	106	11	32	0	18	13	2	31
Future Vol, veh/h	9	70	76	54	106	11	32	0	18	13	2	31
Peak Hour Factor	0.50	0.50	0.50	0.57	0.57	0.57	0.85	0.85	0.85	0.80	0.80	0.80
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	18	140	152	95	186	19	38	0	21	16	3	39
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	9.9	10.5	9.2	8.7
HCM LOS	A	B	A	A

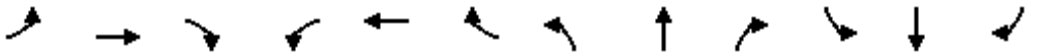
Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	6%	32%	28%
Vol Thru, %	0%	0%	45%	62%	4%
Vol Right, %	0%	100%	49%	6%	67%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	32	18	155	171	46
LT Vol	32	0	9	54	13
Through Vol	0	0	70	106	2
RT Vol	0	18	76	11	31
Lane Flow Rate	38	21	310	300	58
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.068	0.031	0.372	0.385	0.082
Departure Headway (Hd)	6.472	5.256	4.323	4.618	5.148
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	551	676	831	777	691
Service Time	4.243	3.026	2.363	2.66	3.219
HCM Lane V/C Ratio	0.069	0.031	0.373	0.386	0.084
HCM Control Delay	9.7	8.2	9.9	10.5	8.7
HCM Lane LOS	A	A	A	B	A
HCM 95th-tile Q	0.2	0.1	1.7	1.8	0.3

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	89	11	9	1	22	10	3	3	0	12	8	142
Future Vol, veh/h	89	11	9	1	22	10	3	3	0	12	8	142
Peak Hour Factor	0.40	0.40	0.40	0.31	0.31	0.31	0.38	0.38	0.38	0.62	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	223	28	23	3	71	32	8	8	0	19	13	229
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.6	8.6	8.5	9.5
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	50%	82%	3%	7%
Vol Thru, %	50%	10%	67%	5%
Vol Right, %	0%	8%	30%	88%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	109	33	162
LT Vol	3	89	1	12
Through Vol	3	11	22	8
RT Vol	0	9	10	142
Lane Flow Rate	16	272	106	261
Geometry Grp	1	1	1	1
Degree of Util (X)	0.023	0.365	0.14	0.318
Departure Headway (Hd)	5.293	4.817	4.738	4.376
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	672	744	752	818
Service Time	3.358	2.868	2.798	2.416
HCM Lane V/C Ratio	0.024	0.366	0.141	0.319
HCM Control Delay	8.5	10.6	8.6	9.5
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.1	1.7	0.5	1.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	530	167	243	304	16	219	223	359	13	163	114
Future Volume (veh/h)	187	530	167	243	304	16	219	223	359	13	163	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	205	582	184	251	313	16	231	235	378	14	173	121
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.95	0.95	0.95	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	279	1044	452	439	906	46	302	1192	718	71	585	382
Arrive On Green	0.16	0.30	0.30	0.13	0.27	0.27	0.09	0.34	0.34	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1526	3428	3407	173	3428	3526	1530	1767	2016	1318
Grp Volume(v), veh/h	205	582	184	251	161	168	231	235	378	14	150	144
Grp Sat Flow(s),veh/h/ln	1767	1763	1526	1714	1763	1818	1714	1763	1530	1767	1763	1571
Q Serve(g_s), s	11.0	13.9	9.6	6.9	7.4	7.5	6.6	4.7	17.5	0.8	6.6	7.2
Cycle Q Clear(g_c), s	11.0	13.9	9.6	6.9	7.4	7.5	6.6	4.7	17.5	0.8	6.6	7.2
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		0.84
Lane Grp Cap(c), veh/h	279	1044	452	439	469	484	302	1192	718	71	511	456
V/C Ratio(X)	0.73	0.56	0.41	0.57	0.34	0.35	0.77	0.20	0.53	0.20	0.29	0.32
Avail Cap(c_a), veh/h	279	1047	453	439	488	504	302	1192	718	71	511	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	0.61	0.61	0.61	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	29.7	28.2	41.0	29.6	29.7	44.6	23.5	18.9	46.4	27.5	27.8
Incr Delay (d2), s/veh	15.7	2.2	2.7	5.2	1.9	1.9	10.8	0.2	1.7	6.2	1.5	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	6.0	3.8	3.1	3.3	3.4	3.2	2.0	6.2	0.5	2.9	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	31.8	30.9	46.2	31.6	31.6	55.4	23.7	20.6	52.6	29.0	29.6
LnGrp LOS	E	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		971			580			844			308	
Approach Delay, s/veh		36.7			37.9			31.0			30.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	35.9	13.0	34.1	20.0	32.9	8.2	38.9
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 13	29.7	* 8.8	* 29	* 16	* 28	* 4	33.7
Max Q Clear Time (g_c+I1), s	8.9	15.9	8.6	9.2	13.0	9.5	2.8	19.5
Green Ext Time (p_c), s	0.2	5.1	0.0	2.4	0.1	2.1	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	34.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	895	22	106	616	22	108
Future Volume (veh/h)	895	22	106	616	22	108
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	923	23	114	662	31	152
Peak Hour Factor	0.97	0.97	0.93	0.93	0.71	0.71
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1461	36	150	2105	252	224
Arrive On Green	0.42	0.42	0.08	0.60	0.14	0.14
Sat Flow, veh/h	3603	87	1767	3618	1767	1572
Grp Volume(v), veh/h	463	483	114	662	31	152
Grp Sat Flow(s),veh/h/ln	1763	1835	1767	1763	1767	1572
Q Serve(g_s), s	9.1	9.1	2.8	4.1	0.7	4.0
Cycle Q Clear(g_c), s	9.1	9.1	2.8	4.1	0.7	4.0
Prop In Lane		0.05	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	734	764	150	2105	252	224
V/C Ratio(X)	0.63	0.63	0.76	0.31	0.12	0.68
Avail Cap(c_a), veh/h	2243	2335	678	6257	1288	1146
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.1	10.1	19.6	4.4	16.4	17.8
Incr Delay (d2), s/veh	0.9	0.9	7.7	0.1	0.2	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.6	1.3	0.7	0.3	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.0	11.0	27.3	4.5	16.6	21.4
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	946			776	183	
Approach Delay, s/veh	11.0			7.8	20.6	
Approach LOS	B			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.9	24.5				32.4	11.3
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 13	55.7				* 78	31.9
Max Q Clear Time (g_c+I1), s	4.8	11.1				6.1	6.0
Green Ext Time (p_c), s	0.2	6.7				4.9	0.6

Intersection Summary	
HCM 6th Ctrl Delay	10.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	337	224	237	74	126	31	296	446	113	55	403	211
Future Volume (veh/h)	337	224	237	74	126	31	296	446	113	55	403	211
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	359	238	252	84	143	35	333	501	127	58	424	222
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	632	770	331	214	530	226	571	1038	262	165	1085	468
Arrive On Green	0.18	0.22	0.22	0.12	0.15	0.15	0.16	0.37	0.37	0.09	0.31	0.31
Sat Flow, veh/h	3428	3526	1517	1767	3526	1500	3565	2771	698	1767	3526	1521
Grp Volume(v), veh/h	359	238	252	84	143	35	333	318	310	58	424	222
Grp Sat Flow(s),veh/h/ln	1714	1763	1517	1767	1763	1500	1783	1763	1706	1767	1763	1521
Q Serve(g_s), s	9.8	5.8	16.0	4.5	3.7	2.1	8.9	14.1	14.3	3.2	9.7	12.2
Cycle Q Clear(g_c), s	9.8	5.8	16.0	4.5	3.7	2.1	8.9	14.1	14.3	3.2	9.7	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	632	770	331	214	530	226	571	661	639	165	1085	468
V/C Ratio(X)	0.57	0.31	0.76	0.39	0.27	0.16	0.58	0.48	0.49	0.35	0.39	0.47
Avail Cap(c_a), veh/h	632	1352	582	214	1113	473	571	661	639	165	1085	468
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.3	33.7	37.7	41.7	38.7	38.1	40.1	24.6	24.6	43.8	28.0	28.9
Incr Delay (d2), s/veh	3.7	0.2	3.6	5.3	0.3	0.3	4.3	2.5	2.6	5.8	1.1	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	2.5	6.1	2.2	1.6	0.8	4.1	6.1	6.0	1.6	4.1	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.9	34.0	41.3	47.0	39.0	38.4	44.4	27.0	27.2	49.6	29.1	32.3
LnGrp LOS	D	C	D	D	D	D	D	C	C	D	C	C
Approach Vol, veh/h		849			262			961			704	
Approach Delay, s/veh		39.5			41.5			33.1			31.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	28.0	21.0	37.0	24.0	21.0	14.1	43.9
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	12.5	39.5	16.5	31.7	19.0	32.5	9.6	38.6
Max Q Clear Time (g_c+I1), s	10.5	18.0	10.9	14.2	11.8	5.7	5.2	16.3
Green Ext Time (p_c), s	0.1	2.2	0.6	3.2	0.7	0.9	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	1	8	130	1	82	18	831	145	96	648	2
Future Volume (veh/h)	14	1	8	130	1	82	18	831	145	96	648	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	19	1	11	178	1	112	20	944	165	102	689	2
Peak Hour Factor	0.72	0.72	0.72	0.73	0.73	0.73	0.88	0.88	0.88	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	166	12	130	284	2	240	32	1199	209	130	1652	5
Arrive On Green	0.09	0.09	0.09	0.16	0.16	0.16	0.02	0.40	0.40	0.07	0.46	0.46
Sat Flow, veh/h	1767	126	1390	1767	13	1493	1767	2975	520	1767	3605	10
Grp Volume(v), veh/h	19	0	12	178	0	113	20	559	550	102	337	354
Grp Sat Flow(s),veh/h/ln	1767	0	1516	1767	0	1506	1767	1763	1732	1767	1763	1853
Q Serve(g_s), s	0.8	0.0	0.6	7.3	0.0	5.3	0.9	21.5	21.6	4.4	9.9	9.9
Cycle Q Clear(g_c), s	0.8	0.0	0.6	7.3	0.0	5.3	0.9	21.5	21.6	4.4	9.9	9.9
Prop In Lane	1.00		0.92	1.00		0.99	1.00		0.30	1.00		0.01
Lane Grp Cap(c), veh/h	166	0	142	284	0	242	32	710	698	130	808	849
V/C Ratio(X)	0.11	0.00	0.08	0.63	0.00	0.47	0.63	0.79	0.79	0.79	0.42	0.42
Avail Cap(c_a), veh/h	637	0	547	616	0	525	132	840	825	159	869	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	0.0	32.2	30.4	0.0	29.6	37.9	20.3	20.3	35.4	14.1	14.1
Incr Delay (d2), s/veh	0.4	0.0	0.4	2.9	0.0	1.8	7.3	4.8	4.9	14.9	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.2	3.3	0.0	2.0	0.4	8.9	8.8	2.4	3.7	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	0.0	32.5	33.3	0.0	31.4	45.2	25.1	25.2	50.3	14.6	14.6
LnGrp LOS	C	A	C	C	A	C	D	C	C	D	B	B
Approach Vol, veh/h		31			291			1129			793	
Approach Delay, s/veh		32.6			32.6			25.5			19.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	36.4		13.6	5.6	40.7		17.8
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 5	37.0		28.0	* 5.8	* 38		27.1
Max Q Clear Time (g_c+I1), s	10.4	23.6		2.8	2.9	11.9		9.3
Green Ext Time (p_c), s	0.0	7.7		0.1	0.0	6.9		1.5

Intersection Summary		
HCM 6th Ctrl Delay	24.3	
HCM 6th LOS	C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	46	182	157	6	6	21
Future Vol, veh/h	46	182	157	6	6	21
Peak Hour Factor	0.79	0.79	0.79	0.79	0.81	0.81
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	58	230	199	8	7	26
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.4	8.7	7.8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	0%	22%
Vol Thru, %	80%	96%	0%
Vol Right, %	0%	4%	78%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	228	163	27
LT Vol	46	0	6
Through Vol	182	157	0
RT Vol	0	6	21
Lane Flow Rate	289	206	33
Geometry Grp	1	1	1
Degree of Util (X)	0.337	0.241	0.043
Departure Headway (Hd)	4.205	4.205	4.599
Convergence, Y/N	Yes	Yes	Yes
Cap	846	840	783
Service Time	2.281	2.301	2.599
HCM Lane V/C Ratio	0.342	0.245	0.042
HCM Control Delay	9.4	8.7	7.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.5	0.9	0.1

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	71	101	45	59	14	92	2	40	14	2	13
Future Vol, veh/h	21	71	101	45	59	14	92	2	40	14	2	13
Peak Hour Factor	0.87	0.87	0.87	0.80	0.80	0.80	0.68	0.68	0.68	0.70	0.70	0.70
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	82	116	56	74	18	135	3	59	20	3	19
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	9.2	9.1	9.7	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	98%	0%	11%	38%	48%
Vol Thru, %	2%	0%	37%	50%	7%
Vol Right, %	0%	100%	52%	12%	45%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	94	40	193	118	29
LT Vol	92	0	21	45	14
Through Vol	2	0	71	59	2
RT Vol	0	40	101	14	13
Lane Flow Rate	138	59	222	148	41
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.228	0.077	0.276	0.198	0.058
Departure Headway (Hd)	5.932	4.732	4.473	4.844	5.014
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	603	752	801	738	708
Service Time	3.693	2.493	2.514	2.892	3.088
HCM Lane V/C Ratio	0.229	0.078	0.277	0.201	0.058
HCM Control Delay	10.5	7.9	9.2	9.1	8.4
HCM Lane LOS	B	A	A	A	A
HCM 95th-tile Q	0.9	0.2	1.1	0.7	0.2

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

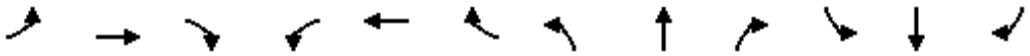
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	99	3	15	1	10	13	13	19	0	4	22	110
Future Vol, veh/h	99	3	15	1	10	13	13	19	0	4	22	110
Peak Hour Factor	0.72	0.72	0.72	0.40	0.40	0.40	0.62	0.62	0.62	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	138	4	21	3	25	33	21	31	0	5	29	147
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.9	7.7	8.1	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	41%	85%	4%	3%
Vol Thru, %	59%	3%	42%	16%
Vol Right, %	0%	13%	54%	81%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	32	117	24	136
LT Vol	13	99	1	4
Through Vol	19	3	10	22
RT Vol	0	15	13	110
Lane Flow Rate	52	162	60	181
Geometry Grp	1	1	1	1
Degree of Util (X)	0.068	0.208	0.072	0.204
Departure Headway (Hd)	4.746	4.613	4.33	4.055
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	756	778	827	887
Service Time	2.769	2.637	2.357	2.074
HCM Lane V/C Ratio	0.069	0.208	0.073	0.204
HCM Control Delay	8.1	8.9	7.7	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.8	0.2	0.8

APPENDIX F

EXISTING + CUMULATIVE PROJECTS INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	327	170	268	748	10	240	139	185	8	282	345
Future Volume (veh/h)	110	327	170	268	748	10	240	139	185	8	282	345
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	129	385	200	319	890	12	324	188	250	9	307	375
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.84	0.74	0.74	0.74	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	173	991	429	391	1057	14	401	1294	741	71	511	442
Arrive On Green	0.10	0.28	0.28	0.11	0.30	0.30	0.12	0.37	0.37	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1525	3428	3560	48	3428	3526	1532	1767	1763	1526
Grp Volume(v), veh/h	129	385	200	319	441	461	324	188	250	9	307	375
Grp Sat Flow(s),veh/h/ln	1767	1763	1525	1714	1763	1845	1714	1763	1532	1767	1763	1526
Q Serve(g_s), s	7.1	8.8	10.9	9.1	23.4	23.4	9.2	3.6	10.1	0.5	15.0	23.1
Cycle Q Clear(g_c), s	7.1	8.8	10.9	9.1	23.4	23.4	9.2	3.6	10.1	0.5	15.0	23.1
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	991	429	391	524	548	401	1294	741	71	511	442
V/C Ratio(X)	0.74	0.39	0.47	0.82	0.84	0.84	0.81	0.15	0.34	0.13	0.60	0.85
Avail Cap(c_a), veh/h	173	994	430	391	543	568	401	1294	741	71	511	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.94	0.85	0.85	0.85	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	29.0	29.7	43.3	32.9	32.9	43.1	21.2	16.1	46.3	30.5	33.4
Incr Delay (d2), s/veh	24.9	1.2	3.6	16.1	14.3	13.8	13.8	0.2	1.0	3.7	5.1	17.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.8	4.3	4.6	11.6	12.1	4.6	1.5	3.6	0.3	6.9	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.8	30.2	33.4	59.4	47.3	46.7	56.9	21.4	17.1	50.0	35.7	51.3
LnGrp LOS	E	C	C	E	D	D	E	C	B	D	D	D
Approach Vol, veh/h		714			1221			762			691	
Approach Delay, s/veh		38.0			50.2			35.1			44.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	34.4	15.9	34.1	14.0	36.0	8.2	41.8
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 11	28.2	* 12	* 29	* 9.8	* 31	* 4	36.6
Max Q Clear Time (g_c+I1), s	11.1	12.9	11.2	25.1	9.1	25.4	2.5	12.1
Green Ext Time (p_c), s	0.0	3.9	0.0	2.0	0.0	2.9	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	43.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	553	54	131	646	29	78
Future Volume (veh/h)	553	54	131	646	29	78
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	683	67	166	818	71	190
Peak Hour Factor	0.81	0.81	0.79	0.79	0.41	0.41
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1126	110	222	2010	302	269
Arrive On Green	0.35	0.35	0.13	0.57	0.17	0.17
Sat Flow, veh/h	3320	316	1767	3618	1767	1572
Grp Volume(v), veh/h	373	377	166	818	71	190
Grp Sat Flow(s),veh/h/ln	1763	1781	1767	1763	1767	1572
Q Serve(g_s), s	7.7	7.7	4.0	5.7	1.5	5.0
Cycle Q Clear(g_c), s	7.7	7.7	4.0	5.7	1.5	5.0
Prop In Lane		0.18	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	615	621	222	2010	302	269
V/C Ratio(X)	0.61	0.61	0.75	0.41	0.24	0.71
Avail Cap(c_a), veh/h	1831	1850	996	6065	1361	1211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.8	11.8	18.6	5.3	15.8	17.2
Incr Delay (d2), s/veh	1.0	1.0	4.9	0.1	0.4	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.4	1.6	1.1	0.6	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.8	12.8	23.5	5.4	16.2	20.6
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	750			984	261	
Approach Delay, s/veh	12.8			8.5	19.4	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.7	21.6				31.4	12.6
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 5.5	45.7				* 76	33.9
Max Q Clear Time (g_c+I1), s	6.0	9.7				7.7	7.0
Green Ext Time (p_c), s	0.4	4.9				6.5	0.8

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	231	105	195	133	243	26	343	560	58	33	573	286
Future Volume (veh/h)	231	105	195	133	243	26	343	560	58	33	573	286
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	282	128	238	208	380	41	451	737	76	36	630	314
Peak Hour Factor	0.82	0.82	0.82	0.64	0.64	0.64	0.76	0.76	0.76	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	441	782	328	296	903	381	624	1224	126	106	938	401
Arrive On Green	0.13	0.22	0.22	0.17	0.26	0.26	0.18	0.38	0.38	0.06	0.27	0.27
Sat Flow, veh/h	3428	3526	1476	1767	3526	1487	3565	3214	331	1767	3526	1508
Grp Volume(v), veh/h	282	128	238	208	380	41	451	404	409	36	630	314
Grp Sat Flow(s),veh/h/ln	1714	1763	1476	1767	1763	1487	1783	1763	1783	1767	1763	1508
Q Serve(g_s), s	9.1	3.4	17.4	12.9	10.5	2.5	13.9	21.5	21.5	2.3	18.6	22.5
Cycle Q Clear(g_c), s	9.1	3.4	17.4	12.9	10.5	2.5	13.9	21.5	21.5	2.3	18.6	22.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	441	782	328	296	903	381	624	671	679	106	938	401
V/C Ratio(X)	0.64	0.16	0.73	0.70	0.42	0.11	0.72	0.60	0.60	0.34	0.67	0.78
Avail Cap(c_a), veh/h	441	886	371	296	1007	425	624	671	679	106	938	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.2	36.6	42.1	45.8	36.1	33.2	45.4	29.0	29.0	52.6	38.2	39.7
Incr Delay (d2), s/veh	6.9	0.1	6.1	13.2	0.3	0.1	7.1	4.0	3.9	8.5	3.8	14.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	1.5	6.8	6.7	4.5	0.9	6.6	9.5	9.6	1.2	8.3	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	36.7	48.2	59.0	36.5	33.3	52.5	32.9	32.9	61.0	42.1	53.8
LnGrp LOS	E	D	D	E	D	C	D	C	C	E	D	D
Approach Vol, veh/h		648			629			1264			980	
Approach Delay, s/veh		48.9			43.7			39.9			46.5	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	31.4	24.9	36.3	20.0	35.4	11.5	49.7
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	19.5	29.3	20.4	31.0	15.0	33.3	7.0	44.4
Max Q Clear Time (g_c+I1), s	11.1	19.4	15.9	24.5	11.1	12.5	4.3	23.5
Green Ext Time (p_c), s	0.2	1.1	0.7	2.8	0.3	2.5	0.0	4.8

Intersection Summary	
HCM 6th Ctrl Delay	44.1
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	2	77	2	50	148	541	69	82	738	3
Future Volume (veh/h)	0	1	2	77	2	50	148	541	69	82	738	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	3	5	107	3	69	187	685	87	108	971	4
Peak Hour Factor	0.38	0.38	0.38	0.72	0.72	0.72	0.79	0.79	0.79	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	100	34	57	284	10	234	229	1278	162	138	1286	5
Arrive On Green	0.00	0.06	0.06	0.16	0.16	0.16	0.13	0.41	0.41	0.08	0.36	0.36
Sat Flow, veh/h	1767	605	1009	1767	63	1453	1767	3130	397	1767	3600	15
Grp Volume(v), veh/h	0	0	8	107	0	72	187	385	387	108	475	500
Grp Sat Flow(s),veh/h/ln	1767	0	1614	1767	0	1516	1767	1763	1764	1767	1763	1852
Q Serve(g_s), s	0.0	0.0	0.3	3.8	0.0	3.0	7.3	11.7	11.7	4.2	16.8	16.8
Cycle Q Clear(g_c), s	0.0	0.0	0.3	3.8	0.0	3.0	7.3	11.7	11.7	4.2	16.8	16.8
Prop In Lane	1.00		0.63	1.00		0.96	1.00		0.23	1.00		0.01
Lane Grp Cap(c), veh/h	100	0	91	284	0	244	229	720	720	138	630	662
V/C Ratio(X)	0.00	0.00	0.09	0.38	0.00	0.30	0.82	0.54	0.54	0.78	0.76	0.76
Avail Cap(c_a), veh/h	701	0	640	676	0	580	346	822	822	280	759	798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	31.6	26.5	0.0	26.1	29.9	15.8	15.8	31.9	20.0	20.0
Incr Delay (d2), s/veh	0.0	0.0	0.6	1.1	0.0	0.9	5.2	0.9	0.9	3.6	4.3	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.7	0.0	1.1	3.2	4.4	4.4	1.9	6.9	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	32.2	27.5	0.0	26.9	35.1	16.7	16.7	35.5	24.3	24.1
LnGrp LOS	A	A	C	C	A	C	D	B	B	D	C	C
Approach Vol, veh/h		8			179			959			1083	
Approach Delay, s/veh		32.2			27.3			20.3			25.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.7	33.9		10.3	13.3	30.3		16.6
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 11	32.9		28.0	* 14	* 30		27.0
Max Q Clear Time (g_c+I1), s	6.2	13.7		2.3	9.3	18.8		5.8
Green Ext Time (p_c), s	0.0	6.4		0.0	0.1	6.5		0.9

Intersection Summary		
HCM 6th Ctrl Delay	23.3	
HCM 6th LOS	C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	146	172	2	5	37
Future Vol, veh/h	22	146	172	2	5	37
Peak Hour Factor	0.51	0.51	0.64	0.64	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	43	286	269	3	8	60
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	10.4	9.7	8.3
HCM LOS	B	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	0%	12%
Vol Thru, %	87%	99%	0%
Vol Right, %	0%	1%	88%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	168	174	42
LT Vol	22	0	5
Through Vol	146	172	0
RT Vol	0	2	37
Lane Flow Rate	329	272	68
Geometry Grp	1	1	1
Degree of Util (X)	0.405	0.336	0.09
Departure Headway (Hd)	4.426	4.452	4.76
Convergence, Y/N	Yes	Yes	Yes
Cap	814	807	752
Service Time	2.448	2.474	2.795
HCM Lane V/C Ratio	0.404	0.337	0.09
HCM Control Delay	10.4	9.7	8.3
HCM Lane LOS	B	A	A
HCM 95th-tile Q	2	1.5	0.3

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	83	45	35	126	11	14	0	6	13	1	31
Future Vol, veh/h	9	83	45	35	126	11	14	0	6	13	1	31
Peak Hour Factor	0.50	0.50	0.50	0.57	0.57	0.57	0.85	0.85	0.85	0.80	0.80	0.80
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	18	166	90	61	221	19	16	0	7	16	1	39
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	9.4	10.1	8.9	8.5
HCM LOS	A	B	A	A

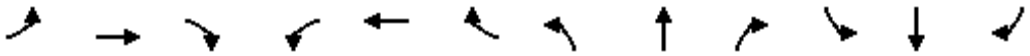
Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	7%	20%	29%
Vol Thru, %	0%	0%	61%	73%	2%
Vol Right, %	0%	100%	33%	6%	69%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	14	6	137	172	45
LT Vol	14	0	9	35	13
Through Vol	0	0	83	126	1
RT Vol	0	6	45	11	31
Lane Flow Rate	16	7	274	302	56
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.029	0.01	0.327	0.373	0.078
Departure Headway (Hd)	6.388	5.173	4.299	4.445	4.993
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	560	690	836	812	716
Service Time	4.137	2.921	2.322	2.468	3.037
HCM Lane V/C Ratio	0.029	0.01	0.328	0.372	0.078
HCM Control Delay	9.3	8	9.4	10.1	8.5
HCM Lane LOS	A	A	A	B	A
HCM 95th-tile Q	0.1	0	1.4	1.7	0.3

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	90	13	11	1	26	12	4	4	0	14	10	140
Future Vol, veh/h	90	13	11	1	26	12	4	4	0	14	10	140
Peak Hour Factor	0.40	0.40	0.40	0.31	0.31	0.31	0.38	0.38	0.38	0.62	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	225	33	28	3	84	39	11	11	0	23	16	226
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11	8.8	8.6	9.7
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	50%	79%	3%	9%
Vol Thru, %	50%	11%	67%	6%
Vol Right, %	0%	10%	31%	85%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	8	114	39	164
LT Vol	4	90	1	14
Through Vol	4	13	26	10
RT Vol	0	11	12	140
Lane Flow Rate	21	285	126	265
Geometry Grp	1	1	1	1
Degree of Util (X)	0.031	0.385	0.167	0.329
Departure Headway (Hd)	5.384	4.858	4.784	4.473
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	659	735	744	799
Service Time	3.464	2.918	2.854	2.524
HCM Lane V/C Ratio	0.032	0.388	0.169	0.332
HCM Control Delay	8.6	11	8.8	9.7
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.1	1.8	0.6	1.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	577	176	260	336	17	229	301	384	15	202	129
Future Volume (veh/h)	217	577	176	260	336	17	229	301	384	15	202	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	238	634	193	268	346	18	241	317	404	16	215	137
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.95	0.95	0.95	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	279	1044	452	439	905	47	302	1192	718	71	605	366
Arrive On Green	0.16	0.30	0.30	0.13	0.27	0.27	0.09	0.34	0.34	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1526	3428	3404	176	3428	3526	1530	1767	2085	1261
Grp Volume(v), veh/h	238	634	193	268	178	186	241	317	404	16	180	172
Grp Sat Flow(s),veh/h/ln	1767	1763	1526	1714	1763	1817	1714	1763	1530	1767	1763	1583
Q Serve(g_s), s	13.1	15.4	10.2	7.4	8.3	8.3	6.9	6.5	19.2	0.9	8.1	8.7
Cycle Q Clear(g_c), s	13.1	15.4	10.2	7.4	8.3	8.3	6.9	6.5	19.2	0.9	8.1	8.7
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		0.80
Lane Grp Cap(c), veh/h	279	1044	452	439	469	483	302	1192	718	71	511	459
V/C Ratio(X)	0.85	0.61	0.43	0.61	0.38	0.38	0.80	0.27	0.56	0.23	0.35	0.37
Avail Cap(c_a), veh/h	279	1047	453	439	488	503	302	1192	718	71	511	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	0.51	0.51	0.51	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	30.2	28.4	41.2	30.0	30.0	44.7	24.1	19.4	46.5	28.1	28.3
Incr Delay (d2), s/veh	26.6	2.6	2.9	6.0	2.3	2.2	10.8	0.3	1.6	7.3	1.9	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	6.7	4.0	3.4	3.7	3.8	3.3	2.7	6.8	0.5	3.6	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.6	32.8	31.3	47.3	32.2	32.2	55.5	24.4	21.0	53.8	30.0	30.6
LnGrp LOS	E	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		1065			632			962			368	
Approach Delay, s/veh		40.3			38.6			30.8			31.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	35.9	13.0	34.1	20.0	32.9	8.2	38.9
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 13	29.7	* 8.8	* 29	* 16	* 28	* 4	33.7
Max Q Clear Time (g_c+I1), s	9.4	17.4	8.9	10.7	15.1	10.3	2.9	21.2
Green Ext Time (p_c), s	0.2	5.2	0.0	2.9	0.0	2.3	0.0	4.1

Intersection Summary	
HCM 6th Ctrl Delay	35.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	958	31	97	657	30	95
Future Volume (veh/h)	958	31	97	657	30	95
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	988	32	104	706	42	134
Peak Hour Factor	0.97	0.97	0.93	0.93	0.71	0.71
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1525	49	136	2145	244	217
Arrive On Green	0.44	0.44	0.08	0.61	0.14	0.14
Sat Flow, veh/h	3573	113	1767	3618	1767	1572
Grp Volume(v), veh/h	500	520	104	706	42	134
Grp Sat Flow(s),veh/h/ln	1763	1830	1767	1763	1767	1572
Q Serve(g_s), s	10.0	10.0	2.6	4.4	0.9	3.6
Cycle Q Clear(g_c), s	10.0	10.0	2.6	4.4	0.9	3.6
Prop In Lane		0.06	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	772	802	136	2145	244	217
V/C Ratio(X)	0.65	0.65	0.76	0.33	0.17	0.62
Avail Cap(c_a), veh/h	2181	2264	659	6085	1252	1114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.9	9.9	20.4	4.3	17.1	18.3
Incr Delay (d2), s/veh	0.9	0.9	8.6	0.1	0.3	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	2.9	1.2	0.7	0.4	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.8	10.8	28.9	4.4	17.5	21.1
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	1020			810	176	
Approach Delay, s/veh	10.8			7.6	20.2	
Approach LOS	B			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.7	26.0				33.7	11.3
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 13	55.7				* 78	31.9
Max Q Clear Time (g_c+I1), s	4.6	12.0				6.4	5.6
Green Ext Time (p_c), s	0.2	7.5				5.3	0.5

Intersection Summary		
HCM 6th Ctrl Delay		10.3
HCM 6th LOS		B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	269	229	91	146	35	291	505	143	61	440	219
Future Volume (veh/h)	350	269	229	91	146	35	291	505	143	61	440	219
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	372	286	244	103	166	40	327	567	161	64	463	231
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	634	764	328	215	523	223	573	1012	286	165	1088	469
Arrive On Green	0.18	0.22	0.22	0.12	0.15	0.15	0.16	0.38	0.38	0.09	0.31	0.31
Sat Flow, veh/h	3428	3526	1517	1767	3526	1500	3565	2693	762	1767	3526	1522
Grp Volume(v), veh/h	372	286	244	103	166	40	327	370	358	64	463	231
Grp Sat Flow(s),veh/h/ln	1714	1763	1517	1767	1763	1500	1783	1763	1692	1767	1763	1522
Q Serve(g_s), s	10.2	7.1	15.4	5.6	4.3	2.4	8.7	17.1	17.2	3.5	10.7	12.7
Cycle Q Clear(g_c), s	10.2	7.1	15.4	5.6	4.3	2.4	8.7	17.1	17.2	3.5	10.7	12.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	634	764	328	215	523	223	573	662	636	165	1088	469
V/C Ratio(X)	0.59	0.37	0.74	0.48	0.32	0.18	0.57	0.56	0.56	0.39	0.43	0.49
Avail Cap(c_a), veh/h	634	1355	583	215	1115	474	573	662	636	165	1088	469
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.3	34.3	37.6	42.1	39.1	38.3	39.9	25.4	25.4	43.8	28.3	29.0
Incr Delay (d2), s/veh	3.9	0.3	3.3	7.5	0.3	0.4	4.1	3.4	3.6	6.7	1.2	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	3.0	5.8	2.8	1.8	0.9	4.0	7.4	7.2	1.8	4.6	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.2	34.6	40.9	49.6	39.4	38.7	44.0	28.7	29.0	50.5	29.5	32.6
LnGrp LOS	D	C	D	D	D	D	D	C	C	D	C	C
Approach Vol, veh/h		902			309			1055			758	
Approach Delay, s/veh		39.5			42.7			33.5			32.2	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	27.8	21.0	37.0	24.0	20.8	14.1	43.9
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	12.5	39.5	16.5	31.7	19.0	32.5	9.6	38.6
Max Q Clear Time (g_c+I1), s	7.6	17.4	10.7	14.7	12.2	6.3	5.5	19.2
Green Ext Time (p_c), s	0.1	2.5	0.6	3.4	0.8	1.1	0.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay	35.9
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	1	8	107	1	66	18	961	125	81	728	2
Future Volume (veh/h)	14	1	8	107	1	66	18	961	125	81	728	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	19	1	11	147	1	90	20	1092	142	86	774	2
Peak Hour Factor	0.72	0.72	0.72	0.73	0.73	0.73	0.88	0.88	0.88	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	165	12	130	265	2	223	32	1332	173	110	1700	4
Arrive On Green	0.09	0.09	0.09	0.15	0.15	0.15	0.02	0.43	0.43	0.06	0.47	0.47
Sat Flow, veh/h	1767	126	1390	1767	17	1487	1767	3119	405	1767	3607	9
Grp Volume(v), veh/h	19	0	12	147	0	91	20	616	618	86	378	398
Grp Sat Flow(s),veh/h/ln	1767	0	1516	1767	0	1503	1767	1763	1760	1767	1763	1853
Q Serve(g_s), s	0.8	0.0	0.6	6.0	0.0	4.3	0.9	24.1	24.2	3.8	11.3	11.3
Cycle Q Clear(g_c), s	0.8	0.0	0.6	6.0	0.0	4.3	0.9	24.1	24.2	3.8	11.3	11.3
Prop In Lane	1.00		0.92	1.00		0.99	1.00		0.23	1.00		0.01
Lane Grp Cap(c), veh/h	165	0	142	265	0	225	32	753	752	110	831	874
V/C Ratio(X)	0.11	0.00	0.08	0.55	0.00	0.40	0.63	0.82	0.82	0.78	0.46	0.46
Avail Cap(c_a), veh/h	632	0	542	612	0	521	131	833	832	158	863	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	32.4	30.8	0.0	30.1	38.2	19.7	19.8	36.2	13.9	13.9
Incr Delay (d2), s/veh	0.4	0.0	0.4	2.3	0.0	1.5	7.3	6.4	6.6	8.7	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.2	2.7	0.0	1.6	0.4	10.2	10.3	1.8	4.2	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	32.8	33.2	0.0	31.6	45.5	26.1	26.3	44.8	14.5	14.5
LnGrp LOS	C	A	C	C	A	C	D	C	C	D	B	B
Approach Vol, veh/h		31			238			1254			862	
Approach Delay, s/veh		32.9			32.6			26.5			17.5	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	38.5		13.6	5.6	42.0		17.0
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 5	37.0		28.0	* 5.8	* 38		27.1
Max Q Clear Time (g_c+I1), s	5.8	26.2		2.8	2.9	13.3		8.0
Green Ext Time (p_c), s	0.0	7.2		0.1	0.0	7.8		1.2

Intersection Summary		
HCM 6th Ctrl Delay	24.0	
HCM 6th LOS	C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	46	174	140	5	5	21
Future Vol, veh/h	46	174	140	5	5	21
Peak Hour Factor	0.79	0.79	0.79	0.79	0.81	0.81
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	58	220	177	6	6	26
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.3	8.4	7.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	21%	0%	19%
Vol Thru, %	79%	97%	0%
Vol Right, %	0%	3%	81%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	220	145	26
LT Vol	46	0	5
Through Vol	174	140	0
RT Vol	0	5	21
Lane Flow Rate	278	184	32
Geometry Grp	1	1	1
Degree of Util (X)	0.324	0.214	0.04
Departure Headway (Hd)	4.188	4.197	4.505
Convergence, Y/N	Yes	Yes	Yes
Cap	849	842	800
Service Time	2.254	2.285	2.505
HCM Lane V/C Ratio	0.327	0.219	0.04
HCM Control Delay	9.3	8.4	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.4	0.8	0.1

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	84	77	28	70	14	62	1	18	14	1	13
Future Vol, veh/h	21	84	77	28	70	14	62	1	18	14	1	13
Peak Hour Factor	0.87	0.87	0.87	0.80	0.80	0.80	0.68	0.68	0.68	0.70	0.70	0.70
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	97	89	35	88	18	91	1	26	20	1	19
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.8	8.6	9.2	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	98%	0%	12%	25%	50%
Vol Thru, %	2%	0%	46%	62%	4%
Vol Right, %	0%	100%	42%	12%	46%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	63	18	182	112	28
LT Vol	62	0	21	28	14
Through Vol	1	0	84	70	1
RT Vol	0	18	77	14	13
Lane Flow Rate	93	26	209	140	40
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.151	0.034	0.25	0.178	0.054
Departure Headway (Hd)	5.866	4.665	4.31	4.581	4.83
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	611	766	835	783	739
Service Time	3.606	2.405	2.334	2.61	2.875
HCM Lane V/C Ratio	0.152	0.034	0.25	0.179	0.054
HCM Control Delay	9.7	7.6	8.8	8.6	8.2
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0.1	1	0.6	0.2

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

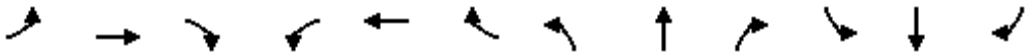
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	88	4	18	1	12	16	16	23	0	5	26	104
Future Vol, veh/h	88	4	18	1	12	16	16	23	0	5	26	104
Peak Hour Factor	0.72	0.72	0.72	0.40	0.40	0.40	0.62	0.62	0.62	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	122	6	25	3	30	40	26	37	0	7	35	139
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.8	7.8	8.2	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	41%	80%	3%	4%
Vol Thru, %	59%	4%	41%	19%
Vol Right, %	0%	16%	55%	77%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	39	110	29	135
LT Vol	16	88	1	5
Through Vol	23	4	12	26
RT Vol	0	18	16	104
Lane Flow Rate	63	153	72	180
Geometry Grp	1	1	1	1
Degree of Util (X)	0.083	0.196	0.087	0.205
Departure Headway (Hd)	4.753	4.627	4.342	4.099
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	755	776	825	877
Service Time	2.776	2.651	2.369	2.117
HCM Lane V/C Ratio	0.083	0.197	0.087	0.205
HCM Control Delay	8.2	8.8	7.8	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.7	0.3	0.8

APPENDIX G

EXISTING + CUMULATIVE PROJECTS + PROJECT INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	327	183	268	748	10	246	141	185	8	285	345
Future Volume (veh/h)	110	327	183	268	748	10	246	141	185	8	285	345
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	129	385	215	319	890	12	332	191	250	9	310	375
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.84	0.74	0.74	0.74	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	173	991	429	391	1057	14	401	1294	741	71	511	442
Arrive On Green	0.10	0.28	0.28	0.11	0.30	0.30	0.12	0.37	0.37	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1525	3428	3560	48	3428	3526	1532	1767	1763	1526
Grp Volume(v), veh/h	129	385	215	319	441	461	332	191	250	9	310	375
Grp Sat Flow(s),veh/h/ln	1767	1763	1525	1714	1763	1845	1714	1763	1532	1767	1763	1526
Q Serve(g_s), s	7.1	8.8	11.8	9.1	23.4	23.4	9.5	3.6	10.1	0.5	15.2	23.1
Cycle Q Clear(g_c), s	7.1	8.8	11.8	9.1	23.4	23.4	9.5	3.6	10.1	0.5	15.2	23.1
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	991	429	391	524	548	401	1294	741	71	511	442
V/C Ratio(X)	0.74	0.39	0.50	0.82	0.84	0.84	0.83	0.15	0.34	0.13	0.61	0.85
Avail Cap(c_a), veh/h	173	994	430	391	543	568	401	1294	741	71	511	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.94	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	29.0	30.1	43.3	32.9	32.9	43.2	21.2	16.1	46.3	30.6	33.4
Incr Delay (d2), s/veh	24.9	1.2	4.2	16.1	14.3	13.8	14.8	0.2	1.0	3.7	5.3	17.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.8	4.7	4.6	11.6	12.1	4.8	1.5	3.6	0.3	7.0	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.8	30.2	34.2	59.4	47.3	46.7	58.0	21.4	17.1	50.0	35.9	51.3
LnGrp LOS	E	C	C	E	D	D	E	C	B	D	D	D
Approach Vol, veh/h		729			1221			773			694	
Approach Delay, s/veh		38.2			50.2			35.7			44.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	34.4	15.9	34.1	14.0	36.0	8.2	41.8
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 11	28.2	* 12	* 29	* 9.8	* 31	* 4	36.6
Max Q Clear Time (g_c+I1), s	11.1	13.8	11.5	25.1	9.1	25.4	2.5	12.1
Green Ext Time (p_c), s	0.0	3.9	0.0	2.0	0.0	2.9	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	43.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	553	56	153	646	30	90
Future Volume (veh/h)	553	56	153	646	30	90
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.95	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	683	69	194	818	73	220
Peak Hour Factor	0.81	0.81	0.79	0.79	0.41	0.41
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1088	110	256	2014	335	298
Arrive On Green	0.34	0.34	0.15	0.57	0.19	0.19
Sat Flow, veh/h	3310	325	1767	3618	1767	1572
Grp Volume(v), veh/h	374	378	194	818	73	220
Grp Sat Flow(s),veh/h/ln	1763	1779	1767	1763	1767	1572
Q Serve(g_s), s	8.5	8.5	5.0	6.2	1.7	6.3
Cycle Q Clear(g_c), s	8.5	8.5	5.0	6.2	1.7	6.3
Prop In Lane		0.18	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	596	602	256	2014	335	298
V/C Ratio(X)	0.63	0.63	0.76	0.41	0.22	0.74
Avail Cap(c_a), veh/h	1690	1705	919	5598	1257	1118
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	13.3	19.6	5.7	16.3	18.2
Incr Delay (d2), s/veh	1.1	1.1	4.5	0.1	0.3	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	2.8	2.1	1.3	0.6	2.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.3	14.3	24.1	5.8	16.7	21.8
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	752			1012	293	
Approach Delay, s/veh	14.3			9.3	20.5	
Approach LOS	B			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	11.1	22.4				33.5	14.1
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 6.9	45.7				* 76	33.9
Max Q Clear Time (g_c+I1), s	7.0	10.5				8.2	8.3
Green Ext Time (p_c), s	0.5	4.9				6.5	0.9

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	107	203	133	246	26	359	560	58	33	573	289
Future Volume (veh/h)	233	107	203	133	246	26	359	560	58	33	573	289
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	284	130	248	208	384	41	472	737	76	36	630	318
Peak Hour Factor	0.82	0.82	0.82	0.64	0.64	0.64	0.76	0.76	0.76	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	440	790	331	295	911	384	622	1221	126	106	935	400
Arrive On Green	0.13	0.22	0.22	0.17	0.26	0.26	0.17	0.38	0.38	0.06	0.27	0.27
Sat Flow, veh/h	3428	3526	1477	1767	3526	1487	3565	3214	331	1767	3526	1508
Grp Volume(v), veh/h	284	130	248	208	384	41	472	404	409	36	630	318
Grp Sat Flow(s),veh/h/ln	1714	1763	1477	1767	1763	1487	1783	1763	1783	1767	1763	1508
Q Serve(g_s), s	9.2	3.5	18.3	13.0	10.6	2.5	14.7	21.6	21.6	2.3	18.7	23.0
Cycle Q Clear(g_c), s	9.2	3.5	18.3	13.0	10.6	2.5	14.7	21.6	21.6	2.3	18.7	23.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	440	790	331	295	911	384	622	670	677	106	935	400
V/C Ratio(X)	0.65	0.16	0.75	0.71	0.42	0.11	0.76	0.60	0.60	0.34	0.67	0.80
Avail Cap(c_a), veh/h	440	884	370	295	1004	424	622	670	677	106	935	400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.4	36.5	42.3	46.0	36.1	33.1	45.9	29.2	29.2	52.7	38.4	40.0
Incr Delay (d2), s/veh	7.1	0.1	7.4	13.3	0.3	0.1	8.4	4.0	4.0	8.5	3.9	15.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	1.5	7.2	6.7	4.6	0.9	7.1	9.5	9.7	1.2	8.4	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.5	36.6	49.7	59.3	36.4	33.2	54.3	33.2	33.1	61.3	42.3	55.0
LnGrp LOS	E	D	D	E	D	C	D	C	C	E	D	E
Approach Vol, veh/h		662			633			1285			984	
Approach Delay, s/veh		49.6			43.7			40.9			47.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	31.7	24.9	36.3	20.0	35.7	11.5	49.7
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	19.5	29.3	20.4	31.0	15.0	33.3	7.0	44.4
Max Q Clear Time (g_c+I1), s	15.0	20.3	16.7	25.0	11.2	12.6	4.3	23.6
Green Ext Time (p_c), s	0.2	1.1	0.7	2.7	0.3	2.5	0.0	4.8

Intersection Summary	
HCM 6th Ctrl Delay	44.7
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	2	89	2	58	148	541	90	98	738	3
Future Volume (veh/h)	0	1	2	89	2	58	148	541	90	98	738	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	3	5	124	3	81	187	685	114	129	971	4
Peak Hour Factor	0.38	0.38	0.38	0.72	0.72	0.72	0.79	0.79	0.79	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	100	34	57	286	9	237	229	1182	197	164	1284	5
Arrive On Green	0.00	0.06	0.06	0.16	0.16	0.16	0.13	0.39	0.39	0.09	0.36	0.36
Sat Flow, veh/h	1767	605	1009	1767	54	1460	1767	3004	499	1767	3600	15
Grp Volume(v), veh/h	0	0	8	124	0	84	187	402	397	129	475	500
Grp Sat Flow(s),veh/h/ln	1767	0	1614	1767	0	1514	1767	1763	1740	1767	1763	1852
Q Serve(g_s), s	0.0	0.0	0.3	4.5	0.0	3.5	7.3	12.7	12.7	5.1	16.8	16.8
Cycle Q Clear(g_c), s	0.0	0.0	0.3	4.5	0.0	3.5	7.3	12.7	12.7	5.1	16.8	16.8
Prop In Lane	1.00		0.63	1.00		0.96	1.00		0.29	1.00		0.01
Lane Grp Cap(c), veh/h	100	0	91	286	0	245	229	694	685	164	629	661
V/C Ratio(X)	0.00	0.00	0.09	0.43	0.00	0.34	0.82	0.58	0.58	0.79	0.76	0.76
Avail Cap(c_a), veh/h	699	0	639	674	0	578	345	820	809	280	757	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	31.7	26.7	0.0	26.3	30.0	16.8	16.9	31.4	20.0	20.0
Incr Delay (d2), s/veh	0.0	0.0	0.6	1.3	0.0	1.1	5.3	1.1	1.1	3.2	4.4	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.9	0.0	1.3	3.3	4.8	4.8	2.2	7.0	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	32.3	28.0	0.0	27.4	35.3	17.9	18.0	34.6	24.4	24.2
LnGrp LOS	A	A	C	C	A	C	D	B	B	C	C	C
Approach Vol, veh/h		8			208			986			1104	
Approach Delay, s/veh		32.3			27.8			21.2			25.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	33.0		10.3	13.4	30.3		16.8
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 11	32.9		28.0	* 14	* 30		27.0
Max Q Clear Time (g_c+I1), s	7.1	14.7		2.3	9.3	18.8		6.5
Green Ext Time (p_c), s	0.1	6.5		0.0	0.1	6.4		1.1

Intersection Summary	
HCM 6th Ctrl Delay	23.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	183	192	2	6	37
Future Vol, veh/h	22	183	192	2	6	37
Peak Hour Factor	0.51	0.51	0.64	0.64	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	43	359	300	3	10	60
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	11.9	10.4	8.6
HCM LOS	B	B	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	0%	14%
Vol Thru, %	89%	99%	0%
Vol Right, %	0%	1%	86%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	205	194	43
LT Vol	22	0	6
Through Vol	183	192	0
RT Vol	0	2	37
Lane Flow Rate	402	303	69
Geometry Grp	1	1	1
Degree of Util (X)	0.499	0.382	0.096
Departure Headway (Hd)	4.469	4.541	4.997
Convergence, Y/N	Yes	Yes	Yes
Cap	808	791	714
Service Time	2.496	2.57	3.047
HCM Lane V/C Ratio	0.498	0.383	0.097
HCM Control Delay	11.9	10.4	8.6
HCM Lane LOS	B	B	A
HCM 95th-tile Q	2.8	1.8	0.3

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	83	83	59	126	11	34	0	19	13	2	31
Future Vol, veh/h	9	83	83	59	126	11	34	0	19	13	2	31
Peak Hour Factor	0.50	0.50	0.50	0.57	0.57	0.57	0.85	0.85	0.85	0.80	0.80	0.80
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	18	166	166	104	221	19	40	0	22	16	3	39
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	10.7	11.5	9.4	8.9
HCM LOS	B	B	A	A

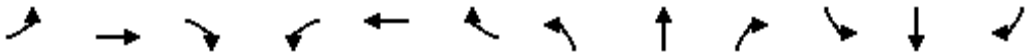
Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	5%	30%	28%
Vol Thru, %	0%	0%	47%	64%	4%
Vol Right, %	0%	100%	47%	6%	67%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	19	175	196	46
LT Vol	34	0	9	59	13
Through Vol	0	0	83	126	2
RT Vol	0	19	83	11	31
Lane Flow Rate	40	22	350	344	58
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.074	0.034	0.428	0.448	0.085
Departure Headway (Hd)	6.667	5.449	4.407	4.688	5.35
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	534	650	812	763	662
Service Time	4.456	3.237	2.454	2.738	3.441
HCM Lane V/C Ratio	0.075	0.034	0.431	0.451	0.088
HCM Control Delay	10	8.4	10.7	11.5	8.9
HCM Lane LOS	A	A	B	B	A
HCM 95th-tile Q	0.2	0.1	2.2	2.3	0.3

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	103	13	11	1	26	12	4	4	0	14	10	164
Future Vol, veh/h	103	13	11	1	26	12	4	4	0	14	10	164
Peak Hour Factor	0.40	0.40	0.40	0.31	0.31	0.31	0.38	0.38	0.38	0.62	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	258	33	28	3	84	39	11	11	0	23	16	265
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.9	9.1	8.8	10.5
HCM LOS	B	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	50%	81%	3%	7%
Vol Thru, %	50%	10%	67%	5%
Vol Right, %	0%	9%	31%	87%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	8	127	39	188
LT Vol	4	103	1	14
Through Vol	4	13	26	10
RT Vol	0	11	12	164
Lane Flow Rate	21	318	126	303
Geometry Grp	1	1	1	1
Degree of Util (X)	0.033	0.439	0.173	0.384
Departure Headway (Hd)	5.651	4.973	4.939	4.559
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	637	718	718	782
Service Time	3.651	3.049	3.029	2.623
HCM Lane V/C Ratio	0.033	0.443	0.175	0.387
HCM Control Delay	8.8	11.9	9.1	10.5
HCM Lane LOS	A	B	A	B
HCM 95th-tile Q	0.1	2.2	0.6	1.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	577	188	260	336	17	242	304	384	15	205	129
Future Volume (veh/h)	217	577	188	260	336	17	242	304	384	15	205	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	238	634	207	268	346	18	255	320	404	16	218	137
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.95	0.95	0.95	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	279	1044	452	439	905	47	302	1192	718	71	608	363
Arrive On Green	0.16	0.30	0.30	0.13	0.27	0.27	0.09	0.34	0.34	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1526	3428	3404	176	3428	3526	1530	1767	2096	1252
Grp Volume(v), veh/h	238	634	207	268	178	186	255	320	404	16	182	173
Grp Sat Flow(s),veh/h/ln	1767	1763	1526	1714	1763	1817	1714	1763	1530	1767	1763	1585
Q Serve(g_s), s	13.1	15.4	11.0	7.4	8.3	8.3	7.3	6.6	19.2	0.9	8.2	8.7
Cycle Q Clear(g_c), s	13.1	15.4	11.0	7.4	8.3	8.3	7.3	6.6	19.2	0.9	8.2	8.7
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		0.79
Lane Grp Cap(c), veh/h	279	1044	452	439	469	483	302	1192	718	71	511	460
V/C Ratio(X)	0.85	0.61	0.46	0.61	0.38	0.38	0.85	0.27	0.56	0.23	0.36	0.38
Avail Cap(c_a), veh/h	279	1047	453	439	488	503	302	1192	718	71	511	460
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	0.45	0.45	0.45	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	30.2	28.7	41.2	30.0	30.0	44.9	24.1	19.4	46.5	28.1	28.3
Incr Delay (d2), s/veh	26.6	2.6	3.3	6.0	2.3	2.2	12.4	0.2	1.4	7.3	1.9	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	6.7	4.4	3.4	3.7	3.8	3.6	2.7	6.7	0.5	3.6	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.6	32.8	32.0	47.3	32.2	32.2	57.4	24.3	20.8	53.8	30.0	30.7
LnGrp LOS	E	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		1079			632			979			371	
Approach Delay, s/veh		40.3			38.6			31.5			31.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	35.9	13.0	34.1	20.0	32.9	8.2	38.9
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 13	29.7	* 8.8	* 29	* 16	* 28	* 4	33.7
Max Q Clear Time (g_c+I1), s	9.4	17.4	9.3	10.7	15.1	10.3	2.9	21.2
Green Ext Time (p_c), s	0.2	5.2	0.0	2.9	0.0	2.3	0.0	4.1

Intersection Summary	
HCM 6th Ctrl Delay	36.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	958	33	117	657	32	118
Future Volume (veh/h)	958	33	117	657	32	118
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	988	34	126	706	45	166
Peak Hour Factor	0.97	0.97	0.93	0.93	0.71	0.71
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1492	51	166	2160	260	231
Arrive On Green	0.43	0.43	0.09	0.61	0.15	0.15
Sat Flow, veh/h	3564	119	1767	3618	1767	1572
Grp Volume(v), veh/h	502	520	126	706	45	166
Grp Sat Flow(s),veh/h/ln	1763	1828	1767	1763	1767	1572
Q Serve(g_s), s	10.7	10.7	3.3	4.6	1.1	4.8
Cycle Q Clear(g_c), s	10.7	10.7	3.3	4.6	1.1	4.8
Prop In Lane		0.07	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	758	786	166	2160	260	231
V/C Ratio(X)	0.66	0.66	0.76	0.33	0.17	0.72
Avail Cap(c_a), veh/h	2072	2149	626	5780	1189	1058
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.8	10.8	20.9	4.4	17.7	19.3
Incr Delay (d2), s/veh	1.0	1.0	6.9	0.1	0.3	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	3.3	1.5	0.8	0.4	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.8	11.7	27.8	4.5	18.0	23.4
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	1022			832	211	
Approach Delay, s/veh	11.7			8.1	22.3	
Approach LOS	B			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	8.7	26.7				35.3	12.1
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 13	55.7				* 78	31.9
Max Q Clear Time (g_c+I1), s	5.3	12.7				6.6	6.8
Green Ext Time (p_c), s	0.2	7.5				5.3	0.7

Intersection Summary	
HCM 6th Ctrl Delay	11.3
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	353	272	246	91	149	35	305	505	143	61	440	222
Future Volume (veh/h)	353	272	246	91	149	35	305	505	143	61	440	222
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	376	289	262	103	169	40	343	567	161	64	463	234
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	627	792	341	213	554	236	567	1001	283	163	1076	464
Arrive On Green	0.18	0.22	0.22	0.12	0.16	0.16	0.16	0.37	0.37	0.09	0.31	0.31
Sat Flow, veh/h	3428	3526	1518	1767	3526	1503	3565	2693	762	1767	3526	1521
Grp Volume(v), veh/h	376	289	262	103	169	40	343	370	358	64	463	234
Grp Sat Flow(s),veh/h/ln	1714	1763	1518	1767	1763	1503	1783	1763	1692	1767	1763	1521
Q Serve(g_s), s	10.4	7.2	16.8	5.7	4.4	2.4	9.3	17.4	17.5	3.5	10.9	13.1
Cycle Q Clear(g_c), s	10.4	7.2	16.8	5.7	4.4	2.4	9.3	17.4	17.5	3.5	10.9	13.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	627	792	341	213	554	236	567	655	629	163	1076	464
V/C Ratio(X)	0.60	0.36	0.77	0.48	0.30	0.17	0.61	0.57	0.57	0.39	0.43	0.50
Avail Cap(c_a), veh/h	627	1341	577	213	1104	470	567	655	629	163	1076	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	34.0	37.7	42.7	38.7	37.9	40.6	25.9	26.0	44.4	28.8	29.6
Incr Delay (d2), s/veh	4.2	0.3	3.7	7.7	0.3	0.3	4.7	3.5	3.7	6.9	1.3	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	3.0	6.4	2.9	1.9	0.9	4.3	7.6	7.3	1.8	4.6	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	34.3	41.4	50.3	39.0	38.2	45.4	29.4	29.7	51.3	30.1	33.5
LnGrp LOS	D	C	D	D	D	D	D	C	C	D	C	C
Approach Vol, veh/h		927			312			1071			761	
Approach Delay, s/veh		39.9			42.7			34.6			32.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	28.8	21.0	37.0	24.0	21.8	14.1	43.9
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	12.5	39.5	16.5	31.7	19.0	32.5	9.6	38.6
Max Q Clear Time (g_c+I1), s	11.7	18.8	11.3	15.1	12.4	6.4	5.5	19.5
Green Ext Time (p_c), s	0.1	2.6	0.6	3.4	0.7	1.1	0.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay	36.6
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	1	8	130	1	82	18	961	145	96	728	2
Future Volume (veh/h)	14	1	8	130	1	82	18	961	145	96	728	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	19	1	11	178	1	112	20	1092	165	102	774	2
Peak Hour Factor	0.72	0.72	0.72	0.73	0.73	0.73	0.88	0.88	0.88	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	12	128	279	2	236	32	1285	194	129	1720	4
Arrive On Green	0.09	0.09	0.09	0.16	0.16	0.16	0.02	0.42	0.42	0.07	0.48	0.48
Sat Flow, veh/h	1767	126	1387	1767	13	1492	1767	3050	460	1767	3607	9
Grp Volume(v), veh/h	19	0	12	178	0	113	20	630	627	102	378	398
Grp Sat Flow(s),veh/h/ln	1767	0	1513	1767	0	1505	1767	1763	1747	1767	1763	1853
Q Serve(g_s), s	0.8	0.0	0.6	7.7	0.0	5.6	0.9	26.4	26.6	4.7	11.7	11.7
Cycle Q Clear(g_c), s	0.8	0.0	0.6	7.7	0.0	5.6	0.9	26.4	26.6	4.7	11.7	11.7
Prop In Lane	1.00		0.92	1.00		0.99	1.00		0.26	1.00		0.01
Lane Grp Cap(c), veh/h	163	0	140	279	0	238	32	743	736	129	840	884
V/C Ratio(X)	0.12	0.00	0.09	0.64	0.00	0.47	0.63	0.85	0.85	0.79	0.45	0.45
Avail Cap(c_a), veh/h	603	0	517	584	0	498	125	795	788	151	840	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	0.0	34.0	32.3	0.0	31.4	40.0	21.4	21.4	37.4	14.3	14.3
Incr Delay (d2), s/veh	0.5	0.0	0.4	3.1	0.0	1.9	7.6	8.5	8.9	17.6	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.2	3.5	0.0	2.1	0.5	11.6	11.7	2.6	4.4	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	0.0	34.4	35.4	0.0	33.3	47.6	29.9	30.3	55.0	14.9	14.9
LnGrp LOS	C	A	C	D	A	C	D	C	C	E	B	B
Approach Vol, veh/h		31			291			1277			878	
Approach Delay, s/veh		34.5			34.6			30.4			19.5	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.2	39.7		13.9	5.7	44.2		18.3
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 6	37.0		28.0	* 5.8	* 38		27.1
Max Q Clear Time (g_c+I1), s	10.7	28.6		2.8	2.9	13.7		9.7
Green Ext Time (p_c), s	0.0	6.0		0.1	0.0	7.7		1.5

Intersection Summary		
HCM 6th Ctrl Delay	27.1	
HCM 6th LOS	C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	46	209	179	6	6	21
Future Vol, veh/h	46	209	179	6	6	21
Peak Hour Factor	0.79	0.79	0.79	0.79	0.81	0.81
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	58	265	227	8	7	26
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.9	9	8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	0%	22%
Vol Thru, %	82%	97%	0%
Vol Right, %	0%	3%	78%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	255	185	27
LT Vol	46	0	6
Through Vol	209	179	0
RT Vol	0	6	21
Lane Flow Rate	323	234	33
Geometry Grp	1	1	1
Degree of Util (X)	0.379	0.282	0.044
Departure Headway (Hd)	4.222	4.335	4.731
Convergence, Y/N	Yes	Yes	Yes
Cap	839	834	760
Service Time	2.314	2.341	2.743
HCM Lane V/C Ratio	0.385	0.281	0.043
HCM Control Delay	9.9	9	8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.8	1.2	0.1

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	84	113	50	70	14	102	2	43	14	2	13
Future Vol, veh/h	21	84	113	50	70	14	102	2	43	14	2	13
Peak Hour Factor	0.87	0.87	0.87	0.80	0.80	0.80	0.68	0.68	0.68	0.70	0.70	0.70
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	97	130	63	88	18	150	3	63	20	3	19
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	9.8	9.5	10.1	8.6
HCM LOS	A	A	B	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	98%	0%	10%	37%	48%
Vol Thru, %	2%	0%	39%	52%	7%
Vol Right, %	0%	100%	52%	10%	45%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	104	43	218	134	29
LT Vol	102	0	21	50	14
Through Vol	2	0	84	70	2
RT Vol	0	43	113	14	13
Lane Flow Rate	153	63	251	168	41
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.257	0.085	0.318	0.23	0.06
Departure Headway (Hd)	6.054	4.853	4.564	4.951	5.177
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	589	731	784	720	684
Service Time	3.833	2.631	2.616	3.013	3.272
HCM Lane V/C Ratio	0.26	0.086	0.32	0.233	0.06
HCM Control Delay	10.9	8.1	9.8	9.5	8.6
HCM Lane LOS	B	A	A	A	A
HCM 95th-tile Q	1	0.3	1.4	0.9	0.2

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	113	4	18	1	12	16	16	23	0	5	26	126
Future Vol, veh/h	113	4	18	1	12	16	16	23	0	5	26	126
Peak Hour Factor	0.72	0.72	0.72	0.40	0.40	0.40	0.62	0.62	0.62	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	157	6	25	3	30	40	26	37	0	7	35	168
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.3	7.9	8.4	8.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	41%	84%	3%	3%
Vol Thru, %	59%	3%	41%	17%
Vol Right, %	0%	13%	55%	80%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	39	135	29	157
LT Vol	16	113	1	5
Through Vol	23	4	12	26
RT Vol	0	18	16	126
Lane Flow Rate	63	188	72	209
Geometry Grp	1	1	1	1
Degree of Util (X)	0.085	0.246	0.09	0.243
Departure Headway (Hd)	4.885	4.723	4.458	4.174
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	732	759	801	860
Service Time	2.921	2.758	2.498	2.201
HCM Lane V/C Ratio	0.086	0.248	0.09	0.243
HCM Control Delay	8.4	9.3	7.9	8.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	1	0.3	1