

Appendix F

Total Future Intersection Capacity Analyses with NY/FLA Circle



Movement	WBR	SBL	SBR	SEL
Lane Configurations	TT			
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	3.0			
Lane Util. Factor	0.88			
Frt	0.85			
Flt Protected	1.00			
Satd. Flow (prot)	2508			
Flt Permitted	1.00			
Satd. Flow (perm)	2508			
Volume (vph)	1890	0	0	0
Peak-hour factor, PHF	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1929	0	0	0
RTOR Reduction (vph)	0	0	0	0
Lane Group Flow (vph)	1929	0	0	0
Turn Type				
Protected Phases	6			
Permitted Phases				
Actuated Green, G (s)	101.0			
Effective Green, g (s)	103.0			
Actuated g/C Ratio	0.86			
Clearance Time (s)	5.0			
Lane Grp Cap (vph)	2153			
v/s Ratio Prot	c0.77			
v/s Ratio Perm				
v/c Ratio	0.90			
Uniform Delay, d1	5.2			
Progression Factor	0.55			
Incremental Delay, d2	3.2			
Delay (s)	6.1			
Level of Service	A			
Approach Delay (s)	6.1	0.0		0.0
Approach LOS	A	A		A
Intersection Summary				
HCM Average Control Delay		6.1	HCM Level of Service	A
HCM Volume to Capacity ratio		0.90		
Actuated Cycle Length (s)		120.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization		76.8%	ICU Level of Service	D
Analysis Period (min)		15		
c Critical Lane Group				

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑	↑		↑			↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0	3.0		3.0			3.0	3.0
Lane Util. Factor					0.91	1.00		1.00			0.95	0.95
Frpb, ped/bikes					1.00	0.95		1.00			0.95	1.00
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			0.86	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					4577	1348		1676			1302	1354
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					4577	1348		1676			1302	1354
Volume (vph)	0	0	0	1	2787	583	0	42	0	0	18	497
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	1	2844	595	0	43	0	0	18	507
RTOR Reduction (vph)	0	0	0	0	0	188	0	0	0	0	2	2
Lane Group Flow (vph)	0	0	0	0	2845	407	0	43	0	0	269	252
Confl. Peds. (#/hr)	11					11				38		15
Turn Type				Perm		Perm						custom
Protected Phases					6			4			4	8
Permitted Phases				6		6						8
Actuated Green, G (s)					78.0	78.0		32.0			32.0	32.0
Effective Green, g (s)					80.0	80.0		34.0			34.0	34.0
Actuated g/C Ratio					0.67	0.67		0.28			0.28	0.28
Clearance Time (s)					5.0	5.0		5.0			5.0	5.0
Lane Grp Cap (vph)					3051	899		475			369	384
v/s Ratio Prot								0.03			0.21	0.19
v/s Ratio Perm					0.62	0.30						
v/c Ratio					0.93	0.45		0.09			0.73	0.66
Uniform Delay, d1					17.6	9.5		31.6			38.8	37.9
Progression Factor					0.84	0.12		1.00			1.00	1.00
Incremental Delay, d2					0.7	0.1		0.4			11.9	8.5
Delay (s)					15.6	1.3		32.0			50.8	46.3
Level of Service					B	A		C			D	D
Approach Delay (s)		0.0			13.1			32.0			48.6	
Approach LOS		A			B			C			D	
Intersection Summary												
HCM Average Control Delay			18.0				HCM Level of Service			B		
HCM Volume to Capacity ratio			0.87									
Actuated Cycle Length (s)			120.0				Sum of lost time (s)			6.0		
Intersection Capacity Utilization			90.8%				ICU Level of Service			E		
Analysis Period (min)			15									
c Critical Lane Group												



Movement	EBT	WBT	WBR	NBL	NWT	NWR
Lane Configurations	↑↑↑	↑↑↑		↑↑	↑↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.91	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	1.00	
Flt Protected	1.00	1.00		0.95	1.00	
Satd. Flow (prot)	4577	4278		3090	4553	
Flt Permitted	1.00	1.00		0.95	1.00	
Satd. Flow (perm)	4577	4278		3090	4553	
Volume (vph)	1519	2403	1541	255	1635	52
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1550	2452	1572	260	1668	53
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1550	4024	0	260	1721	0
Confl. Peds. (#/hr)			3			2
Turn Type						
Protected Phases	2	6		9	4	
Permitted Phases						
Actuated Green, G (s)	70.0	70.0		6.0	29.0	
Effective Green, g (s)	72.0	72.0		8.0	31.0	
Actuated g/C Ratio	0.60	0.60		0.07	0.26	
Clearance Time (s)	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	2746	2567		206	1176	
v/s Ratio Prot	0.34	c0.94		c0.08	c0.38	
v/s Ratio Perm						
v/c Ratio	0.56	1.84dr		1.26	1.46	
Uniform Delay, d1	14.5	24.0		56.0	44.5	
Progression Factor	0.99	1.00		1.08	1.00	
Incremental Delay, d2	0.6	257.3		142.3	213.3	
Delay (s)	15.0	281.3		202.6	257.8	
Level of Service	B	F		F	F	
Approach Delay (s)	15.0	281.3		202.6	257.8	
Approach LOS	B	F		F	F	
Intersection Summary						
HCM Average Control Delay		218.6		HCM Level of Service		F
HCM Volume to Capacity ratio		1.52				
Actuated Cycle Length (s)		120.0		Sum of lost time (s)		9.0
Intersection Capacity Utilization		144.5%		ICU Level of Service		H
Analysis Period (min)		15				
dr Defacto Right Lane. Recode with 1 though lane as a right lane.						
c Critical Lane Group						

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑↑	↑↑↑	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0				3.0	3.0	3.0	
Lane Util. Factor		0.91			0.91				0.88	0.94	0.95	
Frpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	
Flpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	
Frt		0.99			1.00				0.85	1.00	0.97	
Flt Protected		1.00			1.00				1.00	0.95	1.00	
Satd. Flow (prot)		4548			4577				2508	4491	3096	
Flt Permitted		1.00			1.00				1.00	0.95	1.00	
Satd. Flow (perm)		4548			4577				2508	4491	3096	
Volume (vph)	0	1095	44	0	2389	0	0	0	353	1217	1386	283
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1117	45	0	2438	0	0	0	360	1242	1414	289
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	48	0	1	0
Lane Group Flow (vph)	0	1158	0	0	2438	0	0	0	313	1242	1702	0
Confl. Peds. (#/hr)	79		1	1		79	2		28	28		2
Turn Type									custom	Prot		
Protected Phases		2			6				4	3	8	
Permitted Phases									4			
Actuated Green, G (s)		56.0			56.0				17.0	30.0	53.0	
Effective Green, g (s)		58.0			58.0				20.0	33.0	56.0	
Actuated g/C Ratio		0.48			0.48				0.17	0.28	0.47	
Clearance Time (s)		5.0			5.0				6.0	6.0	6.0	
Lane Grp Cap (vph)		2198			2212				418	1235	1445	
v/s Ratio Prot		0.25			0.53				0.12	0.28	0.55	
v/s Ratio Perm												
v/c Ratio		0.53			1.10				0.75	1.01	1.18	
Uniform Delay, d1		21.5			31.0				47.6	43.5	32.0	
Progression Factor		1.00			0.57				0.81	1.00	1.00	
Incremental Delay, d2		0.9			46.8				11.2	27.0	87.7	
Delay (s)		22.4			64.4				49.6	70.5	119.7	
Level of Service		C			E				D	E	F	
Approach Delay (s)		22.4			64.4			49.6			99.0	
Approach LOS		C			E			D			F	
Intersection Summary												
HCM Average Control Delay		71.3			HCM Level of Service				E			
HCM Volume to Capacity ratio		1.14										
Actuated Cycle Length (s)		120.0			Sum of lost time (s)				6.0			
Intersection Capacity Utilization		110.6%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.85		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1593	1615		1593	1425		1593	1608		1593	1604	
Flt Permitted	0.63	1.00		0.20	1.00		0.05	1.00		0.49	1.00	
Satd. Flow (perm)	1063	1615		335	1425		92	1608		827	1604	
Volume (vph)	84	354	114	35	0	42	192	245	91	342	785	317
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	86	361	116	36	0	43	196	250	93	349	801	323
RTOR Reduction (vph)	0	10	0	0	36	0	0	11	0	0	12	0
Lane Group Flow (vph)	86	467	0	36	7	0	196	332	0	349	1112	0
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	27.0	27.0		18.0	18.0		79.0	71.0		79.0	71.0	
Effective Green, g (s)	29.0	29.0		20.0	20.0		82.0	73.0		82.0	73.0	
Actuated g/C Ratio	0.24	0.24		0.17	0.17		0.68	0.61		0.68	0.61	
Clearance Time (s)	4.0	5.0		5.0	5.0		4.0	5.0		4.0	5.0	
Lane Grp Cap (vph)	283	390		56	238		175	978		623	976	
v/s Ratio Prot	0.02	c0.29			0.01		c0.08	0.21		0.04	c0.69	
v/s Ratio Perm	0.06			0.11			0.68			0.34		
v/c Ratio	0.30	1.20		0.64	0.03		1.12	0.34		0.56	1.14	
Uniform Delay, d1	36.5	45.5		46.7	41.9		57.7	11.6		8.8	23.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.55	0.78	
Incremental Delay, d2	2.8	111.4		45.2	0.2		103.9	0.9		0.3	64.0	
Delay (s)	39.3	156.9		91.8	42.1		161.6	12.5		5.2	82.3	
Level of Service	D	F		F	D		F	B		A	F	
Approach Delay (s)		138.9			64.8			66.7			64.0	
Approach LOS		F			E			E			E	

Intersection Summary

HCM Average Control Delay	80.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	121.5%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.91			0.91			1.00			1.00	
Frt		0.98			1.00			0.99			0.92	
Flt Protected		1.00			1.00			0.96			0.99	
Satd. Flow (prot)		4504			4574			1588			1517	
Flt Permitted		0.94			0.92			0.76			0.95	
Satd. Flow (perm)		4223			4229			1259			1456	
Volume (vph)	2	850	101	16	1493	1	87	2	7	8	3	17
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	2	867	103	16	1523	1	89	2	7	8	3	17
RTOR Reduction (vph)	0	15	0	0	0	0	0	3	0	0	11	0
Lane Group Flow (vph)	0	957	0	0	1540	0	0	95	0	0	17	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		57.0			57.0			33.0			33.0	
Effective Green, g (s)		59.0			59.0			35.0			35.0	
Actuated g/C Ratio		0.59			0.59			0.35			0.35	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		2492			2495			441			510	
v/s Ratio Prot												
v/s Ratio Perm		0.23			0.36			0.08			0.01	
v/c Ratio		0.38			0.62			0.22			0.03	
Uniform Delay, d1		10.9			13.2			22.9			21.4	
Progression Factor		0.80			0.03			1.00			1.00	
Incremental Delay, d2		0.4			0.7			1.1			0.1	
Delay (s)		9.1			1.1			24.0			21.5	
Level of Service		A			A			C			C	
Approach Delay (s)		9.1			1.1			24.0			21.5	
Approach LOS		A			A			C			C	
Intersection Summary												
HCM Average Control Delay		5.1			HCM Level of Service			A				
HCM Volume to Capacity ratio		0.47										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			6.0				
Intersection Capacity Utilization		63.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0						3.0	
Lane Util. Factor		0.91			0.91						1.00	
Frt		0.99			1.00						0.94	
Flt Protected		0.99			1.00						1.00	
Satd. Flow (prot)		4505			4563						1571	
Flt Permitted		0.99			1.00						1.00	
Satd. Flow (perm)		4505			4563						1571	
Volume (vph)	101	692	55	85	1558	4	0	0	0	15	81	74
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	103	706	56	87	1590	4	0	0	0	15	83	76
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	28	0
Lane Group Flow (vph)	0	858	0	0	1681	0	0	0	0	0	146	0
Turn Type	custom			custom			Perm			Perm		
Protected Phases	1	1		5	5						6	
Permitted Phases	1			5						6		
Actuated Green, G (s)		24.0			44.0						17.0	
Effective Green, g (s)		26.0			46.0						19.0	
Actuated g/C Ratio		0.26			0.46						0.19	
Clearance Time (s)		5.0			5.0						5.0	
Lane Grp Cap (vph)		1171			2099						298	
v/s Ratio Prot		c0.19			c0.37							
v/s Ratio Perm											0.09	
v/c Ratio		0.73			0.80						0.49	
Uniform Delay, d1		33.8			23.1						36.2	
Progression Factor		0.98			1.00						1.00	
Incremental Delay, d2		3.8			3.3						5.7	
Delay (s)		36.9			26.4						41.9	
Level of Service		D			C						D	
Approach Delay (s)		36.9			26.4			0.0			41.9	
Approach LOS		D			C			A			D	
Intersection Summary												
HCM Average Control Delay		30.7			HCM Level of Service			C				
HCM Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			9.0				
Intersection Capacity Utilization		74.6%			ICU Level of Service			D				
Analysis Period (min)		15										

c Critical Lane Group

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor		0.91			0.91		1.00	1.00		1.00	1.00	
Frt		1.00			1.00		1.00	1.00		1.00	0.89	
Flt Protected		1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		4612			4599		1608	1670		1593	1495	
Flt Permitted		0.82			0.94		0.70	1.00		0.46	1.00	
Satd. Flow (perm)		3767			4310		1179	1670		773	1495	
Volume (vph)	37	1024	0	5	1595	51	35	207	6	14	22	56
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	38	1045	0	5	1628	52	36	211	6	14	22	57
RTOR Reduction (vph)	0	0	0	0	3	0	0	1	0	0	30	0
Lane Group Flow (vph)	0	1083	0	0	1682	0	36	216	0	14	49	0
Heavy Vehicles (%)	2%	1%	1%	1%	1%	2%	1%	2%	1%	2%	2%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases	4			8			2			6		
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	65.0			65.0			25.0		25.0	25.0		25.0
Effective Green, g (s)	67.0			67.0			27.0		27.0	27.0		27.0
Actuated g/C Ratio	0.67			0.67			0.27		0.27	0.27		0.27
Clearance Time (s)	5.0			5.0			5.0		5.0	5.0		5.0
Lane Grp Cap (vph)	2524			2888			318		451	209		404
v/s Ratio Prot							c0.13					0.03
v/s Ratio Perm	0.29			c0.39			0.03			0.02		
v/c Ratio	0.43			0.58			0.11		0.48	0.07		0.12
Uniform Delay, d1	7.6			8.9			27.5		30.6	27.1		27.5
Progression Factor	1.00			0.11			1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5			0.7			0.7		3.6	0.6		0.6
Delay (s)	8.2			1.7			28.2		34.2	27.8		28.2
Level of Service	A			A			C		C	C		C
Approach Delay (s)	8.2			1.7			33.4			28.1		
Approach LOS	A			A			C			C		
Intersection Summary												
HCM Average Control Delay	7.3			HCM Level of Service					A			
HCM Volume to Capacity ratio	0.55											
Actuated Cycle Length (s)	100.0			Sum of lost time (s)					6.0			
Intersection Capacity Utilization	71.8%			ICU Level of Service					C			
Analysis Period (min)	15											
c Critical Lane Group												

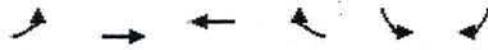


Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Volume (veh/h)	1567	22	0	3945	0	14	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	
Hourly flow rate (vph)	1599	22	0	4026	0	14	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh							
Upstream signal (ft)	348						
pX, platoon unblocked			0.80		0.80	0.80	
vC, conflicting volume			1621		2952	544	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1285		2940	0	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	98	
cM capacity (veh/h)			431		9	872	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	640	640	342	1342	1342	1342	14
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	22	0	0	0	14
cSH	1700	1700	1700	1700	1700	1700	872
Volume to Capacity	0.38	0.38	0.20	0.79	0.79	0.79	0.02
Queue Length 95th (ft)	0	0	0	0	0	0	1
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.2
Lane LOS							A
Approach Delay (s)	0.0			0.0			9.2
Approach LOS							A
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			79.6%		ICU Level of Service		D
Analysis Period (min)			15				

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑	↑↑↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0			3.0	3.0	3.0
Lane Util. Factor	0.91			0.91	0.97	0.91
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	4535			4566	3090	1297
Flt Permitted	1.00			0.63	0.95	1.00
Satd. Flow (perm)	4535			2894	3090	1297
Volume (vph)	1484	96	194	3906	33	44
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1514	98	198	3986	34	45
RTOR Reduction (vph)	7	0	0	0	0	3
Lane Group Flow (vph)	1605	0	0	4184	34	42
Turn Type		pm+pt			pt+ov	
Protected Phases	4		3	8	9	9.3
Permitted Phases			8			
Actuated Green, G (s)	38.0			74.0	16.0	52.0
Effective Green, g (s)	40.0			76.0	18.0	54.0
Actuated g/C Ratio	0.40			0.76	0.18	0.54
Clearance Time (s)	5.0			5.0	5.0	
Lane Grp Cap (vph)	1814			2751	556	700
v/s Ratio Prot	0.35			c0.50	0.01	c0.03
v/s Ratio Perm				c0.65		
v/c Ratio	0.88			1.52	0.06	0.06
Uniform Delay, d1	27.9			12.0	34.0	10.9
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	6.7			236.3	0.2	0.2
Delay (s)	34.6			248.3	34.2	11.1
Level of Service	C			F	C	B
Approach Delay (s)	34.6			248.3	21.0	
Approach LOS	C			F	C	
Intersection Summary						
HCM Average Control Delay		186.6		HCM Level of Service		F
HCM Volume to Capacity ratio		1.24				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		6.0
Intersection Capacity Utilization		135.8%		ICU Level of Service		H
Analysis Period (min)		15				
c Critical Lane Group						



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔					↑↑↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0					3.0
Lane Util. Factor	0.97					0.91
Frt	1.00					1.00
Flt Protected	0.95					1.00
Satd. Flow (prot)	3090					4577
Flt Permitted	0.95					1.00
Satd. Flow (perm)	3090					4577
Volume (vph)	1503	0	0	0	0	1314
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1534	0	0	0	0	1341
RTOR Reduction (vph)	5	0	0	0	0	0
Lane Group Flow (vph)	1529	0	0	0	0	1341
Turn Type						
Protected Phases	6					8
Permitted Phases						
Actuated Green, G (s)	56.0					34.0
Effective Green, g (s)	58.0					36.0
Actuated g/C Ratio	0.58					0.36
Clearance Time (s)	5.0					5.0
Lane Grp Cap (vph)	1792					1648
v/s Ratio Prot	c0.49					c0.29
v/s Ratio Perm						
v/c Ratio	0.85					0.81
Uniform Delay, d1	17.5					29.0
Progression Factor	1.00					1.00
Incremental Delay, d2	5.4					4.5
Delay (s)	22.9					33.5
Level of Service	C					C
Approach Delay (s)	22.9		0.0			33.5
Approach LOS	C		A			C
Intersection Summary						
HCM Average Control Delay	27.8		HCM Level of Service		C	
HCM Volume to Capacity ratio	0.84					
Actuated Cycle Length (s)	100.0		Sum of lost time (s)		6.0	
Intersection Capacity Utilization	91.2%		ICU Level of Service		F	
Analysis Period (min)	15					
c Critical Lane Group						



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			3.0			
Lane Util. Factor			0.95			
Frt			1.00			
Flt Protected			1.00			
Satd. Flow (prot)			3539			
Flt Permitted			1.00			
Satd. Flow (perm)			3539			
Volume (vph)	0	0	2138	0	0	0
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	2182	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	2182	0	0	0
Turn Type						
Protected Phases			6			
Permitted Phases						
Actuated Green, G (s)			91.0			
Effective Green, g (s)			93.0			
Actuated g/C Ratio			0.78			
Clearance Time (s)			5.0			
Lane Grp Cap (vph)			2743			
v/s Ratio Prot			c0.62			
v/s Ratio Perm						
v/c Ratio			0.80			
Uniform Delay, d1			7.9			
Progression Factor			0.39			
Incremental Delay, d2			1.8			
Delay (s)			4.8			
Level of Service			A			
Approach Delay (s)		0.0	4.8		0.0	
Approach LOS		A	A		A	
Intersection Summary						
HCM Average Control Delay			4.8	HCM Level of Service		A
HCM Volume to Capacity ratio			0.80			
Actuated Cycle Length (s)			120.0	Sum of lost time (s)		27.0
Intersection Capacity Utilization			42.3%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

						
Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations				↑↑↑	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)				3.0	3.0	
Lane Util. Factor				0.91	0.97	
Frt				1.00	1.00	
Flt Protected				1.00	0.95	
Satd. Flow (prot)				5085	3433	
Flt Permitted				1.00	0.95	
Satd. Flow (perm)				5085	3433	
Volume (vph)	0	0	0	1523	901	0
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	1554	919	0
RTOR Reduction (vph)	0	0	0	0	15	0
Lane Group Flow (vph)	0	0	0	1554	904	0
Turn Type						
Protected Phases				8	6	
Permitted Phases						
Actuated Green, G (s)				47.0	43.0	
Effective Green, g (s)				49.0	45.0	
Actuated g/C Ratio				0.49	0.45	
Clearance Time (s)				5.0	5.0	
Lane Grp Cap (vph)				2492	1545	
v/s Ratio Prot				c0.31	c0.26	
v/s Ratio Perm						
v/c Ratio				0.62	0.58	
Uniform Delay, d1				18.7	20.5	
Progression Factor				1.00	1.00	
Incremental Delay, d2				1.2	1.6	
Delay (s)				19.9	22.2	
Level of Service				B	C	
Approach Delay (s)	0.0			19.9	22.2	
Approach LOS	A			B	C	
Intersection Summary						
HCM Average Control Delay		20.7		HCM Level of Service		C
HCM Volume to Capacity ratio		0.61				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		6.0
Intersection Capacity Utilization		95.2%		ICU Level of Service		F
Analysis Period (min)		15				
c Critical Lane Group						

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	0.85		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1593	1498		1593	1425		1593	1664		1593	1639	
Flt Permitted	0.16	1.00		0.53	1.00		0.31	1.00		0.07	1.00	
Satd. Flow (perm)	268	1498		886	1425		521	1664		122	1639	
Volume (vph)	561	113	275	98	0	319	39	756	38	101	395	70
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	572	115	281	100	0	326	40	771	39	103	403	71
RTOR Reduction (vph)	0	73	0	0	91	0	0	2	0	0	5	0
Lane Group Flow (vph)	572	323	0	100	235	0	40	808	0	103	469	0
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	57.0	57.0		20.0	20.0		53.0	53.0		53.0	53.0	
Effective Green, g (s)	59.0	59.0		22.0	22.0		55.0	55.0		55.0	55.0	
Actuated g/C Ratio	0.49	0.49		0.18	0.18		0.46	0.46		0.46	0.46	
Clearance Time (s)	4.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	507	737		162	261		239	763		56	751	
v/s Ratio Prot	c0.32	0.22			0.17			0.49			0.29	
v/s Ratio Perm	c0.23			0.11			0.08			c0.84		
v/c Ratio	1.13	0.44		0.62	0.90		0.17	1.06		1.84	0.62	
Uniform Delay, d1	34.2	19.8		45.1	47.9		19.1	32.5		32.5	24.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	80.2	1.9		16.4	35.2		1.5	49.5		438.4	3.9	
Delay (s)	114.4	21.6		61.5	83.2		20.6	82.0		470.9	28.5	
Level of Service	F	C		E	F		C	F		F	C	
Approach Delay (s)		76.4			78.1			79.1			107.5	
Approach LOS		E			E			E			F	
Intersection Summary												
HCM Average Control Delay	83.8			HCM Level of Service			F					
HCM Volume to Capacity ratio	1.47											
Actuated Cycle Length (s)	120.0			Sum of lost time (s)			6.0					
Intersection Capacity Utilization	122.8%			ICU Level of Service			H					
Analysis Period (min)	15											
c Critical Lane Group												

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑↑	↑↑↑	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0				3.0	3.0	3.0	
Lane Util. Factor		0.91			0.91				0.88	0.94	0.95	
Frpb, ped/bikes		1.00			1.00				0.93	1.00	0.99	
Flpb, ped/bikes		1.00			1.00				1.00	1.00	1.00	
Frt		1.00			1.00				0.85	1.00	0.93	
Flt Protected		1.00			1.00				1.00	0.95	1.00	
Satd. Flow (prot)		5080			5085				2581	4990	3274	
Flt Permitted		1.00			1.00				1.00	0.95	1.00	
Satd. Flow (perm)		5080			5085				2581	4990	3274	
Volume (vph)	0	2310	14	0	1120	0	0	0	1566	1924	497	413
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	2357	14	0	1143	0	0	0	1598	1963	507	421
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	100	0
Lane Group Flow (vph)	0	2370	0	0	1143	0	0	0	1598	1963	828	0
Confl. Peds. (#/hr)	79		1	1		79	2		28	28		2
Turn Type									custom	Split		
Protected Phases		2			6					8	8	
Permitted Phases									4			
Actuated Green, G (s)		55.0			55.0				40.0	38.0	38.0	
Effective Green, g (s)		57.0			57.0				43.0	41.0	41.0	
Actuated g/C Ratio		0.38			0.38				0.29	0.27	0.27	
Clearance Time (s)		5.0			5.0				6.0	6.0	6.0	
Lane Grp Cap (vph)		1930			1932				740	1364	895	
v/s Ratio Prot		c0.47			0.22					c0.39	0.25	
v/s Ratio Perm									c0.62			
v/c Ratio		1.23			0.59				2.16	1.44	0.92	
Uniform Delay, d1		46.5			37.2				53.5	54.5	53.0	
Progression Factor		1.00			1.00				1.00	1.00	1.00	
Incremental Delay, d2		107.5			1.3				526.2	201.9	16.6	
Delay (s)		154.0			38.5				579.7	256.4	69.6	
Level of Service		F			D				F	F	E	
Approach Delay (s)		154.0			38.5			579.7			196.4	
Approach LOS		F			D			F			F	
Intersection Summary												
HCM Average Control Delay		237.8			HCM Level of Service				F			
HCM Volume to Capacity ratio		1.57										
Actuated Cycle Length (s)		150.0			Sum of lost time (s)				9.0			
Intersection Capacity Utilization		148.9%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												



Movement	EBT	WBT	WBR	NBL	NWT	NWR
Lane Configurations	↑↑↑	↑↑↑		↑↑	↑↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	0.91	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.98	
Flt Protected	1.00	1.00		0.95	1.00	
Satd. Flow (prot)	5085	4729		3433	4990	
Flt Permitted	1.00	1.00		0.95	1.00	
Satd. Flow (perm)	5085	4729		3433	4990	
Volume (vph)	3787	1125	829	794	1265	162
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	3864	1148	846	810	1291	165
RTOR Reduction (vph)	0	1	0	0	14	0
Lane Group Flow (vph)	3864	1993	0	810	1442	0
Confl. Peds. (#/hr)			3			2
Turn Type						
Protected Phases	2	6		9	4	
Permitted Phases						
Actuated Green, G (s)	56.5	56.0		18.5	31.5	
Effective Green, g (s)	58.0	58.0		20.0	33.0	
Actuated g/C Ratio	0.48	0.48		0.17	0.28	
Clearance Time (s)	4.5	5.0		4.5	4.5	
Lane Grp Cap (vph)	2458	2286		572	1372	
v/s Ratio Prot	c0.76	0.42		c0.24	c0.29	
v/s Ratio Perm						
v/c Ratio	1.57	1.10dr		1.42	1.05	
Uniform Delay, d1	31.0	27.7		50.0	43.5	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	259.4	4.9		197.4	39.0	
Delay (s)	290.4	32.6		247.4	82.5	
Level of Service	F	C		F	F	
Approach Delay (s)	290.4	32.6		247.4	82.5	
Approach LOS	F	C		F	F	

Intersection Summary

HCM Average Control Delay	185.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.39		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	133.9%	ICU Level of Service	H
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑	↑		↑			↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0	3.0		3.0			3.0	3.0
Lane Util. Factor					0.91	1.00		1.00			0.95	0.95
Frpb, ped/bikes					1.00	0.95		1.00			0.95	1.00
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			0.86	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					5085	1498		1858			1437	1504
Flt Permitted					1.00	1.00		0.99			1.00	1.00
Satd. Flow (perm)					5085	1498		1846			1437	1504
Volume (vph)	0	0	0	3	2303	470	1	19	0	0	11	560
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	3	2350	480	1	19	0	0	11	571
RTOR Reduction (vph)	0	0	0	0	0	184	0	0	0	0	3	3
Lane Group Flow (vph)	0	0	0	0	2353	296	0	20	0	0	293	283
Confl. Peds. (#/hr)	11					11				38		15
Turn Type				Perm		Perm	Perm					custom
Protected Phases					6			4			4	8
Permitted Phases				6		6	4					8
Actuated Green, G (s)					69.0	69.0		41.0			41.0	41.0
Effective Green, g (s)					71.0	71.0		43.0			43.0	43.0
Actuated g/C Ratio					0.59	0.59		0.36			0.36	0.36
Clearance Time (s)					5.0	5.0		5.0			5.0	5.0
Lane Grp Cap (vph)					3009	886		661			515	539
v/s Ratio Prot											0.20	0.19
v/s Ratio Perm					0.46	0.20		0.01				
v/c Ratio					0.78	0.33		0.03			0.57	0.53
Uniform Delay, d1					18.6	12.5		25.0			31.0	30.4
Progression Factor					0.45	0.00		1.00			1.00	1.00
Incremental Delay, d2					0.2	0.1		0.1			4.5	3.6
Delay (s)					8.6	0.1		25.1			35.6	34.1
Level of Service					A	A		C			D	C
Approach Delay (s)		0.0			7.1			25.1			34.8	
Approach LOS		A			A			C			C	
Intersection Summary												
HCM Average Control Delay			11.9				HCM Level of Service			B		
HCM Volume to Capacity ratio			0.70									
Actuated Cycle Length (s)			120.0				Sum of lost time (s)			6.0		
Intersection Capacity Utilization			84.2%				ICU Level of Service			E		
Analysis Period (min)			15									
c Critical Lane Group												

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor		0.91			0.91		1.00	1.00		1.00	1.00	
Frt		1.00			1.00		1.00	0.97		1.00	0.89	
Flt Protected		1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		4619			4607		1608	1633		1593	1490	
Flt Permitted		0.92			0.93		0.48	1.00		0.64	1.00	
Satd. Flow (perm)		4253			4299		814	1633		1067	1490	
Volume (vph)	15	1532	0	5	1189	23	90	90	21	44	52	149
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	15	1563	0	5	1213	23	92	92	21	45	53	152
RTOR Reduction (vph)	0	0	0	0	2	0	0	8	0	0	72	0
Lane Group Flow (vph)	0	1578	0	0	1239	0	92	105	0	45	133	0
Heavy Vehicles (%)	2%	1%	1%	1%	1%	2%	1%	2%	1%	2%	2%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		65.0			65.0		25.0	25.0		25.0	25.0	
Effective Green, g (s)		67.0			67.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio		0.67			0.67		0.27	0.27		0.27	0.27	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		2850			2880		220	441		288	402	
v/s Ratio Prot								0.06			0.09	
v/s Ratio Perm		c0.37			0.29		c0.11			0.04		
v/c Ratio		0.55			0.43		0.42	0.24		0.16	0.33	
Uniform Delay, d1		8.7			7.7		30.0	28.5		27.8	29.3	
Progression Factor		1.00			0.08		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.8			0.4		5.8	1.3		1.2	2.2	
Delay (s)		9.4			1.0		35.8	29.7		29.0	31.4	
Level of Service		A			A		D	C		C	C	
Approach Delay (s)		9.4			1.0			32.5			31.0	
Approach LOS		A			A			C			C	
Intersection Summary												
HCM Average Control Delay		9.3					HCM Level of Service		A			
HCM Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		100.0					Sum of lost time (s)		6.0			
Intersection Capacity Utilization		73.2%					ICU Level of Service		D			
Analysis Period (min)		15										
c Critical Lane Group												



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑			↑			↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.91			0.91			1.00			1.00	
Frt		1.00			1.00			0.98			0.93	
Flt Protected		1.00			1.00			0.96			0.98	
Satd. Flow (prot)		4558			4576			1582			1525	
Flt Permitted		0.93			0.93			0.73			0.90	
Satd. Flow (perm)		4246			4267			1206			1398	
Volume (vph)	10	1391	35	5	1003	0	203	3	26	11	3	17
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	10	1419	36	5	1023	0	207	3	27	11	3	17
RTOR Reduction (vph)	0	3	0	0	0	0	0	5	0	0	11	0
Lane Group Flow (vph)	0	1462	0	0	1028	0	0	232	0	0	20	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		59.0			59.0			31.0			31.0	
Effective Green, g (s)		61.0			61.0			33.0			33.0	
Actuated g/C Ratio		0.61			0.61			0.33			0.33	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		2590			2603			398			461	
v/s Ratio Prot												
v/s Ratio Perm		0.34			0.24			0.19			0.01	
v/c Ratio		0.56			0.39			0.58			0.04	
Uniform Delay, d1		11.6			10.0			27.8			22.8	
Progression Factor		0.38			1.20			1.00			1.00	
Incremental Delay, d2		0.8			0.3			6.1			0.2	
Delay (s)		5.2			12.3			33.9			22.9	
Level of Service		A			B			C			C	
Approach Delay (s)		5.2			12.3			33.9			22.9	
Approach LOS		A			B			C			C	

Intersection Summary

HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	66.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0						3.0	
Lane Util. Factor		0.91			0.91						1.00	
Flt		0.99			1.00						0.94	
Flt Protected		1.00			1.00						0.99	
Satd. Flow (prot)		4533			4557						1563	
Flt Permitted		1.00			1.00						0.99	
Satd. Flow (perm)		4533			4557						1563	
Volume (vph)	81	1341	68	53	1018	14	0	0	0	20	62	68
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	83	1368	69	54	1039	14	0	0	0	20	63	69
RTOR Reduction (vph)	0	5	0	0	1	0	0	0	0	0	30	0
Lane Group Flow (vph)	0	1515	0	0	1106	0	0	0	0	0	122	0
Turn Type	custom		custom						Perm			
Protected Phases	4	4		8	8							3
Permitted Phases	4			8						3		
Actuated Green, G (s)		40.0			29.0						16.0	
Effective Green, g (s)		42.0			31.0						18.0	
Actuated g/C Ratio		0.42			0.31						0.18	
Clearance Time (s)		5.0			5.0						5.0	
Lane Grp Cap (vph)		1904			1413						281	
v/s Ratio Prot		c0.33			c0.24							
v/s Ratio Perm											0.08	
v/c Ratio		0.80			0.78						0.44	
Uniform Delay, d1		25.3			31.4						36.5	
Progression Factor		0.61			1.00						1.00	
Incremental Delay, d2		3.0			4.4						4.9	
Delay (s)		18.3			35.8						41.3	
Level of Service		B			D						D	
Approach Delay (s)		18.3			35.8			0.0			41.3	
Approach LOS		B			D			A			D	
Intersection Summary												
HCM Average Control Delay		26.6			HCM Level of Service			C				
HCM Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			9.0				
Intersection Capacity Utilization		75.2%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑	↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0			3.0	3.0	3.0
Lane Util. Factor	0.91			0.91	1.00	1.00
Fr _t	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	4568			4567	1593	1425
Flt Permitted	1.00			0.66	0.95	1.00
Satd. Flow (perm)	4568			3026	1593	1425
Volume (vph)	3955	51	88	1908	47	87
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	4036	52	90	1947	48	89
RTOR Reduction (vph)	1	0	0	0	0	0
Lane Group Flow (vph)	4087	0	0	2037	48	89
Turn Type			pm+pt		pm+ov	
Protected Phases	4		3	8	9	3
Permitted Phases			8		9	
Actuated Green, G (s)	70.2			82.5	9.5	17.8
Effective Green, g (s)	71.2			83.5	10.5	19.8
Actuated g/C Ratio	0.71			0.84	0.10	0.20
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	3252			2670	167	325
v/s Ratio Prot	c0.89			c0.07	0.03	c0.03
v/s Ratio Perm				0.57		0.04
v/c Ratio	1.26			0.76	0.29	0.27
Uniform Delay, d ₁	14.4			3.8	41.3	34.0
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d ₂	118.1			1.3	4.3	0.5
Delay (s)	132.5			5.1	45.6	34.5
Level of Service	F			A	D	C
Approach Delay (s)	132.5			5.1	38.4	
Approach LOS	F			A	D	
Intersection Summary						
HCM Average Control Delay			89.0		HCM Level of Service	F
HCM Volume to Capacity ratio			1.05			
Actuated Cycle Length (s)			100.0		Sum of lost time (s)	3.0
Intersection Capacity Utilization			124.2%		ICU Level of Service	H
Analysis Period (min)			15			
c Critical Lane Group						

	→	↘	↙	←	↖	↗	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Volume (veh/h)	3953	9	0	1955	0	53	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	
Hourly flow rate (vph)	4034	9	0	1995	0	54	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh							
Upstream signal (ft)	316						
pX, platoon unblocked			0.53		0.53	0.53	
vC, conflicting volume			4043		4703	1349	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4985		6242	0	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	91	
cM capacity (veh/h)			9		0	570	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1613	1613	816	665	665	665	54
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	9	0	0	0	54
cSH	1700	1700	1700	1700	1700	1700	570
Volume to Capacity	0.95	0.95	0.48	0.39	0.39	0.39	0.09
Queue Length 95th (ft)	0	0	0	0	0	0	8
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	12.0
Lane LOS							B
Approach Delay (s)	0.0			0.0			12.0
Approach LOS							B
Intersection Summary							
Average Delay			0.1				
Intersection Capacity Utilization			95.4%		ICU Level of Service		F
Analysis Period (min)			15				