

APPENDIX Q
Intersection Capacity Analyses
Saturday Peak Hour
2030 Projected Traffic Conditions with the Proposed Improvements

Intersection Capacity Analysis

1: Washington St & Sherman St

08/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↘		↗	↘	
Traffic Volume (vph)	32	71	58	65	87	36	74	407	67	21	406	19
Future Volume (vph)	32	71	58	65	87	36	74	407	67	21	406	19
Confl. Peds. (#/hr)	3		8	8		3	16		9	9		16
Peak Hour Factor	0.75	0.75	0.75	0.87	0.87	0.87	0.95	0.95	0.95	0.89	0.89	0.89
Growth Factor	112%	112%	112%	112%	112%	112%	112%	112%	112%	112%	112%	112%
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	1%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	241	0	0	242	0	87	559	0	26	535	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		3.0	10.0		2.0	10.0	
Minimum Split (s)	12.5	12.5		12.5	12.5		7.0	15.5		6.0	15.5	
Total Split (s)	25.0	25.0		25.0	25.0		7.0	37.0		6.0	36.0	
Total Split (%)	27.8%	27.8%		27.8%	27.8%		7.8%	41.1%		6.7%	40.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0		4.0	5.0		4.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Min		None	Min	
v/c Ratio		0.50			0.58		0.31	0.69		0.10	0.76	
Control Delay		23.1			28.1		14.3	21.8		11.6	26.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		23.1			28.1		14.3	21.8		11.6	26.9	
Queue Length 50th (ft)		56			63		14	124		4	154	
Queue Length 95th (ft)		148			#223		57	#471		23	#445	
Internal Link Dist (ft)		308			288			525			214	
Turn Bay Length (ft)							100			50		
Base Capacity (vph)		627			544		278	1123		256	1096	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.38			0.44		0.31	0.50		0.10	0.49	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 58.6

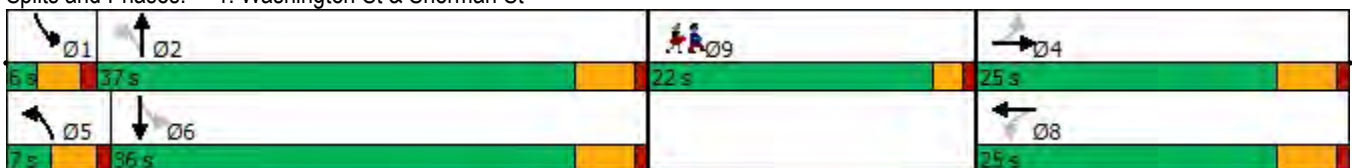
Natural Cycle: 90

Control Type: Actuated-Uncoordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Washington St & Sherman St



Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	22.0
Total Split (s)	22.0
Total Split (%)	24%
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Capacity Analysis

2: Washington St & Revere St/Driveway

08/22/2022

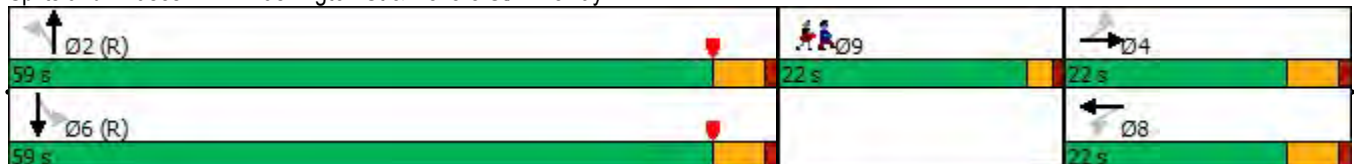


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	44	0	80	2	1	2	66	486	3	4	506	32
Future Volume (vph)	44	0	80	2	1	2	66	486	3	4	506	32
Confl. Peds. (#/hr)	14		10	10		14	26		36	36		26
Peak Hour Factor	0.72	0.72	0.72	0.42	0.42	0.42	0.92	0.92	0.92	0.96	0.96	0.96
Growth Factor	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%
Heavy Vehicles (%)	3%	3%	3%	0%	0%	0%	2%	2%	2%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	186	0	0	13	0	0	652	0	0	610	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	9.0	9.0		9.0	9.0		15.0	15.0		15.0	15.0	
Total Split (s)	22.0	22.0		22.0	22.0		59.0	59.0		59.0	59.0	
Total Split (%)	21.4%	21.4%		21.4%	21.4%		57.3%	57.3%		57.3%	57.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
v/c Ratio		0.84			0.08			0.57			0.46	
Control Delay		55.1			30.6			14.2			11.6	
Queue Delay		0.0			0.0			0.8			0.0	
Total Delay		55.1			30.6			15.1			11.6	
Queue Length 50th (ft)		71			5			121			99	
Queue Length 95th (ft)		98			8			485			386	
Internal Link Dist (ft)		383			46			533			146	
Turn Bay Length (ft)												
Base Capacity (vph)		296			234			1145			1312	
Starvation Cap Reductn		0			0			233			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.63			0.06			0.71			0.46	

Intersection Summary

Cycle Length: 103
 Actuated Cycle Length: 103
 Offset: 23 (22%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
 Natural Cycle: 75
 Control Type: Actuated-Coordinated

Splits and Phases: 2: Washington St & Revere St/Driveway



Intersection Capacity Analysis
 2: Washington St & Revere St/Driveway

08/22/2022

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	22.0
Total Split (s)	22.0
Total Split (%)	21%
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Capacity Analysis
3: Washington St & Bolivar St

08/22/2022



Lane Group	NWL	NWR	NET	NER	SWL	SWT	Ø7
Lane Configurations							
Traffic Volume (vph)	197	119	453	161	99	492	
Future Volume (vph)	197	119	453	161	99	492	
Confl. Peds. (#/hr)	14	25		58	58		
Peak Hour Factor	0.83	0.83	0.97	0.97	0.95	0.95	
Growth Factor	108%	108%	108%	108%	108%	108%	
Heavy Vehicles (%)	2%	2%	1%	1%	2%	2%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	256	155	683	0	113	559	
Turn Type	Prot	pt+ov	NA		pm+pt	NA	
Protected Phases	8	8 1	2		1	6	7
Permitted Phases					6		
Detector Phase	8	8 1	2		1	6	
Switch Phase							
Minimum Initial (s)	5.0		10.0		2.0	10.0	7.0
Minimum Split (s)	10.5		15.5		7.5	15.5	20.0
Total Split (s)	21.0		50.0		9.0	59.0	20.0
Total Split (%)	21.0%		50.0%		9.0%	59.0%	20%
Yellow Time (s)	4.0		4.0		4.0	4.0	2.0
All-Red Time (s)	1.5		1.5		1.5	1.5	1.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.5		5.5		5.5	5.5	
Lead/Lag	Lag		Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes		Yes
Recall Mode	None		C-Min		None	C-Min	None
v/c Ratio	0.91	0.42	0.76		0.36	0.49	
Control Delay	78.9	32.5	29.2		18.9	14.6	
Queue Delay	0.0	0.0	3.6		0.0	0.3	
Total Delay	78.9	32.5	32.8		18.9	14.9	
Queue Length 50th (ft)	163	58	390		34	225	
Queue Length 95th (ft)	#276	93	#603		62	325	
Internal Link Dist (ft)	291		172			533	
Turn Bay Length (ft)		150			200		
Base Capacity (vph)	284	370	899		314	1139	
Starvation Cap Reductn	0	0	137		0	160	
Spillback Cap Reductn	0	0	0		0	0	
Storage Cap Reductn	0	0	0		0	0	
Reduced v/c Ratio	0.90	0.42	0.90		0.36	0.57	

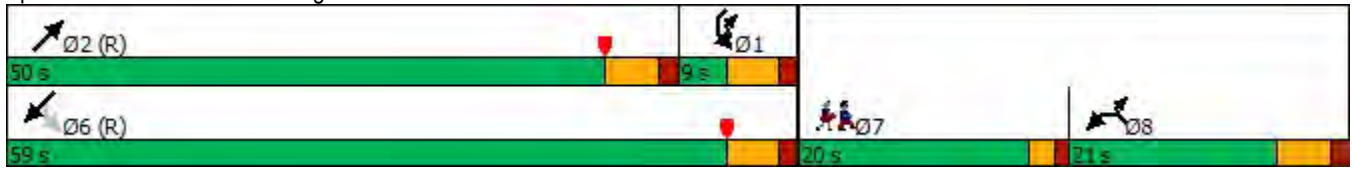
Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 2 (2%), Referenced to phase 2:NET and 6:SWTL, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Intersection Capacity Analysis
3: Washington St & Bolivar St

08/22/2022

















Splits and Phases: 3: Washington St & Bolivar St



Intersection Capacity Analysis (HCM 200 Unsignalized)

4: Washington St & Mechanic St/Wall St

08/22/2022

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	6	0	0	46	2	33	5	553	43	30	664	3
Future Volume (Veh/h)	6	0	0	46	2	33	5	553	43	30	664	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.60	0.60	0.60	0.92	0.92	0.92	0.95	0.95	0.95	0.92	0.92	0.92
Hourly flow rate (vph)	11	0	0	54	2	39	6	629	49	35	779	4
Pedestrians		9			32			10			3	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		1			3			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								205			252	
pX, platoon unblocked	0.86	0.86	0.82	0.86	0.86	0.93	0.82			0.93		
vC, conflicting volume	1568	1582	800	1558	1560	688	792			710		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1386	1401	648	1374	1375	624	639			647		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	87	100	100	44	98	91	99			96		
cM capacity (veh/h)	87	111	382	96	115	438	774			847		
Direction, Lane #	SE 1	NW 1	NE 1	SW 1								
Volume Total	11	95	684	818								
Volume Left	11	54	6	35								
Volume Right	0	39	49	4								
cSH	87	142	774	847								
Volume to Capacity	0.13	0.67	0.01	0.04								
Queue Length 95th (ft)	10	93	1	3								
Control Delay (s)	52.4	71.1	0.2	1.1								
Lane LOS	F	F	A	A								
Approach Delay (s)	52.4	71.1	0.2	1.1								
Approach LOS	F	F										
Intersection Summary												
Average Delay			5.2									
Intersection Capacity Utilization			72.0%		ICU Level of Service					C		
Analysis Period (min)			15									

Intersection Capacity Analysis
5: Church St & Washington St

08/22/2022



Lane Group	EBL	EBR	NEL	NET	SWT	SWR	Ø2	Ø3	Ø4	Ø5
Lane Configurations										
Traffic Volume (vph)	0	0	319	601	491	227				
Future Volume (vph)	0	0	319	601	491	227				
Confl. Peds. (#/hr)	4		6			6				
Peak Hour Factor	0.90	0.90	0.96	0.96	0.93	0.93				
Growth Factor	108%	108%	108%	108%	108%	108%				
Heavy Vehicles (%)	0%	0%	2%	2%	1%	1%				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	359	676	834	0				
Turn Type			pm+pt	NA	NA					
Protected Phases			4 5	2 4 5	6		2	3	4	5
Permitted Phases			2 4 5							
Detector Phase			4 5	2 4 5	6					
Switch Phase										
Minimum Initial (s)					10.0		10.0	7.0	5.0	1.5
Minimum Split (s)					15.5		50.0	21.0	10.5	7.0
Total Split (s)					43.0		50.0	21.0	30.0	7.0
Total Split (%)					42.6%		50%	21%	30%	7%
Yellow Time (s)					4.0		4.0	2.0	4.0	4.0
All-Red Time (s)					1.5		1.5	1.0	1.5	1.0
Lost Time Adjust (s)					0.0					
Total Lost Time (s)					5.5					
Lead/Lag					Lead		Lead	Lag	Lag	
Lead-Lag Optimize?					Yes		Yes	Yes	Yes	
Recall Mode					C-Min		C-Min	None	None	None
v/c Ratio			0.55	0.38	0.80					
Control Delay			13.1	2.3	26.3					
Queue Delay			4.0	0.1	14.8					
Total Delay			17.1	2.4	41.1					
Queue Length 50th (ft)			38	0	351					
Queue Length 95th (ft)			162	217	#896					
Internal Link Dist (ft)	599			58	125					
Turn Bay Length (ft)										
Base Capacity (vph)			725	1756	1049					
Starvation Cap Reductn			279	173	214					
Spillback Cap Reductn			0	0	0					
Storage Cap Reductn			0	0	0					
Reduced v/c Ratio			0.80	0.43	1.00					

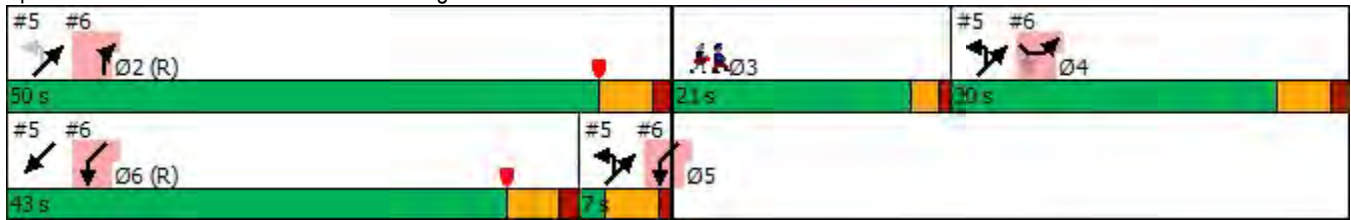
Intersection Summary

Cycle Length: 101
 Actuated Cycle Length: 101
 Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Yellow
 Natural Cycle: 95
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Intersection Capacity Analysis
5: Church St & Washington St

08/22/2022

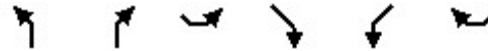
Splits and Phases: 5: Church St & Washington St



Intersection Capacity Analysis

6: Washington St & Neponset St

08/22/2022

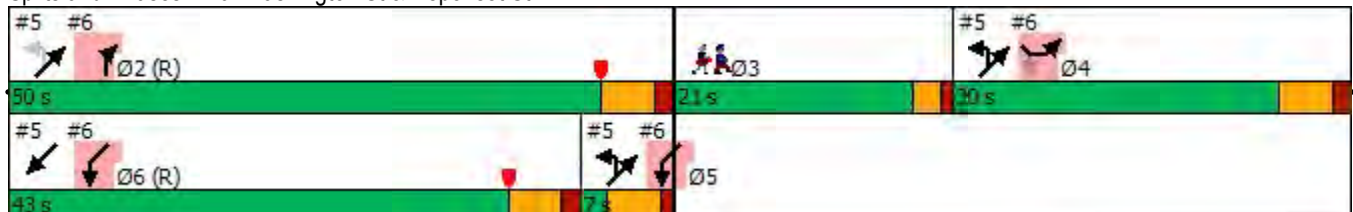


Lane Group	NBL	NBR	SEL	SER	SWL	SWR	Ø3	Ø5	Ø6
Lane Configurations		↗	↘	↘	↗				
Traffic Volume (vph)	0	729	192	360	481	0			
Future Volume (vph)	0	729	192	360	481	0			
Confl. Peds. (#/hr)	2		8	6		2			
Peak Hour Factor	0.91	0.91	0.96	0.96	0.92	0.92			
Growth Factor	108%	108%	108%	108%	108%	108%			
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	865	216	405	565	0			
Turn Type		Prot	Prot	Perm	Prot				
Protected Phases		2	4		5 6		3	5	6
Permitted Phases				4					
Detector Phase		2	4	4	5 6				
Switch Phase									
Minimum Initial (s)		10.0	5.0	5.0			7.0	1.5	10.0
Minimum Split (s)		50.0	10.5	10.5			21.0	7.0	15.5
Total Split (s)		50.0	30.0	30.0			21.0	7.0	43.0
Total Split (%)		49.5%	29.7%	29.7%			21%	7%	43%
Yellow Time (s)		4.0	4.0	4.0			2.0	4.0	4.0
All-Red Time (s)		1.5	1.5	1.5			1.0	1.0	1.5
Lost Time Adjust (s)		0.0	0.0	0.0					
Total Lost Time (s)		5.5	5.5	5.5					
Lead/Lag			Lag	Lag			Lead	Lag	Lead
Lead-Lag Optimize?			Yes	Yes			Yes	Yes	Yes
Recall Mode		C-Min	None	None			None	None	C-Min
v/c Ratio		0.67	0.62	0.64	0.48				
Control Delay		7.0	43.9	8.5	13.6				
Queue Delay		0.0	0.0	0.0	2.3				
Total Delay		7.0	43.9	8.5	15.9				
Queue Length 50th (ft)		46	126	0	149				
Queue Length 95th (ft)		306	194	79	417				
Internal Link Dist (ft)	644		531		158				
Turn Bay Length (ft)									
Base Capacity (vph)		1285	434	681	1172				
Starvation Cap Reductn		0	0	0	456				
Spillback Cap Reductn		0	0	0	0				
Storage Cap Reductn		0	0	0	0				
Reduced v/c Ratio		0.67	0.50	0.59	0.79				

Intersection Summary

Cycle Length: 101
 Actuated Cycle Length: 101
 Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Yellow
 Natural Cycle: 95
 Control Type: Actuated-Coordinated

Splits and Phases: 6: Washington St & Neponset St



Intersection Capacity Analysis

7: Washington St & High St

08/22/2022

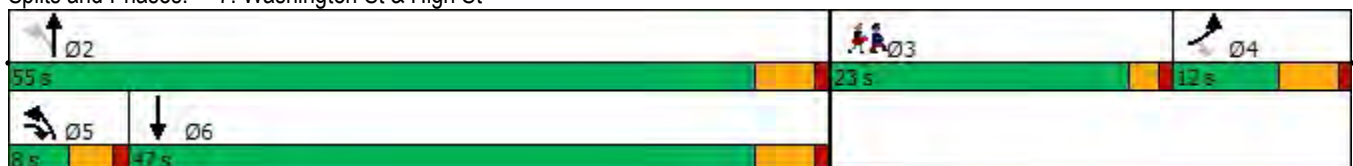


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø3
Lane Configurations							
Traffic Volume (vph)	29	112	121	676	764	57	
Future Volume (vph)	29	112	121	676	764	57	
Confl. Peds. (#/hr)		1					
Peak Hour Factor	0.71	0.71	0.98	0.98	0.96	0.96	
Growth Factor	108%	108%	108%	108%	108%	108%	
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	44	170	133	745	924	0	
Turn Type	Prot	pm+ov	pm+pt	NA	NA		
Protected Phases	4	5	5	2	6		3
Permitted Phases		4	2				
Detector Phase	4	5	5	2	6		
Switch Phase							
Minimum Initial (s)	7.0	3.0	3.0	5.0	5.0		3.0
Minimum Split (s)	12.0	7.0	7.0	10.0	10.0		23.0
Total Split (s)	12.0	8.0	8.0	55.0	47.0		23.0
Total Split (%)	13.3%	8.9%	8.9%	61.1%	52.2%		26%
Yellow Time (s)	4.0	3.0	3.0	4.0	4.0		2.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.0	4.0	4.0	5.0	5.0		
Lead/Lag	Lag	Lead	Lead		Lag		Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes		Yes
Recall Mode	None	Min	Min	Min	None		None
v/c Ratio	0.23	0.49	0.46	0.49	0.76		
Control Delay	35.0	10.2	11.1	7.2	17.7		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay	35.0	10.2	11.1	7.2	17.7		
Queue Length 50th (ft)	17	0	10	94	241		
Queue Length 95th (ft)	44	23	#66	408	#791		
Internal Link Dist (ft)	418			1059	682		
Turn Bay Length (ft)	50						
Base Capacity (vph)	194	350	291	1527	1216		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.23	0.49	0.46	0.49	0.76		

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 66.4
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 7: Washington St & High St



Intersection Capacity Analysis
8: Washington St & Shoppes Village Driveway

08/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔		↔	↔	
Traffic Volume (vph)	19	3	32	78	0	216	27	599	63	308	538	30
Future Volume (vph)	19	3	32	78	0	216	27	599	63	308	538	30
Confl. Peds. (#/hr)							1		1	1		1
Peak Hour Factor	0.80	0.80	0.80	0.96	0.96	0.96	0.98	0.98	0.98	0.91	0.91	0.91
Growth Factor	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	73	0	0	88	243	30	729	0	366	675	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	10.0	10.0		10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Total Split (s)	15.0	15.0		15.0	15.0	15.0	7.0	36.0		18.0	47.0	
Total Split (%)	16.7%	16.7%		16.7%	16.7%	16.7%	7.8%	40.0%		20.0%	52.2%	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	4.0	5.0		4.0	5.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
v/c Ratio		0.38			0.56	0.63	0.07	0.81		0.81	0.53	
Control Delay		24.5			52.3	13.0	7.1	23.5		36.2	11.9	
Queue Delay		0.0			0.0	0.0	0.0	1.7		0.0	0.1	
Total Delay		24.6			52.3	13.0	7.1	25.3		36.2	12.0	
Queue Length 50th (ft)		16			48	0	5	337		133	159	
Queue Length 95th (ft)		48			#104	68	m8	#686		#372	455	
Internal Link Dist (ft)		81			235			168			854	
Turn Bay Length (ft)										200		
Base Capacity (vph)		208			171	402	412	898		454	1282	
Starvation Cap Reductn		0			0	0	0	66		0	0	
Spillback Cap Reductn		1			0	0	0	0		0	45	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.35			0.51	0.60	0.07	0.88		0.81	0.55	

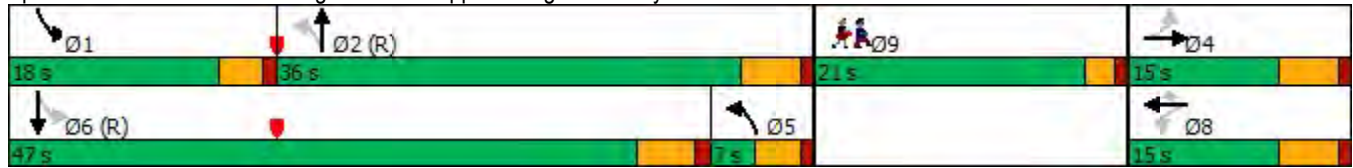
Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Intersection Capacity Analysis
 8: Washington St & Shoppes Village Driveway

08/22/2022

Splits and Phases: 8: Washington St & Shoppes Village Driveway



















Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	21.0
Total Split (s)	21.0
Total Split (%)	23%
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Capacity Analysis (HCM 200 Unsignalized)

9: Washington St & Plaza Driveway

08/22/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	43	0	0	62	0	620	108	0	597	0
Future Volume (Veh/h)	0	0	43	0	0	62	0	620	108	0	597	0
Sign Control	Stop			Stop				Free			Free	
Grade	0%			0%				0%			0%	
Peak Hour Factor	0.73	0.73	0.73	0.96	0.96	0.96	0.99	0.99	0.99	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	64	0	0	70	0	676	118	0	701	0
Pedestrians	1			3								
Lane Width (ft)	12.0			12.0								
Walking Speed (ft/s)	3.5			3.5								
Percent Blockage	0			0								
Right turn flare (veh)												
Median type							TWLTL			TWLTL		
Median storage (veh)							2			2		
Upstream signal (ft)							201			248		
pX, platoon unblocked	0.80	0.80	0.80	0.80	0.80	0.70	0.80			0.70		
vC, conflicting volume	1507	1499	702	1503	1440	738	702			797		
vC1, stage 1 conf vol	702	702		738	738							
vC2, stage 2 conf vol	805	797		765	702							
vCu, unblocked vol	946	936	502	941	863	416	502			500		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5		6.1	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	86	100	100	84	100			100		
cM capacity (veh/h)	290	333	458	300	353	448	849			750		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	64	70	794	701								
Volume Left	0	0	0	0								
Volume Right	64	70	118	0								
cSH	458	448	1700	1700								
Volume to Capacity	0.14	0.16	0.47	0.41								
Queue Length 95th (ft)	12	14	0	0								
Control Delay (s)	14.1	14.5	0.0	0.0								
Lane LOS	B	B										
Approach Delay (s)	14.1	14.5	0.0	0.0								
Approach LOS	B	B										
Intersection Summary												
Average Delay			1.2									
Intersection Capacity Utilization			53.2%	ICU Level of Service		A						
Analysis Period (min)			15									

Intersection Capacity Analysis
10: Washington St & Cobb Corner

08/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔		↔	↔	
Traffic Volume (vph)	38	5	5	126	5	113	55	553	90	89	582	27
Future Volume (vph)	38	5	5	126	5	113	55	553	90	89	582	27
Confl. Peds. (#/hr)	2					2	3					3
Peak Hour Factor	0.70	0.70	0.70	0.98	0.98	0.98	0.91	0.91	0.91	0.95	0.95	0.95
Growth Factor	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	0	0	145	125	65	763	0	101	693	0
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	23.0	23.0		10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Total Split (s)	23.0	23.0		23.0	23.0	23.0	7.0	39.0		7.0	39.0	
Total Split (%)	25.6%	25.6%		25.6%	25.6%	25.6%	7.8%	43.3%		7.8%	43.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	4.0	5.0		4.0	5.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
v/c Ratio		0.42			0.67	0.36	0.18	0.68		0.33	0.60	
Control Delay		37.5			50.5	9.0	10.5	19.4		8.1	13.4	
Queue Delay		0.0			0.0	0.0	0.0	5.1		0.0	0.2	
Total Delay		37.5			50.5	9.1	10.5	24.6		8.1	13.7	
Queue Length 50th (ft)		35			78	0	8	229		8	120	
Queue Length 95th (ft)		56			135	45	42	#713		29	#605	
Internal Link Dist (ft)		38			134			131			121	
Turn Bay Length (ft)												
Base Capacity (vph)		228			276	415	360	1122		307	1163	
Starvation Cap Reductn		0			0	0	0	290		0	95	
Spillback Cap Reductn		0			0	4	0	77		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.33			0.53	0.30	0.18	0.92		0.33	0.65	

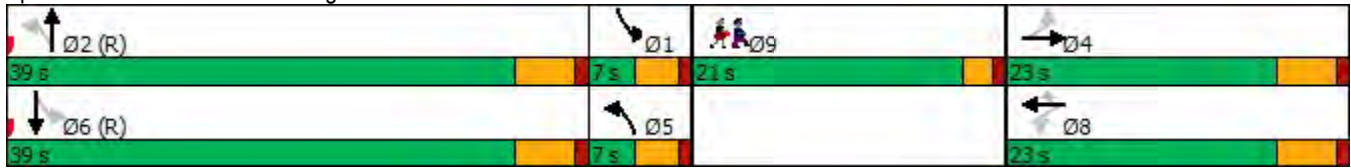
Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 78 (87%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Intersection Capacity Analysis
 10: Washington St & Cobb Corner

08/22/2022

Splits and Phases: 10: Washington St & Cobb Corner



Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	21.0
Total Split (s)	21.0
Total Split (%)	23%
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Capacity Analysis
 11: Bay Rd/Washington St & N Main St/Sharon St

08/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	183	270	35	90	329	90	33	309	46	249	255	148
Future Volume (vph)	183	270	35	90	329	90	33	309	46	249	255	148
Confl. Peds. (#/hr)			1	1			3					3
Peak Hour Factor	0.92	0.92	0.92	0.94	0.94	0.94	0.86	0.86	0.86	0.93	0.93	0.93
Growth Factor	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	215	358	0	103	481	0	41	446	0	289	296	172
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8			6			2		2
Detector Phase	7	4		3	8		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	3.0	10.0		5.0	10.0		3.0	10.0		4.0	10.0	10.0
Minimum Split (s)	7.0	15.0		9.0	15.0		7.0	15.0		9.0	15.0	15.0
Total Split (s)	17.0	35.0		10.0	28.0		7.0	37.0		20.0	50.0	50.0
Total Split (%)	13.3%	27.3%		7.8%	21.9%		5.5%	28.9%		15.6%	39.1%	39.1%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0		4.0	5.0		4.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
v/c Ratio	0.90	0.91		0.70	0.84		0.09	0.68		0.66	0.32	0.20
Control Delay	74.1	75.0		60.3	62.7		21.3	43.7		29.2	24.8	4.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	1.3	0.0
Total Delay	74.1	75.0		60.3	62.7		21.3	43.7		29.2	26.1	4.7
Queue Length 50th (ft)	138	282		62	192		12	288		104	132	0
Queue Length 95th (ft)	#263	#437		#125	254		42	#531		#294	273	48
Internal Link Dist (ft)		217			198			180			132	
Turn Bay Length (ft)				125								
Base Capacity (vph)	240	431		147	641		458	653		436	928	865
Starvation Cap Reductn	0	0		0	0		0	0		0	431	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.90	0.83		0.70	0.75		0.09	0.68		0.66	0.60	0.20

Intersection Summary

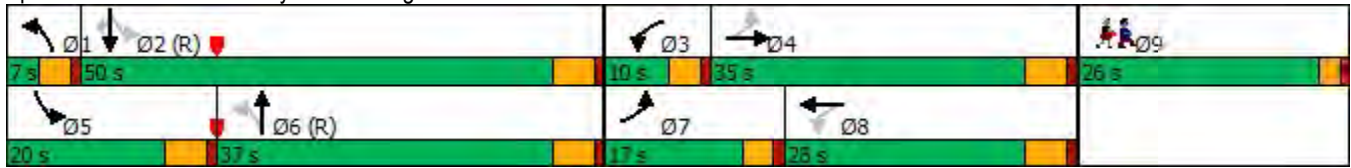
Cycle Length: 128
 Actuated Cycle Length: 128
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green, Master Intersection
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Intersection Capacity Analysis

11: Bay Rd/Washington St & N Main St/Sharon St

08/22/2022

Splits and Phases: 11: Bay Rd/Washington St & N Main St/Sharon St





















Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	26.0
Total Split (s)	26.0
Total Split (%)	20%
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection Capacity Analysis (HCM 200 Unsignalized)

12: Washington St & Starbucks Driveway


















08/22/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	30	0	0	40	0	612	40	0	577	15
Future Volume (Veh/h)	0	0	30	0	0	40	0	612	40	0	577	15
Sign Control	Stop			Stop				Free			Free	
Grade	0%			0%				0%			0%	
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.96	0.96	0.96	0.84	0.84	0.84
Hourly flow rate (vph)	0	0	46	0	0	47	0	688	45	0	742	19
Pedestrians	2											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	3.5											
Percent Blockage	0											
Right turn flare (veh)												
Median type							None			TWLTL		
Median storage (veh)										2		
Upstream signal (ft)							212			211		
pX, platoon unblocked												
vC, conflicting volume	1144	1486	382	1128	1474	366	763				733	
vC1, stage 1 conf vol	754	754		710	710							
vC2, stage 2 conf vol	391	733		417	763							
vCu, unblocked vol	1144	1486	382	1128	1474	366	763				733	
tC, single (s)	7.6	6.6	7.0	7.5	6.5	6.9	4.2				4.2	
tC, 2 stage (s)	6.6	5.6		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	100	100	92	100	100	93	100				100	
cM capacity (veh/h)	322	311	612	336	315	630	837				861	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	46	47	459	274	495	266						
Volume Left	0	0	0	0	0	0						
Volume Right	46	47	0	45	0	19						
cSH	612	630	1700	1700	1700	1700						
Volume to Capacity	0.08	0.07	0.27	0.16	0.29	0.16						
Queue Length 95th (ft)	6	6	0	0	0	0						
Control Delay (s)	11.4	11.2	0.0	0.0	0.0	0.0						
Lane LOS	B	B										
Approach Delay (s)	11.4	11.2	0.0	0.0								
Approach LOS	B	B										
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utilization			29.6%			ICU Level of Service			A			
Analysis Period (min)	15											

Intersection Capacity Analysis (HCM 200 Unsignalized)

13: Sharon St & Cobb orner Dr

08/22/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	538	62	15	506	1	44	4	48	0	0	37
Future Volume (Veh/h)	34	538	62	15	506	1	44	4	48	0	0	37
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.94	0.94	0.94	0.85	0.85	0.85	0.84	0.84	0.84
Hourly flow rate (vph)	42	660	76	17	581	1	56	5	61	0	0	48
Pedestrians												1
Lane Width (ft)												12.0
Walking Speed (ft/s)												3.5
Percent Blockage												0
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		278			313							
pX, platoon unblocked	0.77			0.71			0.83	0.83	0.71	0.83	0.83	0.77
vC, conflicting volume	583			736			1445	1399	698	1462	1436	582
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	313			430			816	760	377	836	805	312
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			98			74	98	87	100	100	91
cM capacity (veh/h)	963			810			212	259	477	195	246	564
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1							
Volume Total	778	598	1	122	48							
Volume Left	42	17	0	56	0							
Volume Right	76	0	1	61	48							
cSH	963	810	1700	297	564							
Volume to Capacity	0.04	0.02	0.00	0.41	0.09							
Queue Length 95th (ft)	3	2	0	48	7							
Control Delay (s)	1.1	0.6	0.0	25.4	12.0							
Lane LOS	A	A		D	B							
Approach Delay (s)	1.1	0.6		25.4	12.0							
Approach LOS				D	B							
Intersection Summary												
Average Delay			3.2									
Intersection Capacity Utilization			77.8%		ICU Level of Service				D			
Analysis Period (min)			15									

Intersection Capacity Analysis
 14: Sharon St & Village Shoppes Dr

08/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	536	40	15	531	151	0	0	0	165	1	105
Future Volume (vph)	5	536	40	15	531	151	0	0	0	165	1	105
Confl. Peds. (#/hr)	2		1	1		2						
Peak Hour Factor	0.88	0.88	0.88	0.94	0.94	0.94	0.92	0.92	0.92	0.87	0.87	0.87
Growth Factor	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	707	0	0	800	0	0	0	0	0	206	130
Turn Type	Perm	NA		Perm	NA					Perm	NA	Perm
Protected Phases		4			8						6	
Permitted Phases	4			8						6		6
Detector Phase	4	4		8	8					6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0					5.0	5.0	5.0
Minimum Split (s)	9.0	9.0		9.0	9.0					10.0	10.0	10.0
Total Split (s)	43.0	43.0		43.0	43.0					26.0	26.0	26.0
Total Split (%)	47.8%	47.8%		47.8%	47.8%					28.9%	28.9%	28.9%
Yellow Time (s)	3.0	3.0		3.0	3.0					4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0						0.0	0.0
Total Lost Time (s)	4.0	4.0			4.0						5.0	5.0
Lead/Lag										Lead	Lead	Lead
Lead-Lag Optimize?										Yes	Yes	Yes
Recall Mode	C-Max	C-Max		C-Max	C-Max					Max	Max	Max
v/c Ratio	0.02	0.55			0.63						0.49	0.27
Control Delay	10.8	13.8			15.9						34.5	7.0
Queue Delay	0.0	0.7			0.0						0.0	0.0
Total Delay	10.8	14.6			15.9						34.5	7.0
Queue Length 50th (ft)	1	177			214						102	0
Queue Length 95th (ft)	9	460			#642						163	40
Internal Link Dist (ft)		233			100			33			115	
Turn Bay Length (ft)	75											
Base Capacity (vph)	397	1296			1262						422	476
Starvation Cap Reductn	0	280			0						0	0
Spillback Cap Reductn	0	0			0						0	0
Storage Cap Reductn	0	0			0						0	0
Reduced v/c Ratio	0.02	0.70			0.63						0.49	0.27

Intersection Summary

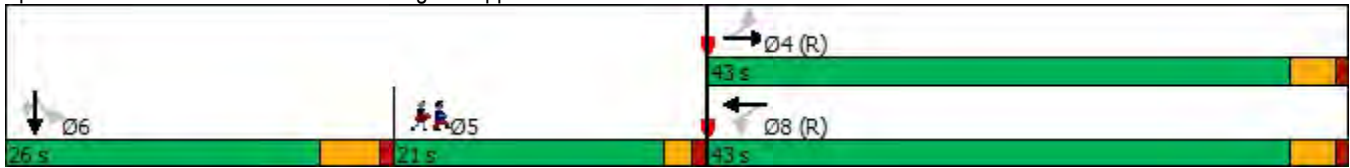
Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Intersection Capacity Analysis

14: Sharon St & Village Shoppes Dr

08/22/2022

Splits and Phases: 14: Sharon St & Village Shoppes Dr



Lane Group Ø5	
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	5
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	21.0
Total Split (s)	21.0
Total Split (%)	23%
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Recall Mode	None
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	