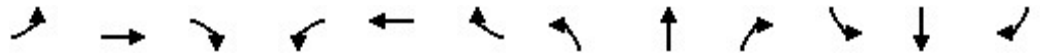


**APPENDIX O**  
**Intersection Capacity Analyses**  
**Weekday AM Peak Hour**  
**2030 Projected Traffic Conditions with the Proposed Improvements**

# 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)	55	58	35	63	151	180	47	591	44	27	301	36
Future Volume (vph)	55	58	35	63	151	180	47	591	44	27	301	36
Confl. Peds. (#/hr)	3		1	1		3	6		9	9		9
Peak Hour Factor	0.74	0.74	0.74	0.85	0.85	0.85	0.99	0.99	0.99	0.79	0.79	0.79
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	232	0	0	538	0	55	744	0	40	495	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	15.0		6.0	15.0	
Total Split (s)	28.0	28.0		28.0	28.0		7.0	34.0		6.0	33.0	
Total Split (%)	31.1%	31.1%		31.1%	31.1%		7.8%	37.8%		6.7%	36.7%	
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		0.67			0.98		0.19	0.96		0.26	0.67	
Control Delay		33.3			60.5		13.6	48.8		17.3	25.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		33.3			60.5		13.6	48.8		17.3	25.1	
Queue Length 50th (ft)		75			202		10	286		7	159	
Queue Length 95th (ft)		#177			#521		43	#761		29	#351	
Internal Link Dist (ft)		308			288			525			214	
Turn Bay Length (ft)							100			50		
Base Capacity (vph)		346			547		287	771		153	738	
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		0.67			0.98		0.19	0.96		0.26	0.67	

### Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 70

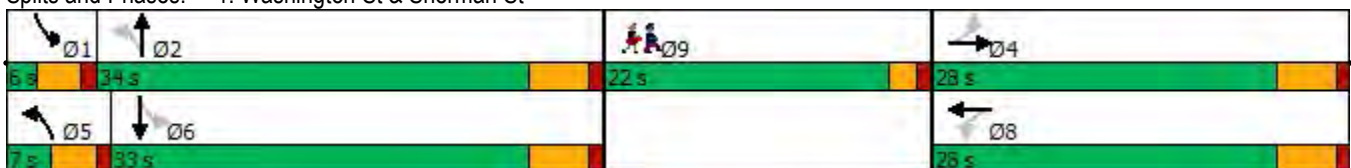
Natural Cycle: 150

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)	53	0	58	0	0	0	58	614	6	1	333	44
Future Volume (vph)	53	0	58	0	0	0	58	614	6	1	333	44
Confl. Peds. (#/hr)	5		6	6		5	10		19	19		
Peak Hour Factor	0.79	0.79	0.79	0.25	0.25	0.25	0.92	0.92	0.92	0.75	0.75	0.75
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	11%	11%	11%	0%	0%	0%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	0	0	0	0	0	855	0	0	585	0
Turn Type	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)	12.0	12.0		12.0	12.0		59.0	59.0		59.0	59.0	
Total Split (%)	12.9%	12.9%		12.9%	12.9%		63.4%	63.4%		63.4%	63.4%	
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		0.71						0.78			0.49	
Control Delay		44.2						20.5			11.3	
Queue Delay		0.0						2.3			0.0	
Total Delay		44.2						22.8			11.3	
Queue Length 50th (ft)		57						236			114	
Queue Length 95th (ft)		#160						#686			214	
Internal Link Dist (ft)		383			46			533			146	
Turn Bay Length (ft)												
Base Capacity (vph)		231						1121			1217	
Starvation Cap Reductn		0						149			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.71						0.88			0.48	

Intersection Summary

Cycle Length: 93  
 Actuated Cycle Length: 93  
 Offset: 47 (51%), Referenced to phase 2:NBTL and 6:SBTL, 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  
 2: Washington St & Revere St/Driveway

08/22/2022

Splits and Phases: 2: Washington St & Revere St/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)	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  
3: Washington St & Bolivar St

08/22/2022



Lane Group	NWL	NWR	NET	NER	SWL	SWT	Ø7
Lane Configurations							
Traffic Volume (vph)	166	130	557	89	77	313	
Future Volume (vph)	166	130	557	89	77	313	
Confl. Peds. (#/hr)	4			5	5		
Peak Hour Factor	0.91	0.91	0.90	0.90	0.72	0.72	
Growth Factor	116%	116%	116%	116%	116%	116%	
Heavy Vehicles (%)	5%	5%	2%	2%	4%	4%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	212	166	833	0	124	504	
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)	17.0		43.0		10.0	53.0	20.0
Total Split (%)	18.9%		47.8%		11.1%	58.9%	22%
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		Min	C-Min	None
v/c Ratio	0.66	0.36	0.79		0.41	0.40	
Control Delay	44.2	26.9	22.4		13.6	7.4	
Queue Delay	0.0	0.0	13.6		0.0	0.0	
Total Delay	44.2	26.9	35.9		13.6	7.4	
Queue Length 50th (ft)	113	74	342		20	106	
Queue Length 95th (ft)	180	123	#627		33	130	
Internal Link Dist (ft)	291		172			533	
Turn Bay Length (ft)		150			200		
Base Capacity (vph)	320	457	1056		305	1262	
Starvation Cap Reductn	0	0	217		0	0	
Spillback Cap Reductn	0	0	0		0	0	
Storage Cap Reductn	0	0	0		0	0	
Reduced v/c Ratio	0.66	0.36	0.99		0.41	0.40	

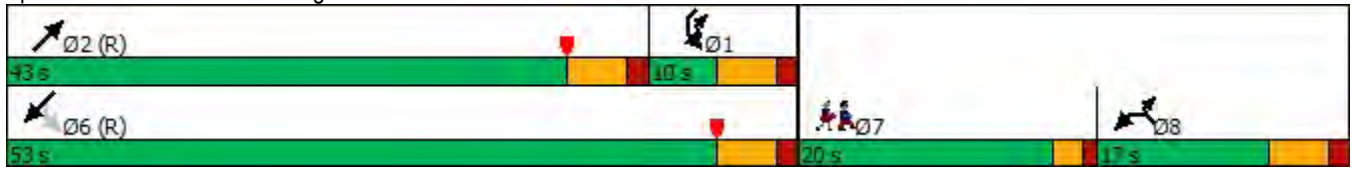
Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 90  
 Offset: 22 (24%), Referenced to phase 2:NET and 6:SWTL, Start of Yellow  
 Natural Cycle: 100  
 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)	12	1	1	37	0	38	2	599	37	23	443	7
Future Volume (Veh/h)	12	1	1	37	0	38	2	599	37	23	443	7
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.58	0.58	0.58	0.85	0.85	0.85	0.93	0.93	0.93	0.82	0.82	0.82
Hourly flow rate (vph)	24	2	2	50	0	52	2	747	46	33	627	10
Pedestrians		16			6			3			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		2			1			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								205			252	
pX, platoon unblocked	0.94	0.94	0.88	0.94	0.94	0.88	0.88			0.88		
vC, conflicting volume	1543	1517	651	1484	1499	779	653			799		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1266	1239	539	1204	1220	683	541			706		
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 %	79	99	100	64	100	87	100			96		
cM capacity (veh/h)	112	156	474	139	157	390	894			779		
Direction, Lane #	SE 1	NW 1	NE 1	SW 1								
Volume Total	28	102	795	670								
Volume Left	24	50	2	33								
Volume Right	2	52	46	10								
cSH	121	207	894	779								
Volume to Capacity	0.23	0.49	0.00	0.04								
Queue Length 95th (ft)	21	61	0	3								
Control Delay (s)	43.5	38.1	0.1	1.1								
Lane LOS	E	E	A	A								
Approach Delay (s)	43.5	38.1	0.1	1.1								
Approach LOS	E	E										
<b>Intersection Summary</b>												
Average Delay			3.7									
Intersection Capacity Utilization			60.0%		ICU Level of Service					B		
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	308	632	272	210				
Future Volume (vph)	0	0	308	632	272	210				
Confl. Peds. (#/hr)	2		7			7				
Peak Hour Factor	0.25	0.25	0.92	0.92	0.83	0.83				
Growth Factor	116%	116%	116%	116%	116%	116%				
Heavy Vehicles (%)	0%	0%	3%	3%	6%	6%				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	388	797	673	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		15.5	21.0	24.0	7.0
Total Split (s)					39.0		46.0	21.0	24.0	7.0
Total Split (%)					42.9%		51%	23%	26%	8%
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	1.5
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			0.51	0.46	0.73					
Control Delay			7.4	3.1	23.5					
Queue Delay			0.0	0.1	2.2					
Total Delay			7.4	3.2	25.7					
Queue Length 50th (ft)			0	0	246					
Queue Length 95th (ft)			141	298	#540					
Internal Link Dist (ft)	599			58	125					
Turn Bay Length (ft)										
Base Capacity (vph)			787	1718	926					
Starvation Cap Reductn			0	129	136					
Spillback Cap Reductn			0	0	0					
Storage Cap Reductn			0	0	0					
Reduced v/c Ratio			0.49	0.50	0.85					

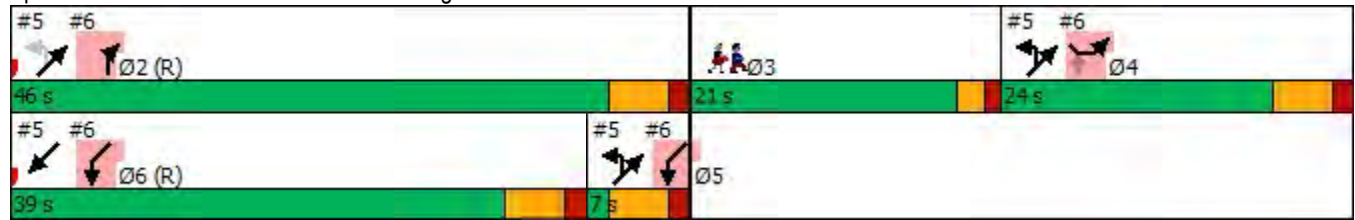
Intersection Summary

Cycle Length: 91  
 Actuated Cycle Length: 91  
 Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, 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  
 5: Church St & Washington St

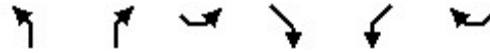
08/22/2022

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	740	163	251	285	0			
Future Volume (vph)	0	740	163	251	285	0			
Confl. Peds. (#/hr)	4			1		4			
Peak Hour Factor	0.89	0.89	0.84	0.84	0.75	0.75			
Growth Factor	116%	116%	116%	116%	116%	116%			
Heavy Vehicles (%)	2%	2%	5%	5%	2%	2%			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	964	225	347	441	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)		15.5	24.0	24.0			21.0	7.0	15.5
Total Split (s)		46.0	24.0	24.0			21.0	7.0	39.0
Total Split (%)		50.5%	26.4%	26.4%			23%	8%	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	1.5	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		0.77	0.62	0.59	0.40				
Control Delay		10.3	39.9	7.9	12.5				
Queue Delay		0.0	0.0	0.0	1.1				
Total Delay		10.3	39.9	7.9	13.6				
Queue Length 50th (ft)		72	113	0	111				
Queue Length 95th (ft)		#494	181	53	212				
Internal Link Dist (ft)	644		531		158				
Turn Bay Length (ft)									
Base Capacity (vph)		1252	391	610	1098				
Starvation Cap Reductn		0	0	0	421				
Spillback Cap Reductn		0	0	0	0				
Storage Cap Reductn		0	0	0	0				
Reduced v/c Ratio		0.77	0.58	0.57	0.65				

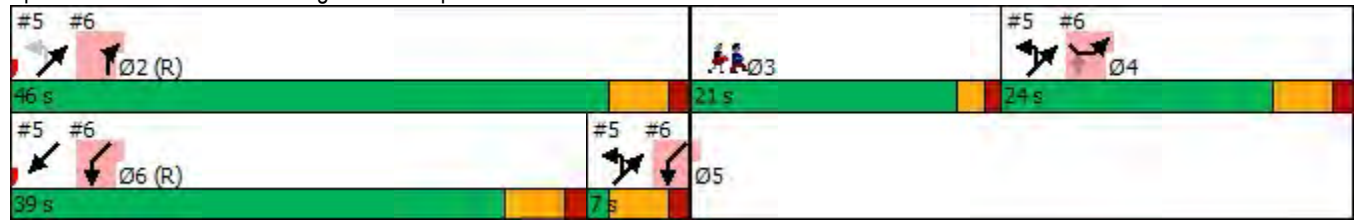
Intersection Summary

Cycle Length: 91  
 Actuated Cycle Length: 91  
 Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, 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  
 6: Washington St & Neponset St

08/22/2022

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)	45	66	74	696	428	39	
Future Volume (vph)	45	66	74	696	428	39	
Confl. Peds. (#/hr)			4				
Peak Hour Factor	0.93	0.93	0.87	0.87	0.87	0.87	
Growth Factor	116%	116%	116%	116%	116%	116%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	56	82	99	928	623	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)	5.0	4.0	4.0	5.0	5.0		3.0
Minimum Split (s)	10.0	8.0	8.0	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	0.20	0.20	0.22	0.64	0.66		
Control Delay	29.8	8.3	5.8	10.8	14.7		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay	29.8	8.3	5.8	10.8	14.7		
Queue Length 50th (ft)	15	0	7	142	123		
Queue Length 95th (ft)	68	37	43	#651	365		
Internal Link Dist (ft)	418			1059	682		
Turn Bay Length (ft)	50						
Base Capacity (vph)	305	408	459	1665	1502		
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	0.18	0.20	0.22	0.56	0.41		

### Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 49.9

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

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

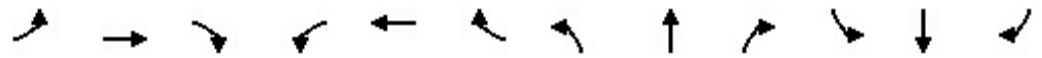
Queue shown is maximum after two cycles.

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)	15	1	10	20	0	51	22	668	22	119	405	26
Future Volume (vph)	15	1	10	20	0	51	22	668	22	119	405	26
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.57	0.57	0.57	0.69	0.69	0.69	0.94	0.94	0.94	0.86	0.86	0.86
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	0%	0%	0%	5%	5%	5%	1%	1%	1%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	53	0	0	34	86	27	851	0	161	581	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)	12.0	12.0		12.0	12.0	12.0	7.0	48.0		9.0	50.0	
Total Split (%)	13.3%	13.3%		13.3%	13.3%	13.3%	7.8%	53.3%		10.0%	55.6%	
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		0.40			0.27	0.31	0.05	0.70		0.46	0.41	
Control Delay		37.0			44.3	2.9	2.2	8.7		12.8	8.2	
Queue Delay		0.0			0.0	0.0	0.0	0.9		0.0	0.0	
Total Delay		37.0			44.3	2.9	2.2	9.6		12.8	8.2	
Queue Length 50th (ft)		18			18	0	1	82		13	67	
Queue Length 95th (ft)		30			37	0	m3	m#680		#96	316	
Internal Link Dist (ft)		81			235			168			854	
Turn Bay Length (ft)										200		
Base Capacity (vph)		138			135	283	584	1212		352	1403	
Starvation Cap Reductn		0			0	0	0	146		0	0	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.38			0.25	0.30	0.05	0.80		0.46	0.41	

Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 90  
 Offset: 86 (96%), 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	
<b>Intersection Summary</b>	

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	29	0	0	25	0	667	48	0	424	0
Future Volume (Veh/h)	0	0	29	0	0	25	0	667	48	0	424	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.62	0.62	0.62	0.77	0.77	0.77	0.94	0.94	0.94	0.96	0.96	0.96
Hourly flow rate (vph)	0	0	54	0	0	38	0	823	59	0	512	0
Pedestrians		1			1							
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	0.62	0.62	0.87	0.62	0.62	0.56	0.87			0.56		
vC, conflicting volume	1404	1396	513	1420	1366	854	513			883		
vC1, stage 1 conf vol	513	513		854	854							
vC2, stage 2 conf vol	890	883		566	513							
vCu, unblocked vol	869	857	364	895	809	337	364			390		
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	91	100	100	90	100			100		
cM capacity (veh/h)	289	311	589	318	327	392	1042			646		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	54	38	882	512								
Volume Left	0	0	0	0								
Volume Right	54	38	59	0								
cSH	589	392	1700	1700								
Volume to Capacity	0.09	0.10	0.52	0.30								
Queue Length 95th (ft)	8	8	0	0								
Control Delay (s)	11.7	15.2	0.0	0.0								
Lane LOS	B	C										
Approach Delay (s)	11.7	15.2	0.0	0.0								
Approach LOS	B	C										
<b>Intersection Summary</b>												
Average Delay			0.8									
Intersection Capacity Utilization			54.1%		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)	34	4	3	58	4	75	81	677	71	78	353	7
Future Volume (vph)	34	4	3	58	4	75	81	677	71	78	353	7
Confl. Peds. (#/hr)							1		1	1		1
Peak Hour Factor	0.71	0.71	0.71	0.84	0.84	0.84	0.87	0.87	0.87	0.88	0.88	0.88
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	68	0	0	86	104	108	998	0	103	474	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)	13.0	13.0		13.0	13.0	13.0	9.0	49.0		7.0	47.0	
Total Split (%)	14.4%	14.4%		14.4%	14.4%	14.4%	10.0%	54.4%		7.8%	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							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
v/c Ratio		0.48			0.57	0.32	0.20	0.83		0.47	0.40	
Control Delay		48.3			54.4	3.9	8.1	21.6		18.4	6.3	
Queue Delay		0.0			0.0	0.0	0.0	31.7		0.0	0.2	
Total Delay		48.3			54.4	3.9	8.1	53.3		18.4	6.6	
Queue Length 50th (ft)		35			46	0	17	334		18	95	
Queue Length 95th (ft)		61			#107	3	57	#846		#46	75	
Internal Link Dist (ft)		38			134			131			121	
Turn Bay Length (ft)												
Base Capacity (vph)		147			156	326	548	1208		218	1189	
Starvation Cap Reductn		0			0	0	0	264		0	221	
Spillback Cap Reductn		0			0	2	0	28		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.46			0.55	0.32	0.20	1.06		0.47	0.49	

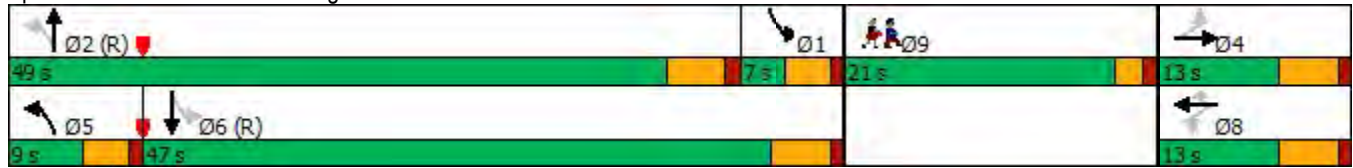
Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 90  
 Offset: 84 (93%), 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

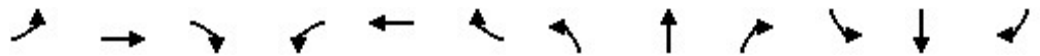
Splits and Phases: 10: Washington St & Cobb Corner



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	
<b>Intersection Summary</b>	

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)	155	396	26	16	351	169	70	483	29	147	125	89
Future Volume (vph)	155	396	26	16	351	169	70	483	29	147	125	89
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.88	0.88	0.88	0.89	0.89	0.89
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	4%	4%	4%	5%	5%	5%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	191	521	0	20	642	0	92	675	0	192	163	116
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)	5.0	10.0		3.0	10.0		3.0	10.0		5.0	10.0	10.0
Minimum Split (s)	9.0	15.0		7.0	15.0		7.0	15.0		9.0	15.0	15.0
Total Split (s)	16.0	37.0		10.0	31.0		8.0	45.0		10.0	47.0	47.0
Total Split (%)	12.5%	28.9%		7.8%	24.2%		6.3%	35.2%		7.8%	36.7%	36.7%
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	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		4.0	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	0.87	0.97		0.15	0.91		0.16	0.97		0.60	0.19	0.14
Control Delay	68.4	76.1		31.7	62.8		17.9	67.5		34.2	22.9	2.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	68.4	76.1		31.7	62.8		17.9	67.5		34.2	22.9	2.7
Queue Length 50th (ft)	118	405		11	254		30	502		85	72	0
Queue Length 95th (ft)	#243	#729		30	#364		84	#874		#323	156	24
Internal Link Dist (ft)		217			198			180			132	
Turn Bay Length (ft)				125								
Base Capacity (vph)	221	539		133	709		562	693		319	853	802
Starvation Cap Reductn	0	0		0	0		0	0		0	0	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	0.86	0.97		0.15	0.91		0.16	0.97		0.60	0.19	0.14

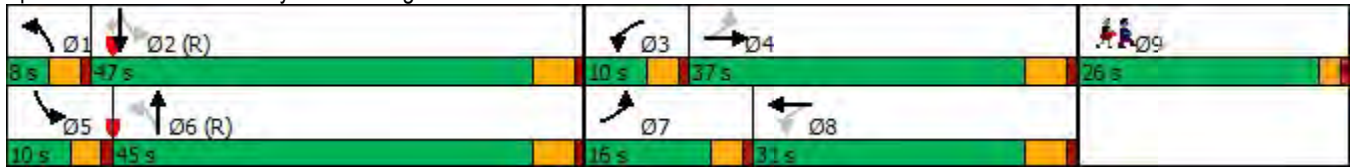
Intersection Summary

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: 150  
 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	
<b>Intersection Summary</b>	

Intersection Capacity Analysis (HCM 200 Unsignalized)

12: Washington St & Starbucks Driveway

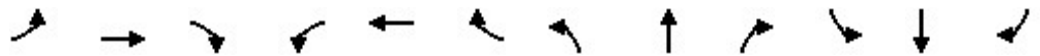
08/22/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	32	0	0	22	0	777	42	0	352	18
Future Volume (Veh/h)	0	0	32	0	0	22	0	777	42	0	352	18
Sign Control	Stop		Stop		Free		Free					
Grade	0%		0%		0%		0%					
Peak Hour Factor	0.81	0.81	0.81	0.85	0.85	0.85	0.92	0.92	0.92	0.93	0.93	0.93
Hourly flow rate (vph)	0	0	46	0	0	30	0	980	53	0	439	22
Pedestrians	3		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							None			TWLTL		
Median storage veh										2		
Upstream signal (ft)							212			211		
pX, platoon unblocked												
vC, conflicting volume	973	1489	234	1275	1474	520	464			1036		
vC1, stage 1 conf vol	453	453		1010	1010							
vC2, stage 2 conf vol	520	1036		266	464							
vCu, unblocked vol	973	1489	234	1275	1474	520	464			1036		
tC, single (s)	7.7	6.7	7.1	7.5	6.5	6.9	4.1			4.2		
tC, 2 stage (s)	6.7	5.7		6.5	5.5							
tF (s)	3.6	4.1	3.4	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	94	100	100	94	100			100		
cM capacity (veh/h)	382	268	748	247	290	505	1090			647		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	46	30	653	380	293	168						
Volume Left	0	0	0	0	0	0						
Volume Right	46	30	0	53	0	22						
cSH	748	505	1700	1700	1700	1700						
Volume to Capacity	0.06	0.06	0.38	0.22	0.17	0.10						
Queue Length 95th (ft)	5	5	0	0	0	0						
Control Delay (s)	10.1	12.6	0.0	0.0	0.0	0.0						
Lane LOS	B	B										
Approach Delay (s)	10.1	12.6	0.0	0.0								
Approach LOS	B	B										
Intersection Summary												
Average Delay			0.5									
Intersection Capacity Utilization			36.5%		ICU Level of Service			A				
Analysis Period (min)			15									

Intersection Capacity Analysis (HCM 200 Unsignalized)

13: Sharon St & Cobb orner Dr

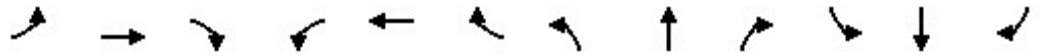
08/22/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔		↔				↔
Traffic Volume (veh/h)	4	457	3	34	518	50	19	8	32	0	0	27
Future Volume (Veh/h)	4	457	3	34	518	50	19	8	32	0	0	27
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.82	0.82	0.82	0.80	0.80	0.80
Hourly flow rate (vph)	5	570	4	44	668	64	27	11	45	0	0	39
Pedestrians					3			3				5
Lane Width (ft)					12.0			12.0				12.0
Walking Speed (ft/s)					3.5			3.5				3.5
Percent Blockage					0			0				0
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		278			313							
pX, platoon unblocked	0.82			0.68			0.76	0.76	0.68	0.76	0.76	0.82
vC, conflicting volume	737			577			1380	1410	578	1396	1348	673
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	574			134			823	862	135	845	781	496
tC, single (s)	4.2			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			95			86	95	93	100	100	92
cM capacity (veh/h)	803			965			195	210	614	181	233	467
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1							
Volume Total	579	712	64	83	39							
Volume Left	5	44	0	27	0							
Volume Right	4	0	64	45	39							
cSH	803	965	1700	314	467							
Volume to Capacity	0.01	0.05	0.04	0.26	0.08							
Queue Length 95th (ft)	0	4	0	26	7							
Control Delay (s)	0.2	1.2	0.0	20.5	13.4							
Lane LOS	A	A		C	B							
Approach Delay (s)	0.2	1.1		20.5	13.4							
Approach LOS				C	B							
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			69.4%		ICU Level of Service				C			
Analysis Period (min)			15									

Intersection Capacity Analysis  
 14: Sharon St & Village Shoppes Dr

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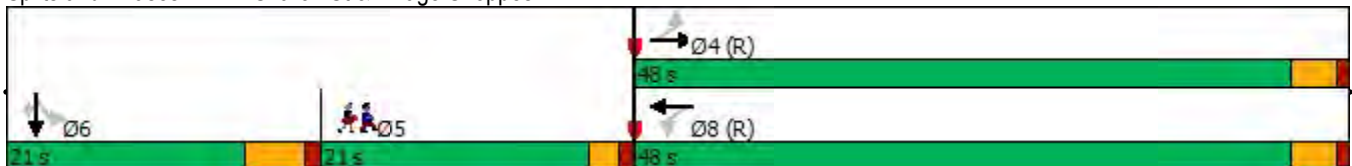


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↔						↖	↗
Traffic Volume (vph)	20	481	13	2	500	66	0	0	0	40	2	29
Future Volume (vph)	20	481	13	2	500	66	0	0	0	40	2	29
Confl. Peds. (#/hr)	3			3								
Peak Hour Factor	0.96	0.96	0.96	0.85	0.85	0.85	0.92	0.92	0.92	0.78	0.78	0.78
Growth Factor	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%	116%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	2%	2%	2%	1%	1%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	597	0	0	775	0	0	0	0	0	62	43
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)	48.0	48.0		48.0	48.0					21.0	21.0	21.0
Total Split (%)	53.3%	53.3%		53.3%	53.3%					23.3%	23.3%	23.3%
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	0.05	0.41			0.54						0.19	0.13
Control Delay	3.9	5.9			7.3						33.4	9.9
Queue Delay	0.0	0.5			0.0						0.0	0.0
Total Delay	3.9	6.4			7.3						33.4	9.9
Queue Length 50th (ft)	3	111			165						30	0
Queue Length 95th (ft)	10	162			216						56	19
Internal Link Dist (ft)		233			100			33			115	
Turn Bay Length (ft)	75											
Base Capacity (vph)	522	1461			1441						319	320
Starvation Cap Reductn	0	444			0						0	0
Spillback Cap Reductn	0	0			0						0	0
Storage Cap Reductn	0	0			0						0	0
Reduced v/c Ratio	0.05	0.59			0.54						0.19	0.13

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: 60  
 Control Type: Actuated-Coordinated

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



Intersection Capacity Analysis  
 14: Sharon St & Village Shoppes Dr

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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	