

Appendix H: Level-of-Service Analyses

Lanes, Volumes, Timings
2: Huttleston Avenue & Mill Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕↕	
Traffic Volume (vph)	14	968	703	8	33	31
Future Volume (vph)	14	968	703	8	33	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.998		0.934	
Flt Protected		0.999			0.975	
Satd. Flow (prot)	0	3418	3414	0	1696	0
Flt Permitted		0.999			0.975	
Satd. Flow (perm)	0	3418	3414	0	1696	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1082	1396		506	
Travel Time (s)		24.6	31.7		11.5	
Peak Hour Factor	0.96	0.96	0.83	0.83	0.52	0.52
Adj. Flow (vph)	15	1008	847	10	63	60
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1023	857	0	123	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	47.1%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 4: Huttleston Avenue & Weeden Road

12/06/2019



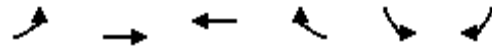
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	18	7	558	59	3	439
Future Volume (vph)	18	7	558	59	3	439
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.963		0.986			
Flt Protected	0.965					
Satd. Flow (prot)	1731	0	3373	0	0	3421
Flt Permitted	0.965					
Satd. Flow (perm)	1731	0	3373	0	0	3421
Link Speed (mph)	30		30			30
Link Distance (ft)	498		1396			2661
Travel Time (s)	11.3		31.7			60.5
Peak Hour Factor	0.57	0.57	0.87	0.87	0.88	0.88
Adj. Flow (vph)	32	12	641	68	3	499
Shared Lane Traffic (%)						
Lane Group Flow (vph)	44	0	709	0	0	502
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	27.3%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
6: New Boston Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↗	↘
Traffic Volume (vph)	55	580	469	37	41	60
Future Volume (vph)	55	580	469	37	41	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	12
Storage Length (ft)	0			0	0	160
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.989			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	3408	3384	0	1711	1583
Flt Permitted		0.996			0.950	
Satd. Flow (perm)	0	3408	3384	0	1711	1583
Link Speed (mph)		30	30		30	
Link Distance (ft)		2661	516		800	
Travel Time (s)		60.5	11.7		18.2	
Peak Hour Factor	0.90	0.90	0.96	0.96	0.87	0.87
Adj. Flow (vph)	61	644	489	39	47	69
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	705	528	0	47	69
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	45.1%			ICU Level of Service A		
Analysis Period (min)	15					

Lanes, Volumes, Timings
8: Gелlette Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	569	40	14	461	23	16
Future Volume (vph)	569	40	14	461	23	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.990				0.944	
Flt Protected				0.999	0.972	
Satd. Flow (prot)	3387	0	0	3418	1652	0
Flt Permitted				0.999	0.972	
Satd. Flow (perm)	3387	0	0	3418	1652	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			2679	535	
Travel Time (s)	11.7			60.9	12.2	
Peak Hour Factor	0.89	0.89	0.93	0.93	0.65	0.65
Adj. Flow (vph)	639	45	15	496	35	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	684	0	0	511	60	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	32.9%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
10: Shaw Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	383	133	14	421	29	4
Future Volume (vph)	383	133	14	421	29	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	14	14
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.961				0.983	
Flt Protected				0.998	0.958	
Satd. Flow (prot)	3288	0	0	3414	1871	0
Flt Permitted				0.998	0.958	
Satd. Flow (perm)	3288	0	0	3414	1871	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2679			2104	500	
Travel Time (s)	60.9			47.8	11.4	
Peak Hour Factor	0.92	0.92	0.94	0.94	0.84	0.84
Adj. Flow (vph)	416	145	15	448	35	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	561	0	0	463	40	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.92	0.92
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	31.8%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 12: Wareham Road & Creek Road

12/06/2019



Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	42	16	373	69	5	280
Future Volume (vph)	42	16	373	69	5	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.962		0.977			
Flt Protected	0.965					0.999
Satd. Flow (prot)	1672	0	3343	0	0	3418
Flt Permitted	0.965					0.999
Satd. Flow (perm)	1672	0	3343	0	0	3418
Link Speed (mph)	30		30			30
Link Distance (ft)	882		1429			3254
Travel Time (s)	20.0		32.5			74.0
Peak Hour Factor	0.60	0.60	0.93	0.93	0.95	0.95
Adj. Flow (vph)	70	27	401	74	5	295
Shared Lane Traffic (%)						
Lane Group Flow (vph)	97	0	475	0	0	300
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	22.5%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
14: Brandt Island Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	349	44	40	412	26	27
Future Volume (vph)	349	44	40	412	26	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.983				0.931	
Flt Protected				0.996	0.976	
Satd. Flow (prot)	3363	0	0	3408	1636	0
Flt Permitted				0.996	0.976	
Satd. Flow (perm)	3363	0	0	3408	1636	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2104			2288	496	
Travel Time (s)	47.8			52.0	11.3	
Peak Hour Factor	0.90	0.90	0.94	0.94	0.66	0.66
Adj. Flow (vph)	388	49	43	438	39	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	437	0	0	481	80	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	36.9%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 16: Mattapoisett Neck Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	329	42	55	399	23	34
Future Volume (vph)	329	42	55	399	23	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.983			0.920		
Flt Protected				0.994	0.980	
Satd. Flow (prot)	3363	0	0	3401	1623	0
Flt Permitted				0.994	0.980	
Satd. Flow (perm)	3363	0	0	3401	1623	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2288			494	531	
Travel Time (s)	52.0			11.2	12.1	
Peak Hour Factor	0.95	0.95	0.89	0.89	0.75	0.75
Adj. Flow (vph)	346	44	62	448	31	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	390	0	0	510	76	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	36.4% ICU Level of Service A
Analysis Period (min)	15

Lanes, Volumes, Timings
 18: Main Street & Fairhaven Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	356	36	25	445	36	53	15	12	24	10	7
Future Volume (vph)	4	356	36	25	445	36	53	15	12	24	10	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	16	16	16
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.989			0.980			0.977	
Flt Protected					0.997			0.968			0.972	
Satd. Flow (prot)	0	3373	0	0	3373	0	0	1826	0	0	2005	0
Flt Permitted		0.948			0.910			0.819			0.855	
Satd. Flow (perm)	0	3198	0	0	3079	0	0	1545	0	0	1763	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			14			15			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		4565			395			496			500	
Travel Time (s)		103.8			9.0			11.3			11.4	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.80	0.80	0.80	0.85	0.85	0.85
Adj. Flow (vph)	4	396	40	27	473	38	66	19	15	28	12	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	440	0	0	538	0	0	100	0	0	48	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	0.96	0.96	0.96	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
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												

Lanes, Volumes, Timings
18: Main Street & Fairhaven Road

12/06/2019

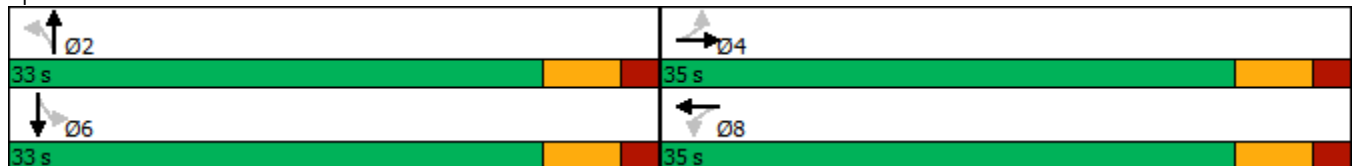


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		33.0	33.0		33.0	33.0	
Total Split (%)	51.5%	51.5%		51.5%	51.5%		48.5%	48.5%		48.5%	48.5%	
Maximum Green (s)	29.0	29.0		29.0	29.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		14.7			14.7			27.1			27.1	
Actuated g/C Ratio		0.27			0.27			0.50			0.50	
v/c Ratio		0.50			0.63			0.13			0.05	
Control Delay		17.5			20.2			7.8			7.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		17.5			20.2			7.8			7.4	
LOS		B			C			A			A	
Approach Delay		17.5			20.2			7.8			7.4	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type:	Other
Cycle Length:	68
Actuated Cycle Length:	53.9
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.63
Intersection Signal Delay:	17.5
Intersection LOS:	B
Intersection Capacity Utilization:	46.9%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 18: Main Street & Fairhaven Road



Lanes, Volumes, Timings
21: North Street

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕			↕	
Traffic Volume (vph)	153	264	16	13	295	212	9	42	13	220	43	209
Future Volume (vph)	153	264	16	13	295	212	9	42	13	220	43	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.939			0.973			0.940	
Flt Protected		0.983			0.999			0.993			0.977	
Satd. Flow (prot)	0	3346	0	0	3209	0	0	1860	0	0	1654	0
Flt Permitted		0.621			0.938			0.928			0.814	
Satd. Flow (perm)	0	2114	0	0	3013	0	0	1738	0	0	1378	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			236			15			110	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		326			3802			502			502	
Travel Time (s)		7.4			86.4			11.4			11.4	
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.84	0.84	0.84	0.85	0.85	0.85
Adj. Flow (vph)	165	284	17	14	328	236	11	50	15	259	51	246
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	466	0	0	578	0	0	76	0	0	556	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	0.96	0.96	0.96	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
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												

Lanes, Volumes, Timings

21: North Street

12/06/2019

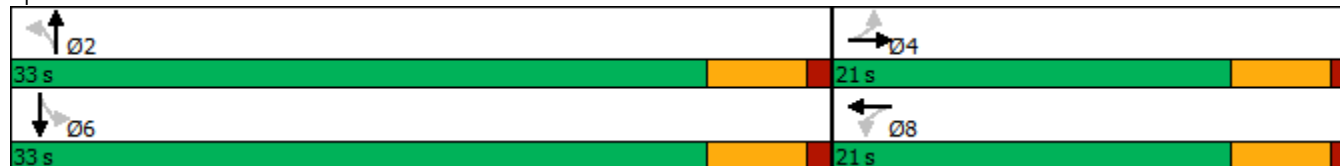


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	14.0	14.0		14.0	14.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	19.0	19.0		19.0	19.0		13.0	13.0		13.0	13.0	
Total Split (s)	21.0	21.0		21.0	21.0		33.0	33.0		33.0	33.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%		61.1%	61.1%		61.1%	61.1%	
Maximum Green (s)	16.0	16.0		16.0	16.0		28.0	28.0		28.0	28.0	
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?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		15.3			15.3			28.0			28.0	
Actuated g/C Ratio		0.29			0.29			0.53			0.53	
v/c Ratio		0.87dl			0.56			0.08			0.72	
Control Delay		27.2			11.6			5.8			14.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		27.2			11.6			5.8			14.6	
LOS		C			B			A			B	
Approach Delay		27.2			11.6			5.8			14.6	
Approach LOS		C			B			A			B	

Intersection Summary

Area Type: Other
 Cycle Length: 54
 Actuated Cycle Length: 53.3
 Natural Cycle: 45
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 16.7
 Intersection LOS: B
 Intersection Capacity Utilization 74.0%
 ICU Level of Service D
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 21: North Street



Lanes, Volumes, Timings
 24: Prospect Road/Randall Road & Marion Road

12/06/2019



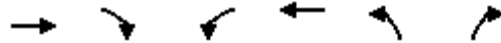
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕			↕	
Traffic Volume (vph)	5	312	38	27	374	5	18	0	10	4	0	3
Future Volume (vph)	5	312	38	27	374	5	18	0	10	4	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.998			0.952			0.944	
Flt Protected		0.999			0.997			0.969			0.972	
Satd. Flow (prot)	0	3363	0	0	3404	0	0	1661	0	0	1652	0
Flt Permitted		0.999			0.997			0.969			0.972	
Satd. Flow (perm)	0	3363	0	0	3404	0	0	1661	0	0	1652	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1466			15280			657			606	
Travel Time (s)		33.3			347.3			14.9			13.8	
Peak Hour Factor	0.84	0.84	0.84	0.86	0.86	0.86	0.58	0.58	0.58	0.58	0.58	0.58
Adj. Flow (vph)	6	371	45	31	435	6	31	0	17	7	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	422	0	0	472	0	0	48	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	34.6%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
26: Church Street Ext

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	
Traffic Volume (vph)	340	47	2	343	33	1
Future Volume (vph)	340	47	2	343	33	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.982			0.995		
Flt Protected				0.954		
Satd. Flow (prot)	3360	0	0	3421	1650	0
Flt Permitted				0.954		
Satd. Flow (perm)	3360	0	0	3421	1650	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	3802			1012	473	
Travel Time (s)	86.4			23.0	10.8	
Peak Hour Factor	0.81	0.81	0.83	0.83	0.92	0.92
Growth Factor	100%	100%	100%	100%	77%	77%
Adj. Flow (vph)	420	58	2	413	28	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	478	0	0	415	29	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	20.9%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
28: Marion Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	275	1	1	320	28	25
Future Volume (vph)	275	1	1	320	28	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.999				0.923	
Flt Protected					0.979	
Satd. Flow (prot)	3418	0	0	3421	1627	0
Flt Permitted					0.979	
Satd. Flow (perm)	3418	0	0	3421	1627	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1012			1466	421	
Travel Time (s)	23.0			33.3	9.6	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.72	0.48
Adj. Flow (vph)	299	1	1	356	39	52
Shared Lane Traffic (%)						
Lane Group Flow (vph)	300	0	0	357	91	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	19.5%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
30: Marion Road & Converse Road

12/06/2019














Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	44	63	290	42	75	347
Future Volume (vph)	44	63	290	42	75	347
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt		0.850	0.981			
Flt Protected	0.950					0.991
Satd. Flow (prot)	1770	1583	3356	0	0	3390
Flt Permitted	0.950					0.991
Satd. Flow (perm)	1770	1583	3356	0	0	3390
Link Speed (mph)	30		30			30
Link Distance (ft)	531		15280			1140
Travel Time (s)	12.1		347.3			25.9
Peak Hour Factor	0.81	0.81	0.91	0.91	0.87	0.87
Adj. Flow (vph)	54	78	319	46	86	399
Shared Lane Traffic (%)						
Lane Group Flow (vph)	54	78	365	0	0	485
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	34.5%
Analysis Period (min)	15
	ICU Level of Service A

















Lanes, Volumes, Timings
32: Main Street & Mill Street

12/06/2019

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			 
Traffic Volume (vph)	31	56	323	47	61	329
Future Volume (vph)	31	56	323	47	61	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.913		0.981			
Flt Protected	0.983					0.992
Satd. Flow (prot)	1672	0	3356	0	0	3394
Flt Permitted	0.983					0.992
Satd. Flow (perm)	1672	0	3356	0	0	3394
Link Speed (mph)	30		30			30
Link Distance (ft)	500		1140			4673
Travel Time (s)	11.4		25.9			106.2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.88	0.88
Adj. Flow (vph)	34	62	355	52	69	374
Shared Lane Traffic (%)						
Lane Group Flow (vph)	96	0	407	0	0	443
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	36.5%			ICU Level of Service A		
Analysis Period (min)	15					

Lanes, Volumes, Timings
34: Mill Street & Spring Street

12/06/2019

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	6	39	48	18	30	206	139	429	5	24	243	4
Future Volume (vph)	6	39	48	18	30	206	139	429	5	24	243	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.931			0.891			0.999			0.998	
Flt Protected		0.997			0.996			0.988			0.996	
Satd. Flow (prot)	0	1671	0	0	1598	0	0	3377	0	0	3401	0
Flt Permitted		0.997			0.996			0.988			0.996	
Satd. Flow (perm)	0	1671	0	0	1598	0	0	3377	0	0	3401	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		499			498			4673			490	
Travel Time (s)		11.3			11.3			106.2			11.1	
Peak Hour Factor	0.89	0.89	0.89	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	7	44	54	20	33	224	151	466	5	26	267	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	105	0	0	277	0	0	622	0	0	297	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	53.8%						ICU Level of Service A					
Analysis Period (min)	15											

Lanes, Volumes, Timings
37: Front Street & Wareham Road

12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕↔			↕↔	
Traffic Volume (vph)	179	70	13	26	102	79	177	187	11	41	205	159
Future Volume (vph)	179	70	13	26	102	79	177	187	11	41	205	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.993			0.948			0.996			0.941	
Flt Protected		0.967			0.994			0.977			0.995	
Satd. Flow (prot)	0	1789	0	0	1755	0	0	3329	0	0	3203	0
Flt Permitted		0.700			0.942			0.669			0.876	
Satd. Flow (perm)	0	1295	0	0	1663	0	0	2280	0	0	2820	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			64			7			173	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			508			490			2182	
Travel Time (s)		11.4			11.5			11.1			49.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	195	76	14	28	111	86	192	203	12	45	223	173
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	285	0	0	225	0	0	407	0	0	441	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												

Lanes, Volumes, Timings
 37: Front Street & Wareham Road

12/06/2019

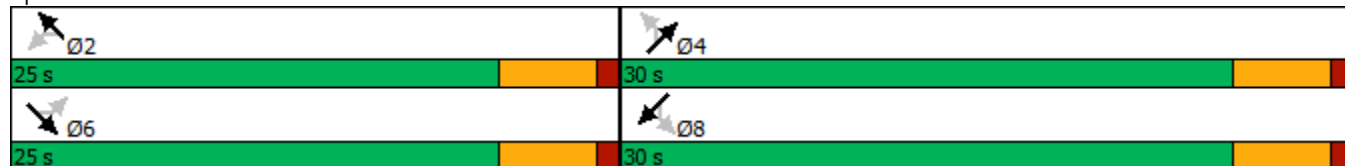


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		11.5	11.5	
Minimum Split (s)	12.0	12.0		12.0	12.0		17.0	17.0		17.0	17.0	
Total Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (%)	45.5%	45.5%		45.5%	45.5%		54.5%	54.5%		54.5%	54.5%	
Maximum Green (s)	20.0	20.0		20.0	20.0		25.0	25.0		25.0	25.0	
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?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		20.1			20.1			14.1			14.1	
Actuated g/C Ratio		0.45			0.45			0.32			0.32	
v/c Ratio		0.48			0.28			0.56			0.43	
Control Delay		12.5			7.2			15.4			8.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.5			7.2			15.4			8.3	
LOS		B			A			B			A	
Approach Delay		12.5			7.2			15.4			8.3	
Approach LOS		B			A			B			A	

Intersection Summary

Area Type:	Other
Cycle Length:	55
Actuated Cycle Length:	44.2
Natural Cycle:	40
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.56
Intersection Signal Delay:	11.1
Intersection LOS:	B
Intersection Capacity Utilization:	65.3%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 37: Front Street & Wareham Road



Lanes, Volumes, Timings
40: Wareham Road & Hermitage Road

12/06/2019



Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	5	2	413	4	2	305
Future Volume (vph)	5	2	413	4	2	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.959		0.999			
Flt Protected	0.966					
Satd. Flow (prot)	1611	0	3418	0	0	3421
Flt Permitted	0.966					
Satd. Flow (perm)	1611	0	3418	0	0	3421
Link Speed (mph)	30		30			30
Link Distance (ft)	504		2182			1429
Travel Time (s)	11.5		49.6			32.5
Peak Hour Factor	0.35	0.35	0.90	0.90	0.89	0.89
Adj. Flow (vph)	14	6	459	4	2	343
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	463	0	0	345
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	21.5%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
42: Point Road & Wareham Road

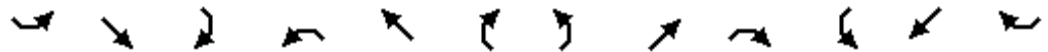
12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕↕			↕↕			↕↕			↕↕	
Traffic Volume (vph)	55	29	17	17	19	57	15	277	2	92	265	88
Future Volume (vph)	55	29	17	17	19	57	15	277	2	92	265	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.978			0.917			0.999			0.970	
Flt Protected		0.973			0.991			0.997			0.990	
Satd. Flow (prot)	0	1713	0	0	1636	0	0	3408	0	0	3285	0
Flt Permitted		0.821			0.952			0.926			0.808	
Satd. Flow (perm)	0	1446	0	0	1572	0	0	3165	0	0	2681	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			62			1			62	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		784			806			3254			5829	
Travel Time (s)		17.8			18.3			74.0			132.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	32	18	18	21	62	16	301	2	100	288	96
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	110	0	0	101	0	0	319	0	0	484	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Minimum Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	30.0	30.0		30.0	30.0		35.0	35.0		35.0	35.0	
Total Split (%)	46.2%	46.2%		46.2%	46.2%		53.8%	53.8%		53.8%	53.8%	
Maximum Green (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
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?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		25.0			25.0			30.0			30.0	
Actuated g/C Ratio		0.38			0.38			0.46			0.46	
v/c Ratio		0.19			0.16			0.22			0.38	
Control Delay		12.4			7.1			10.9			10.9	
Queue Delay		0.0			0.0			0.0			0.0	

Lanes, Volumes, Timings
 42: Point Road & Wareham Road

12/06/2019

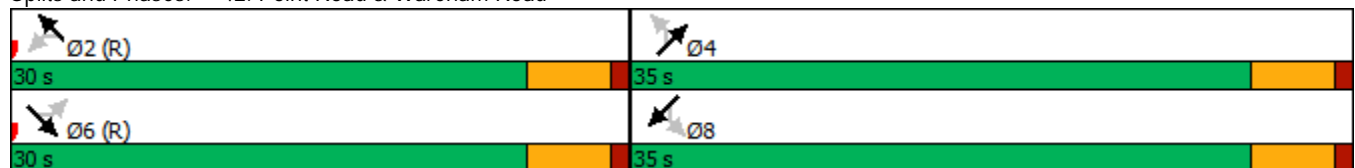


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay		12.4			7.1			10.9			10.9	
LOS		B			A			B			B	
Approach Delay		12.4			7.1			10.9			10.9	
Approach LOS		B			A			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	65
Actuated Cycle Length:	65
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	55
Control Type:	Pretimed
Maximum v/c Ratio:	0.38
Intersection Signal Delay:	10.7
Intersection LOS:	B
Intersection Capacity Utilization	45.7%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 42: Point Road & Wareham Road



Lanes, Volumes, Timings
45: Wareham Road & Hathaway Street

12/06/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	23	65	49	335	411	38
Future Volume (vph)	23	65	49	335	411	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.901				0.987	
Flt Protected	0.987			0.994		
Satd. Flow (prot)	1657	0	0	3401	3377	0
Flt Permitted	0.987			0.994		
Satd. Flow (perm)	1657	0	0	3401	3377	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	590			5829	3420	
Travel Time (s)	13.4			132.5	77.7	
Peak Hour Factor	0.83	0.83	0.94	0.94	0.96	0.96
Adj. Flow (vph)	28	78	52	356	428	40
Shared Lane Traffic (%)						
Lane Group Flow (vph)	106	0	0	408	468	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	38.5%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
49: Cromesett Road & Marion Road

12/06/2019



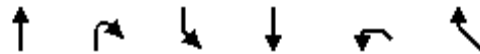
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	46	79	395	59	115	465
Future Volume (vph)	46	79	395	59	115	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.915		0.981			
Flt Protected	0.982					0.990
Satd. Flow (prot)	1674	0	3356	0	0	3387
Flt Permitted	0.982					0.990
Satd. Flow (perm)	1674	0	3356	0	0	3387
Link Speed (mph)	30		30			30
Link Distance (ft)	565		3420			1505
Travel Time (s)	12.8		77.7			34.2
Peak Hour Factor	0.87	0.87	0.89	0.89	0.94	0.94
Adj. Flow (vph)	53	91	444	66	122	495
Shared Lane Traffic (%)						
Lane Group Flow (vph)	144	0	510	0	0	617
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	46.4%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
51: Marion Road & Swifts Beach Road

12/06/2019



Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations	↑↑			↑↑	↘↘	
Traffic Volume (vph)	461	66	180	566	59	154
Future Volume (vph)	461	66	180	566	59	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.981				0.904	
Flt Protected				0.988	0.986	
Satd. Flow (prot)	3356	0	0	3380	1660	0
Flt Permitted				0.988	0.986	
Satd. Flow (perm)	3356	0	0	3380	1660	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1505			1848	506	
Travel Time (s)	34.2			42.0	11.5	
Peak Hour Factor	0.92	0.90	0.89	0.89	0.69	0.74
Adj. Flow (vph)	501	73	202	636	86	208
Shared Lane Traffic (%)						
Lane Group Flow (vph)	574	0	0	838	294	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

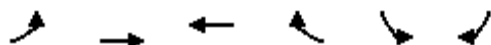
Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	58.5%
ICU Level of Service	B
Analysis Period (min)	15

Lanes, Volumes, Timings

53: Marion Road & Shaws

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	85	476	566	77	78	73
Future Volume (vph)	85	476	566	77	78	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	15	15
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.982		0.935	
Flt Protected	0.950				0.975	
Satd. Flow (prot)	1711	1801	3360	0	1868	0
Flt Permitted	0.950				0.975	
Satd. Flow (perm)	1711	1801	3360	0	1868	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			26		62	
Link Speed (mph)		30	30		30	
Link Distance (ft)		1848	285		278	
Travel Time (s)		42.0	6.5		6.3	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	92	517	651	89	85	79
Shared Lane Traffic (%)						
Lane Group Flow (vph)	92	517	740	0	164	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.88	0.88
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	
Detector Template	Left	Thru	Thru		Left	
Leading Detector (ft)	20	100	100		20	
Trailing Detector (ft)	0	0	0		0	
Detector 1 Position(ft)	0	0	0		0	
Detector 1 Size(ft)	20	6	6		20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA		Perm	
Protected Phases	7	4	8			
Permitted Phases					6	
Detector Phase	7	4	8		6	
Switch Phase						

Lanes, Volumes, Timings
53: Marion Road & Shaws

12/06/2019

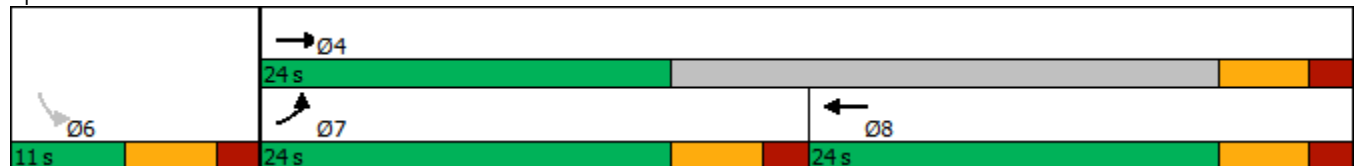


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)	11.0	5.0	5.0		5.0	
Minimum Split (s)	24.0	24.0	24.0		11.0	
Total Split (s)	24.0	24.0	24.0		11.0	
Total Split (%)	40.7%	40.7%	40.7%		18.6%	
Maximum Green (s)	18.0	18.0	18.0		5.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		Max	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effect Green (s)	11.7	25.5	16.4		18.7	
Actuated g/C Ratio	0.21	0.45	0.29		0.33	
v/c Ratio	0.26	0.64	0.75		0.25	
Control Delay	24.9	15.0	25.0		13.1	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	24.9	15.0	25.0		13.1	
LOS	C	B	C		B	
Approach Delay		16.5	25.0		13.1	
Approach LOS		B	C		B	

Intersection Summary

Area Type:	Other
Cycle Length:	59
Actuated Cycle Length:	56.7
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.75
Intersection Signal Delay:	20.3
Intersection LOS:	C
Intersection Capacity Utilization:	51.1%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 53: Marion Road & Shaws



Lanes, Volumes, Timings
55: Marion Road & Gibbs Avenue

12/06/2019



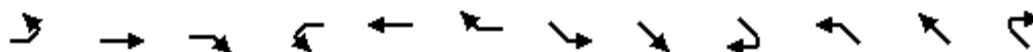
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	158	356	415	17	20	226
Future Volume (vph)	158	356	415	17	20	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	16	16	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.876	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1711	1801	2101	0	1625	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1711	1801	2101	0	1625	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		285	1841		501	
Travel Time (s)		6.5	41.8		11.4	
Peak Hour Factor	0.94	0.94	0.91	0.91	0.93	0.93
Adj. Flow (vph)	168	379	456	19	22	243
Shared Lane Traffic (%)						
Lane Group Flow (vph)	168	379	475	0	265	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	0.85	0.85	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	56.7%
Analysis Period (min)	15
	ICU Level of Service B

Lanes, Volumes, Timings
57: High Street & Marion Road

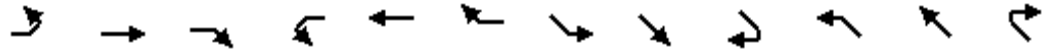
12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	27	271	130	4	323	14	19	72	29	150	53	18
Future Volume (vph)	27	271	130	4	323	14	19	72	29	150	53	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	15	15	15	12	12	12	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.959			0.995			0.967			0.989	
Flt Protected		0.997			0.999			0.992			0.967	
Satd. Flow (prot)	0	2018	0	0	2037	0	0	1787	0	0	1900	0
Flt Permitted		0.965			0.996			0.933			0.750	
Satd. Flow (perm)	0	1954	0	0	2031	0	0	1681	0	0	1474	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		53			5			29			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1841			479			513			510	
Travel Time (s)		41.8			10.9			11.7			11.6	
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	28	285	137	4	355	15	22	84	34	165	58	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	450	0	0	374	0	0	140	0	0	243	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.85	0.85	0.85	0.88	0.88	0.88	1.00	1.00	1.00	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%	
Maximum Green (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
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?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		30.0			30.0			20.0			20.0	
Actuated g/C Ratio		0.50			0.50			0.33			0.33	
v/c Ratio		0.45			0.37			0.24			0.49	
Control Delay		10.2			10.4			12.9			19.5	
Queue Delay		0.0			0.0			0.0			0.0	

Lanes, Volumes, Timings
 57: High Street & Marion Road

12/06/2019

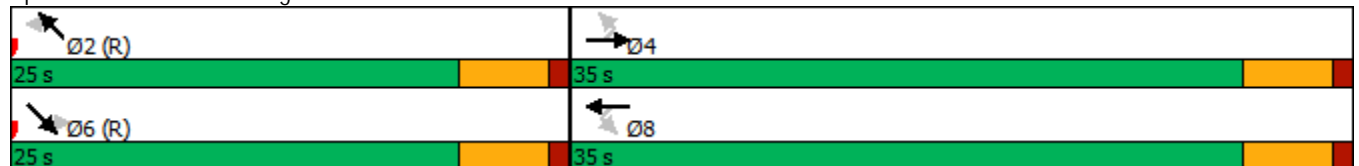


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay		10.2			10.4			12.9			19.5	
LOS		B			B			B			B	
Approach Delay		10.2			10.4			12.9			19.5	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	60
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.49
Intersection Signal Delay:	12.4
Intersection LOS:	B
Intersection Capacity Utilization	66.8%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 57: High Street & Marion Road



Lanes, Volumes, Timings
61: Fairhaven Road & River Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↔		↔↕	
Traffic Volume (vph)	31	354	443	9	18	32
Future Volume (vph)	31	354	443	9	18	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.997		0.914	
Flt Protected		0.996			0.982	
Satd. Flow (prot)	0	3408	3411	0	1672	0
Flt Permitted		0.996			0.982	
Satd. Flow (perm)	0	3408	3411	0	1672	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		494	4565		394	
Travel Time (s)		11.2	103.8		9.0	
Peak Hour Factor	0.92	0.92	0.86	0.86	0.78	0.78
Adj. Flow (vph)	34	385	515	10	23	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	419	525	0	64	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	36.6%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings

2: Huttleston Avenue & Mill Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	15	1036	752	9	35	33
Future Volume (vph)	15	1036	752	9	35	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.998		0.935	
Flt Protected		0.999			0.975	
Satd. Flow (prot)	0	1799	1797	0	1698	0
Flt Permitted		0.999			0.975	
Satd. Flow (perm)	0	1799	1797	0	1698	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1082	1396		506	
Travel Time (s)		24.6	31.7		11.5	
Peak Hour Factor	0.96	0.96	0.83	0.83	0.52	0.52
Adj. Flow (vph)	16	1079	906	11	67	63
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1095	917	0	130	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	77.1%
Analysis Period (min)	15
	ICU Level of Service D

Lanes, Volumes, Timings
 4: Huttleston Avenue & Weeden Road

12/06/2019



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	19	7	597	63	3	470
Future Volume (vph)	19	7	597	63	3	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.964		0.987			
Flt Protected	0.965					
Satd. Flow (prot)	1733	0	1777	0	0	1801
Flt Permitted	0.965					
Satd. Flow (perm)	1733	0	1777	0	0	1801
Link Speed (mph)	30		30			30
Link Distance (ft)	498		1396			2661
Travel Time (s)	11.3		31.7			60.5
Peak Hour Factor	0.57	0.57	0.87	0.87	0.88	0.88
Adj. Flow (vph)	33	12	686	72	3	534
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	0	758	0	0	537
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	45.2%
	ICU Level of Service A
Analysis Period (min)	15

Lanes, Volumes, Timings
6: New Boston Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Volume (vph)	59	621	502	40	44	64
Future Volume (vph)	59	621	502	40	44	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	12
Storage Length (ft)	0			0	0	160
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.990			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	1614	1604	0	1540	1425
Flt Permitted		0.922			0.950	
Satd. Flow (perm)	0	1494	1604	0	1540	1425
Right Turn on Red				No		No
Satd. Flow (RTOR)						
Link Speed (mph)		30	30		30	
Link Distance (ft)		2661	516		800	
Travel Time (s)		60.5	11.7		18.2	
Peak Hour Factor	0.90	0.90	0.96	0.96	0.87	0.87
Adj. Flow (vph)	66	690	523	42	51	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	756	565	0	51	74
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.19	1.19	1.19	1.19	1.19	1.14
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	100	100		20	20
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	20	6	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	

Lanes, Volumes, Timings

6: New Boston Road

12/06/2019

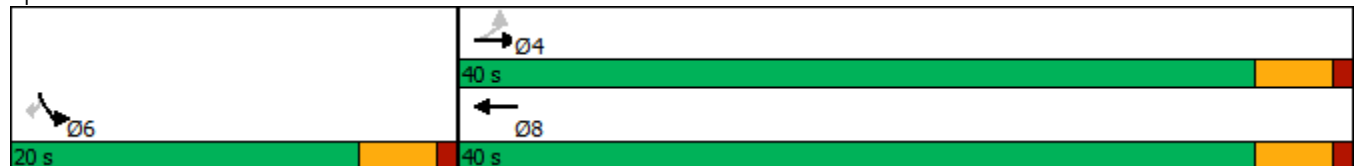


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	4					6
Detector Phase	4	4	8		6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	20.0	20.0	20.0		20.0	20.0
Total Split (s)	40.0	40.0	40.0		20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%		33.3%	33.3%
Maximum Green (s)	35.5	35.5	35.5		15.5	15.5
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	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)		4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	None		Min	Min
Act Effect Green (s)		28.5	28.5		8.1	8.1
Actuated g/C Ratio		0.62	0.62		0.18	0.18
v/c Ratio		0.82	0.57		0.19	0.29
Control Delay		16.4	7.9		20.2	22.0
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		16.4	7.9		20.2	22.0
LOS		B	A		C	C
Approach Delay		16.4	7.9		21.3	
Approach LOS		B	A		C	

Intersection Summary

Area Type:	CBD
Cycle Length:	60
Actuated Cycle Length:	46
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.82
Intersection Signal Delay:	13.5
Intersection LOS:	B
Intersection Capacity Utilization:	87.4%
ICU Level of Service:	E
Analysis Period (min):	15

Splits and Phases: 6: New Boston Road



Lanes, Volumes, Timings
8: Gелlette Road

12/06/2019



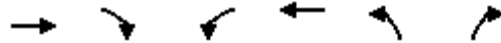
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	609	43	15	493	25	17
Future Volume (vph)	609	43	15	493	25	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.991				0.945	
Flt Protected				0.999	0.971	
Satd. Flow (prot)	1784	0	0	1799	1652	0
Flt Permitted				0.999	0.971	
Satd. Flow (perm)	1784	0	0	1799	1652	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			2679	535	
Travel Time (s)	11.7			60.9	12.2	
Peak Hour Factor	0.89	0.89	0.93	0.93	0.65	0.65
Adj. Flow (vph)	684	48	16	530	38	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	732	0	0	546	64	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	48.0%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
10: Shaw Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	410	142	15	450	31	4
Future Volume (vph)	410	142	15	450	31	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.965				0.984	
Flt Protected			0.998		0.958	
Satd. Flow (prot)	1738	0	0	1797	1873	0
Flt Permitted			0.998		0.958	
Satd. Flow (perm)	1738	0	0	1797	1873	0
Link Speed (mph)	30		30		30	
Link Distance (ft)	2679		2104		500	
Travel Time (s)	60.9		47.8		11.4	
Peak Hour Factor	0.92	0.92	0.94	0.94	0.84	0.84
Adj. Flow (vph)	446	154	16	479	37	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	600	0	0	495	42	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0		0		14	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.92	0.92
Turning Speed (mph)	9		15		15	
Sign Control	Free		Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	45.8%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 12: Wareham Road & Creek Road

12/06/2019



Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	45	17	399	74	5	300
Future Volume (vph)	45	17	399	74	5	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.963		0.979			
Flt Protected	0.965					0.999
Satd. Flow (prot)	1673	0	1763	0	0	1799
Flt Permitted	0.965					0.999
Satd. Flow (perm)	1673	0	1763	0	0	1799
Link Speed (mph)	30		30			30
Link Distance (ft)	882		1429			3254
Travel Time (s)	20.0		32.5			74.0
Peak Hour Factor	0.60	0.60	0.93	0.93	0.95	0.95
Adj. Flow (vph)	75	28	429	80	5	316
Shared Lane Traffic (%)						
Lane Group Flow (vph)	103	0	509	0	0	321
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	35.7%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
14: Brandt Island Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	373	47	43	441	28	29
Future Volume (vph)	373	47	43	441	28	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985				0.931	
Flt Protected				0.996	0.976	
Satd. Flow (prot)	1774	0	0	1793	1636	0
Flt Permitted				0.996	0.976	
Satd. Flow (perm)	1774	0	0	1793	1636	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2104			2288	496	
Travel Time (s)	47.8			52.0	11.3	
Peak Hour Factor	0.90	0.90	0.94	0.94	0.66	0.66
Adj. Flow (vph)	414	52	46	469	42	44
Shared Lane Traffic (%)						
Lane Group Flow (vph)	466	0	0	515	86	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	61.4%
Analysis Period (min)	15
	ICU Level of Service B

Lanes, Volumes, Timings
16: Mattapoisett Neck Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	352	45	59	427	25	36
Future Volume (vph)	352	45	59	427	25	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985			0.920		
Flt Protected				0.994	0.980	
Satd. Flow (prot)	1774	0	0	1790	1623	0
Flt Permitted				0.994	0.980	
Satd. Flow (perm)	1774	0	0	1790	1623	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2288			494	531	
Travel Time (s)	52.0			11.2	12.1	
Peak Hour Factor	0.95	0.95	0.89	0.89	0.75	0.75
Adj. Flow (vph)	371	47	66	480	33	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	418	0	0	546	81	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	60.6%
Analysis Period (min)	15
	ICU Level of Service B

Lanes, Volumes, Timings
 18: Main Street & Fairhaven Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	4	381	39	27	476	39	57	16	13	26	11	7
Future Volume (vph)	4	381	39	27	476	39	57	16	13	26	11	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	16	16	16
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.990			0.980			0.979	
Flt Protected					0.997			0.968			0.971	
Satd. Flow (prot)	0	1601	0	0	1600	0	0	1643	0	0	1806	0
Flt Permitted		0.995			0.962			0.789			0.822	
Satd. Flow (perm)	0	1593	0	0	1543	0	0	1339	0	0	1529	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			9			15			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		4565			395			496			500	
Travel Time (s)		103.8			9.0			11.3			11.4	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.80	0.80	0.80	0.85	0.85	0.85
Adj. Flow (vph)	4	423	43	29	506	41	71	20	16	31	13	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	470	0	0	576	0	0	107	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.10	1.10	1.10	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
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												

Lanes, Volumes, Timings
 18: Main Street & Fairhaven Road

12/06/2019

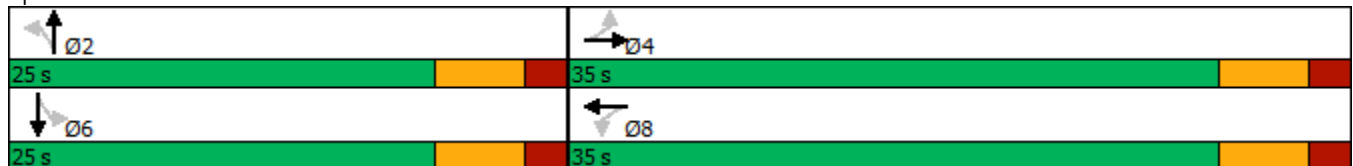


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%	
Maximum Green (s)	29.0	29.0		29.0	29.0		19.0	19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		24.2			24.2			19.2			19.2	
Actuated g/C Ratio		0.44			0.44			0.35			0.35	
v/c Ratio		0.67			0.85			0.23			0.10	
Control Delay		17.2			27.4			14.6			13.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		17.2			27.4			14.6			13.2	
LOS		B			C			B			B	
Approach Delay		17.2			27.4			14.6			13.2	
Approach LOS		B			C			B			B	

Intersection Summary

Area Type:	CBD
Cycle Length:	60
Actuated Cycle Length:	55.5
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.85
Intersection Signal Delay:	21.7
Intersection LOS:	C
Intersection Capacity Utilization:	66.6%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 18: Main Street & Fairhaven Road



Lanes, Volumes, Timings
21: North Street

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	282	17	14	316	227	10	45	14	235	46	224
Future Volume (vph)	164	282	17	14	316	227	10	45	14	235	46	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	11	11	11
Storage Length (ft)	100		0	0		0	0		0	100		0
Storage Lanes	1		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.992			0.945			0.972			0.875	
Fl _t Protected	0.950				0.999			0.993		0.950		
Satd. Flow (prot)	1711	1786	0	0	1700	0	0	1858	0	1711	1576	0
Fl _t Permitted	0.172				0.987			0.934		0.659		
Satd. Flow (perm)	310	1786	0	0	1679	0	0	1747	0	1187	1576	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			65			17				264
Link Speed (mph)		30			30			30				30
Link Distance (ft)		326			3802			502				502
Travel Time (s)		7.4			86.4			11.4				11.4
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.84	0.84	0.84	0.85	0.85	0.85
Adj. Flow (vph)	176	303	18	16	351	252	12	54	17	276	54	264
Shared Lane Traffic (%)												
Lane Group Flow (vph)	176	321	0	0	619	0	0	83	0	276	318	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	0.96	0.96	0.96	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	7	4			8			2		1	6	

Lanes, Volumes, Timings

21: North Street

12/06/2019

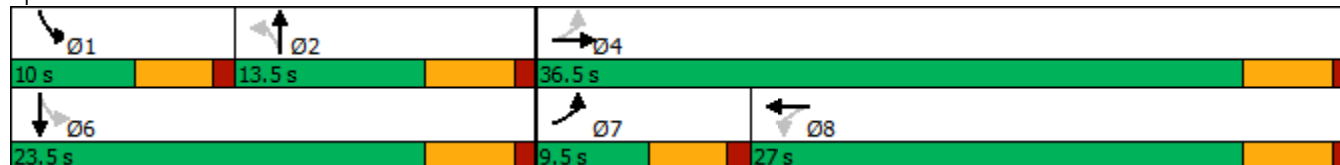


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	14.0		14.0	14.0		8.0	8.0		5.0	8.0	
Minimum Split (s)	9.5	19.0		19.0	19.0		13.0	13.0		9.5	13.0	
Total Split (s)	9.5	36.5		27.0	27.0		13.5	13.5		10.0	23.5	
Total Split (%)	15.8%	60.8%		45.0%	45.0%		22.5%	22.5%		16.7%	39.2%	
Maximum Green (s)	5.0	31.5		22.0	22.0		8.5	8.5		5.5	18.5	
Yellow Time (s)	3.5	4.0		4.0	4.0		4.0	4.0		3.5	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)	4.5	5.0			5.0			5.0		4.5	5.0	
Lead/Lag	Lead			Lag	Lag		Lag	Lag		Lead		
Lead-Lag Optimize?	Yes						Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		None	Max	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0			11.0	
Pedestrian Calls (#/hr)		0		0	0		0	0			0	
Act Effect Green (s)	29.6	29.1			21.7			18.1		28.6	28.1	
Actuated g/C Ratio	0.44	0.43			0.32			0.27		0.42	0.42	
v/c Ratio	0.73	0.41			1.06			0.17		0.50	0.39	
Control Delay	32.9	14.5			77.4			17.8		18.2	5.0	
Queue Delay	0.0	0.0			0.0			0.0		0.0	0.0	
Total Delay	32.9	14.5			77.4			17.8		18.2	5.0	
LOS	C	B			E			B		B	A	
Approach Delay		21.0			77.4			17.8			11.1	
Approach LOS		C			E			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	67.3
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.06
Intersection Signal Delay:	37.1
Intersection LOS:	D
Intersection Capacity Utilization:	79.3%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 21: North Street



Lanes, Volumes, Timings
 24: Prospect Road/Randall Road & Marion Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	5	334	41	29	400	5	19	0	11	4	0	3
Future Volume (vph)	5	334	41	29	400	5	19	0	11	4	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.998			0.951			0.944	
Flt Protected		0.999			0.997			0.969			0.972	
Satd. Flow (prot)	0	1772	0	0	1792	0	0	1659	0	0	1652	0
Flt Permitted		0.999			0.997			0.969			0.972	
Satd. Flow (perm)	0	1772	0	0	1792	0	0	1659	0	0	1652	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1466			15280			657			606	
Travel Time (s)		33.3			347.3			14.9			13.8	
Peak Hour Factor	0.84	0.84	0.84	0.86	0.86	0.86	0.58	0.58	0.58	0.58	0.58	0.58
Adj. Flow (vph)	6	398	49	34	465	6	33	0	19	7	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	453	0	0	505	0	0	52	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	48.8%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
26: Church Street Ext

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	364	50	2	367	35	1
Future Volume (vph)	364	50	2	367	35	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.995		
Flt Protected				0.954		
Satd. Flow (prot)	1772	0	0	1801	1650	0
Flt Permitted				0.954		
Satd. Flow (perm)	1772	0	0	1801	1650	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	3802			1012	473	
Travel Time (s)	86.4			23.0	10.8	
Peak Hour Factor	0.81	0.81	0.83	0.83	0.92	0.92
Growth Factor	100%	100%	100%	100%	77%	77%
Adj. Flow (vph)	449	62	2	442	29	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	511	0	0	444	30	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	32.2%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
28: Marion Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	294	1	1	342	30	27
Future Volume (vph)	294	1	1	342	30	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.923	
Flt Protected					0.979	
Satd. Flow (prot)	1801	0	0	1801	1627	0
Flt Permitted					0.979	
Satd. Flow (perm)	1801	0	0	1801	1627	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1012			1466	421	
Travel Time (s)	23.0			33.3	9.6	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.72	0.48
Adj. Flow (vph)	320	1	1	380	42	56
Shared Lane Traffic (%)						
Lane Group Flow (vph)	321	0	0	381	98	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	28.8%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
30: Marion Road & Converse Road

12/06/2019












Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	47	67	310	45	80	371
Future Volume (vph)	47	67	310	45	80	371
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.983			
Flt Protected	0.950					0.991
Satd. Flow (prot)	1770	1583	1770	0	0	1784
Flt Permitted	0.950					0.991
Satd. Flow (perm)	1770	1583	1770	0	0	1784
Link Speed (mph)	30		30			30
Link Distance (ft)	531		15280			1140
Travel Time (s)	12.1		347.3			25.9
Peak Hour Factor	0.81	0.81	0.91	0.91	0.87	0.87
Adj. Flow (vph)	58	83	341	49	92	426
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	83	390	0	0	518
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	56.3%
	ICU Level of Service B
Analysis Period (min)	15


















Lanes, Volumes, Timings
32: Main Street & Mill Street

12/06/2019

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	33	60	346	50	65	352
Future Volume (vph)	33	60	346	50	65	352
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.913		0.983			
Flt Protected	0.983					0.992
Satd. Flow (prot)	1672	0	1770	0	0	1786
Flt Permitted	0.983					0.992
Satd. Flow (perm)	1672	0	1770	0	0	1786
Link Speed (mph)	30		30			30
Link Distance (ft)	500		1140			4673
Travel Time (s)	11.4		25.9			106.2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.88	0.88
Adj. Flow (vph)	36	66	380	55	74	400
Shared Lane Traffic (%)						
Lane Group Flow (vph)	102	0	435	0	0	474
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	58.9%			ICU Level of Service B		
Analysis Period (min)	15					

Lanes, Volumes, Timings
34: Mill Street & Spring Street

12/06/2019

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	6	42	51	19	32	220	149	459	5	26	260	4
Future Volume (vph)	6	42	51	19	32	220	149	459	5	26	260	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.931			0.891			0.999			0.998	
Flt Protected		0.997			0.996		0.950				0.995	
Satd. Flow (prot)	0	1671	0	0	1598	0	1711	1799	0	0	1788	0
Flt Permitted		0.978			0.979		0.369				0.925	
Satd. Flow (perm)	0	1640	0	0	1571	0	664	1799	0	0	1662	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		57			239			1			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		499			498			4673			490	
Travel Time (s)		11.3			11.3			106.2			11.1	
Peak Hour Factor	0.89	0.89	0.89	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	7	47	57	21	35	239	162	499	5	29	286	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	111	0	0	295	0	162	504	0	0	319	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		2			6		7	4			8	

Lanes, Volumes, Timings
 34: Mill Street & Spring Street

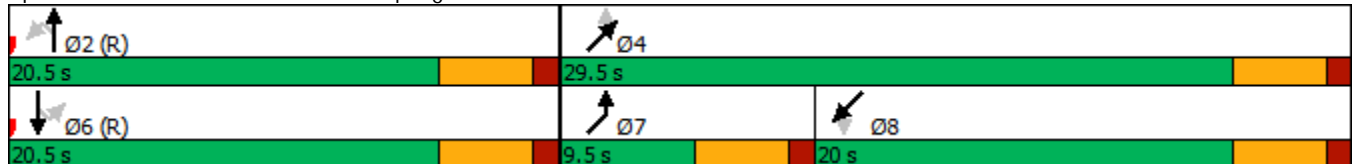
12/06/2019

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		7	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		9.5	20.0		20.0	20.0	
Total Split (s)	20.5	20.5		20.5	20.5		9.5	29.5		20.0	20.0	
Total Split (%)	41.0%	41.0%		41.0%	41.0%		19.0%	59.0%		40.0%	40.0%	
Maximum Green (s)	16.0	16.0		16.0	16.0		5.0	25.0		15.5	15.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
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	
Total Lost Time (s)		4.5			4.5		4.5	4.5			4.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Act Effect Green (s)		19.3			19.3		21.7	21.7			14.1	
Actuated g/C Ratio		0.39			0.39		0.43	0.43			0.28	
v/c Ratio		0.17			0.39		0.41	0.65			0.68	
Control Delay		7.9			5.4		10.9	14.7			24.0	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		7.9			5.4		10.9	14.7			24.0	
LOS		A			A		B	B			C	
Approach Delay		7.9			5.4			13.8			24.0	
Approach LOS		A			A			B			C	

Intersection Summary

Area Type: Other
 Cycle Length: 50
 Actuated Cycle Length: 50
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 13.9
 Intersection LOS: B
 Intersection Capacity Utilization 72.8%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 34: Mill Street & Spring Street



Lanes, Volumes, Timings
37: Front Street & Wareham Road

12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	192	75	14	28	109	85	189	200	12	44	219	170
Future Volume (vph)	192	75	14	28	109	85	189	200	12	44	219	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	11	11	11	11
Storage Length (ft)	100		0	0		0	50		0	50		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr't		0.977			0.948			0.992			0.934	
Fl't Protected	0.950				0.994		0.950			0.950		
Satd. Flow (prot)	1593	1638	0	0	1580	0	1540	1608	0	1540	1514	0
Fl't Permitted	0.479				0.957		0.335			0.594		
Satd. Flow (perm)	803	1638	0	0	1521	0	543	1608	0	963	1514	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			51			7			87	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			508			490			2182	
Travel Time (s)		11.4			11.5			11.1			49.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	209	82	15	30	118	92	205	217	13	48	238	185
Shared Lane Traffic (%)												
Lane Group Flow (vph)	209	97	0	0	240	0	205	230	0	48	423	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.19	1.19	1.19	1.19	1.19	1.19
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			8	

Lanes, Volumes, Timings
 37: Front Street & Wareham Road

12/06/2019

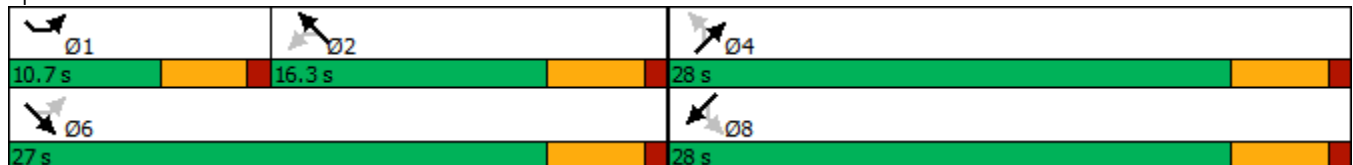


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6			2			4			8		
Detector Phase	1	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	7.0		7.0	7.0		12.0	12.0		11.5	11.5	
Minimum Split (s)	9.5	12.0		12.0	12.0		17.0	17.0		17.0	17.0	
Total Split (s)	10.7	27.0		16.3	16.3		28.0	28.0		28.0	28.0	
Total Split (%)	19.5%	49.1%		29.6%	29.6%		50.9%	50.9%		50.9%	50.9%	
Maximum Green (s)	6.2	22.0		11.3	11.3		23.0	23.0		23.0	23.0	
Yellow Time (s)	3.5	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	0.0		0.0	0.0	
Total Lost Time (s)	4.5	5.0			5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead			Lag		Lag						
Lead-Lag Optimize?	Yes			Yes		Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max		Max	Max		None	None		None	None	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0	
Act Effect Green (s)	29.4	28.9			18.1		19.9	19.9		19.9	19.9	
Actuated g/C Ratio	0.50	0.49			0.31		0.34	0.34		0.34	0.34	
v/c Ratio	0.43	0.12			0.48		1.12	0.42		0.15	0.74	
Control Delay	12.7	8.6			17.6		126.8	16.8		14.3	22.4	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	12.7	8.6			17.6		126.8	16.8		14.3	22.4	
LOS	B	A			B		F	B		B	C	
Approach Delay		11.4			17.6			68.7			21.6	
Approach LOS		B			B			E			C	

Intersection Summary

Area Type:	CBD
Cycle Length:	55
Actuated Cycle Length:	58.8
Natural Cycle:	55
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.12
Intersection Signal Delay:	32.9
Intersection LOS:	C
Intersection Capacity Utilization:	78.3%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 37: Front Street & Wareham Road



Lanes, Volumes, Timings
40: Wareham Road & Hermitage Road

12/06/2019



Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	5	2	442	4	2	326
Future Volume (vph)	5	2	442	4	2	326
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.959		0.999			
Flt Protected	0.966					
Satd. Flow (prot)	1611	0	1799	0	0	1801
Flt Permitted	0.966					
Satd. Flow (perm)	1611	0	1799	0	0	1801
Link Speed (mph)	30		30			30
Link Distance (ft)	504		2182			1429
Travel Time (s)	11.5		49.6			32.5
Peak Hour Factor	0.35	0.35	0.90	0.90	0.89	0.89
Adj. Flow (vph)	14	6	491	4	2	366
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	495	0	0	368
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	33.5%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
42: Point Road & Wareham Road

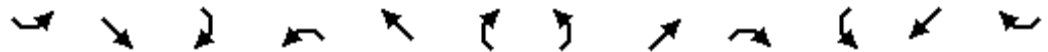
12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	59	31	18	18	20	61	16	296	2	98	284	94
Future Volume (vph)	59	31	18	18	20	61	16	296	2	98	284	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.977			0.917			0.999			0.973	
Flt Protected		0.974			0.991			0.998			0.990	
Satd. Flow (prot)	0	1713	0	0	1636	0	0	1795	0	0	1735	0
Flt Permitted		0.809			0.944			0.969			0.857	
Satd. Flow (perm)	0	1423	0	0	1559	0	0	1743	0	0	1501	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			66			1			29	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		784			806			3254			5829	
Travel Time (s)		17.8			18.3			74.0			132.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	64	34	20	20	22	66	17	322	2	107	309	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	118	0	0	108	0	0	341	0	0	518	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Minimum Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	25.0	25.0		25.0	25.0		35.0	35.0		35.0	35.0	
Total Split (%)	41.7%	41.7%		41.7%	41.7%		58.3%	58.3%		58.3%	58.3%	
Maximum Green (s)	20.0	20.0		20.0	20.0		30.0	30.0		30.0	30.0	
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?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		20.0			20.0			30.0			30.0	
Actuated g/C Ratio		0.33			0.33			0.50			0.50	
v/c Ratio		0.24			0.19			0.39			0.68	
Control Delay		14.1			8.0			11.0			16.2	
Queue Delay		0.0			0.0			0.0			0.0	

Lanes, Volumes, Timings
 42: Point Road & Wareham Road

12/06/2019

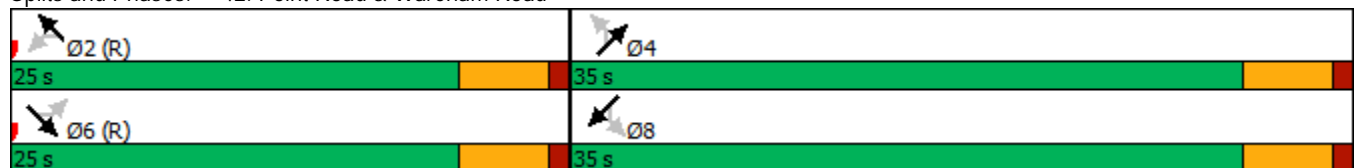


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay		14.1			8.0			11.0			16.2	
LOS		B			A			B			B	
Approach Delay		14.1			8.0			11.0			16.2	
Approach LOS		B			A			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	60
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.68
Intersection Signal Delay:	13.5
Intersection LOS:	B
Intersection Capacity Utilization	67.8%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 42: Point Road & Wareham Road



Lanes, Volumes, Timings
45: Wareham Road & Hathaway Street

12/06/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	25	70	52	358	440	41
Future Volume (vph)	25	70	52	358	440	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.901				0.988	
Flt Protected	0.987			0.994		
Satd. Flow (prot)	1657	0	0	1790	1779	0
Flt Permitted	0.987			0.994		
Satd. Flow (perm)	1657	0	0	1790	1779	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	590			5829	3420	
Travel Time (s)	13.4			132.5	77.7	
Peak Hour Factor	0.83	0.83	0.94	0.94	0.96	0.96
Adj. Flow (vph)	30	84	55	381	458	43
Shared Lane Traffic (%)						
Lane Group Flow (vph)	114	0	0	436	501	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	63.1%
Analysis Period (min)	15
	ICU Level of Service B

Lanes, Volumes, Timings
49: Cromesett Road & Marion Road

12/06/2019



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↔		↔	↔
Traffic Volume (vph)	49	85	423	63	123	498
Future Volume (vph)	49	85	423	63	123	498
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	0		0	100	
Storage Lanes	0	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.905		0.982			
Flt Protected	0.982				0.950	
Satd. Flow (prot)	0	0	1768	0	1711	1801
Flt Permitted	0.982				0.271	
Satd. Flow (perm)	0	0	1768	0	488	1801
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)			15			
Link Speed (mph)	30		30			30
Link Distance (ft)	565		3420			1505
Travel Time (s)	12.8		77.7			34.2
Peak Hour Factor	0.87	0.87	0.89	0.89	0.94	0.94
Adj. Flow (vph)	56	98	475	71	131	530
Shared Lane Traffic (%)						
Lane Group Flow (vph)	154	0	546	0	131	530
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	7		2		1	6

Lanes, Volumes, Timings
49: Cromesett Road & Marion Road

12/06/2019

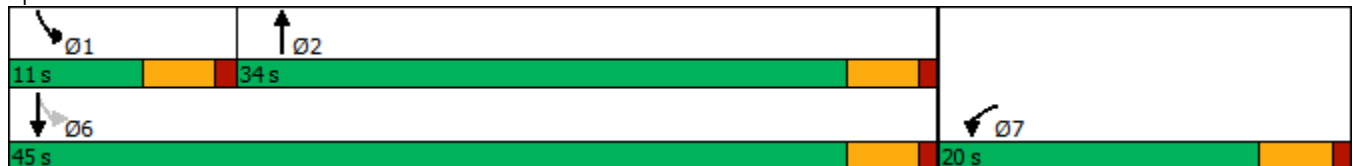


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases					6	
Detector Phase	7		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	20.0		20.0		9.5	20.0
Total Split (s)	20.0		34.0		11.0	45.0
Total Split (%)	30.8%		52.3%		16.9%	69.2%
Maximum Green (s)	15.5		29.5		6.5	40.5
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)			0.0		0.0	0.0
Total Lost Time (s)			4.5		4.5	4.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		None	Min
Act Effect Green (s)	0.0		28.1		34.2	36.0
Actuated g/C Ratio	0.00		0.53		0.64	0.67
v/c Ratio	no cap		0.58		0.28	0.44
Control Delay			16.6		6.9	7.9
Queue Delay			0.0		0.0	0.0
Total Delay	Error		16.6		6.9	7.9
LOS	F		B		A	A
Approach Delay	Err		16.6			7.7
Approach LOS	F		B			A

Intersection Summary

Area Type:	Other
Cycle Length:	65
Actuated Cycle Length:	53.5
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	Err
Intersection Signal Delay:	Err
Intersection LOS:	F
Intersection Capacity Utilization Err%	ICU Level of Service H
Analysis Period (min)	15

Splits and Phases: 49: Cromesett Road & Marion Road



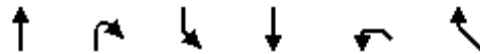
Lanes, Volumes, Timings
51: Marion Road & Swifts Beach Road

12/06/2019

	↑	↖	↙	↓	↘	↗
Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations	↗		↖	↑	↘	
Traffic Volume (vph)	493	71	193	606	63	165
Future Volume (vph)	493	71	193	606	63	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t	0.983				0.904	
Fl _t Protected			0.950		0.986	
Satd. Flow (prot)	1770	0	1711	1801	1660	0
Fl _t Permitted			0.160		0.986	
Satd. Flow (perm)	1770	0	288	1801	1660	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	1505			1848	506	
Travel Time (s)	34.2			42.0	11.5	
Peak Hour Factor	0.92	0.90	0.89	0.89	0.69	0.74
Adj. Flow (vph)	536	79	217	681	91	223
Shared Lane Traffic (%)						
Lane Group Flow (vph)	615	0	217	681	314	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	2		1	6	4	

Lanes, Volumes, Timings
 51: Marion Road & Swifts Beach Road

12/06/2019



Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Permitted Phases			6			
Detector Phase	2		1	6	4	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	20.0		9.5	20.0	20.0	
Total Split (s)	30.0		10.0	40.0	20.0	
Total Split (%)	50.0%		16.7%	66.7%	33.3%	
Maximum Green (s)	25.5		5.5	35.5	15.5	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Min		None	None	None	
Act Effect Green (s)	22.6		32.7	32.7	13.8	
Actuated g/C Ratio	0.41		0.59	0.59	0.25	
v/c Ratio	0.86		0.70	0.64	0.76	
Control Delay	29.7		21.4	11.4	34.5	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	29.7		21.4	11.4	34.5	
LOS	C		C	B	C	
Approach Delay	29.7			13.8	34.5	
Approach LOS	C			B	C	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	55.7
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.86
Intersection Signal Delay:	22.7
Intersection LOS:	C
Intersection Capacity Utilization:	65.8%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 51: Marion Road & Swifts Beach Road



Lanes, Volumes, Timings

53: Marion Road & Shaws

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	91	509	606	82	83	78
Future Volume (vph)	91	509	606	82	83	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	15	15
Storage Length (ft)	175			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.984		0.934	
Fl _t Protected	0.950				0.975	
Satd. Flow (prot)	1711	1801	1772	0	1866	0
Fl _t Permitted	0.950				0.975	
Satd. Flow (perm)	1711	1801	1772	0	1866	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			11		42	
Link Speed (mph)		30	30		30	
Link Distance (ft)		1848	285		278	
Travel Time (s)		42.0	6.5		6.3	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	99	553	697	94	90	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	99	553	791	0	175	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.88	0.88
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	
Detector Template	Left	Thru	Thru		Left	
Leading Detector (ft)	20	100	100		20	
Trailing Detector (ft)	0	0	0		0	
Detector 1 Position(ft)	0	0	0		0	
Detector 1 Size(ft)	20	6	6		20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA		Perm	
Protected Phases	7	4	8			

Lanes, Volumes, Timings

53: Marion Road & Shaws

12/06/2019

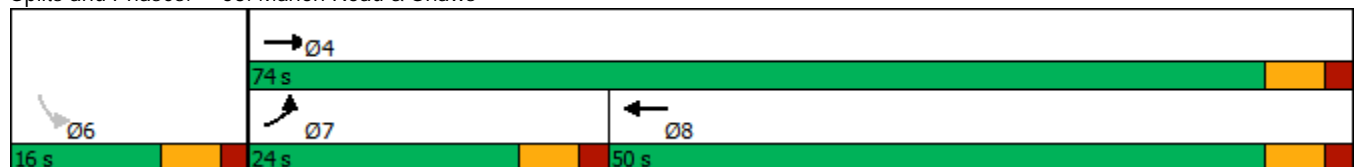


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases					6	
Detector Phase	7	4	8		6	
Switch Phase						
Minimum Initial (s)	11.0	5.0	5.0		5.0	
Minimum Split (s)	24.0	24.0	24.0		11.0	
Total Split (s)	24.0	74.0	50.0		16.0	
Total Split (%)	26.7%	82.2%	55.6%		17.8%	
Maximum Green (s)	18.0	68.0	44.0		10.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		Max	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)	12.5	53.6	40.1		18.8	
Actuated g/C Ratio	0.15	0.63	0.47		0.22	
v/c Ratio	0.40	0.49	0.94		0.39	
Control Delay	41.9	9.2	42.6		27.9	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	41.9	9.2	42.6		27.9	
LOS	D	A	D		C	
Approach Delay		14.2	42.6		27.9	
Approach LOS		B	D		C	

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	84.9
Natural Cycle:	90
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.94
Intersection Signal Delay:	29.6
Intersection LOS:	C
Intersection Capacity Utilization:	70.4%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 53: Marion Road & Shaws



Lanes, Volumes, Timings
55: Marion Road & Gibbs Avenue

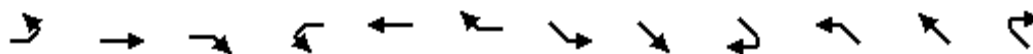
12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	169	381	444	18	21	242
Future Volume (vph)	169	381	444	18	21	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	16	16	12	12
Storage Length (ft)	125			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.876	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1711	1801	2101	0	1625	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1711	1801	2101	0	1625	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		285	1841		501	
Travel Time (s)		6.5	41.8		11.4	
Peak Hour Factor	0.94	0.94	0.91	0.91	0.93	0.93
Adj. Flow (vph)	180	405	488	20	23	260
Shared Lane Traffic (%)						
Lane Group Flow (vph)	180	405	508	0	283	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	0.85	0.85	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	59.9%			ICU Level of Service B		
Analysis Period (min)	15					

Lanes, Volumes, Timings
57: High Street & Marion Road

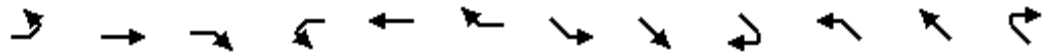
12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	29	290	139	4	346	15	20	77	31	161	57	19
Future Volume (vph)	29	290	139	4	346	15	20	77	31	161	57	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	15	15	15	12	12	12	14	14	14
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.959			0.995			0.967			0.962	
Fl _t Protected		0.997						0.992		0.950		
Satd. Flow (prot)	0	2018	0	0	2039	0	0	1787	0	1888	1911	0
Fl _t Permitted		0.959			0.996			0.953		0.566		
Satd. Flow (perm)	0	1942	0	0	2031	0	0	1717	0	1125	1911	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		39			4			23			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1841			479			513			510	
Travel Time (s)		41.8			10.9			11.7			11.6	
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	31	305	146	4	380	16	23	90	36	177	63	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	482	0	0	400	0	0	149	0	177	84	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			14			14	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.85	0.85	0.85	0.88	0.88	0.88	1.00	1.00	1.00	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			6		5	2	
Permitted Phases	4			8			6			2		
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		9.5	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		10.0	35.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		35.7%	35.7%		14.3%	50.0%	
Maximum Green (s)	30.0	30.0		30.0	30.0		20.0	20.0		5.5	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		3.5	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	
Total Lost Time (s)		5.0			5.0			5.0		4.5	5.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0			8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0			0	
Act Effct Green (s)		30.0			30.0			20.0		30.5	30.0	
Actuated g/C Ratio		0.43			0.43			0.29		0.44	0.43	

Lanes, Volumes, Timings
57: High Street & Marion Road

12/06/2019

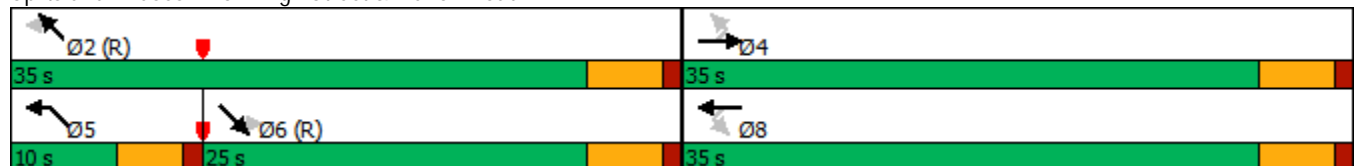


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio		0.56			0.46			0.29		0.32	0.10	
Control Delay		16.9			16.2			18.3		14.2	9.9	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		16.9			16.2			18.3		14.2	9.9	
LOS		B			B			B		B	A	
Approach Delay		16.9			16.2			18.3			12.8	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	70
Actuated Cycle Length:	70
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	70
Control Type:	Pretimed
Maximum v/c Ratio:	0.56
Intersection Signal Delay:	16.0
Intersection LOS:	B
Intersection Capacity Utilization	66.6%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 57: High Street & Marion Road



Lanes, Volumes, Timings
61: Fairhaven Road & River Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	33	379	474	10	19	34
Future Volume (vph)	33	379	474	10	19	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.913	
Flt Protected		0.996			0.983	
Satd. Flow (prot)	0	1793	1795	0	1672	0
Flt Permitted		0.996			0.983	
Satd. Flow (perm)	0	1793	1795	0	1672	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		494	4565		394	
Travel Time (s)		11.2	103.8		9.0	
Peak Hour Factor	0.92	0.92	0.86	0.86	0.78	0.78
Adj. Flow (vph)	36	412	551	12	24	44
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	448	563	0	68	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	57.3%
Analysis Period (min)	15
	ICU Level of Service B

Lanes, Volumes, Timings 2: Huttleston Avenue & Mill Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	15	1036	752	9	35	33
Future Volume (vph)	15	1036	752	9	35	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.998		0.935	
Flt Protected		0.999			0.975	
Satd. Flow (prot)	0	1799	1797	0	1698	0
Flt Permitted		0.999			0.975	
Satd. Flow (perm)	0	1799	1797	0	1698	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1082	1396		506	
Travel Time (s)		24.6	31.7		11.5	
Peak Hour Factor	0.96	0.96	0.83	0.83	0.52	0.52
Adj. Flow (vph)	16	1079	906	11	67	63
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1095	917	0	130	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	77.1%
Analysis Period (min)	15
	ICU Level of Service D

Lanes, Volumes, Timings
 4: Huttleston Avenue & Weeden Road

12/06/2019



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	19	7	597	63	3	470
Future Volume (vph)	19	7	597	63	3	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.964		0.987			
Flt Protected	0.965					
Satd. Flow (prot)	1733	0	1777	0	0	1801
Flt Permitted	0.965					
Satd. Flow (perm)	1733	0	1777	0	0	1801
Link Speed (mph)	30		30			30
Link Distance (ft)	498		1396			2661
Travel Time (s)	11.3		31.7			60.5
Peak Hour Factor	0.57	0.57	0.87	0.87	0.88	0.88
Adj. Flow (vph)	33	12	686	72	3	534
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	0	758	0	0	537
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	45.2%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings

6: New Boston Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	59	621	502	40	44	64
Future Volume (vph)	59	621	502	40	44	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	12
Storage Length (ft)	0			0	0	160
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.990			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	1793	1783	0	1711	1583
Flt Permitted		0.922			0.950	
Satd. Flow (perm)	0	1660	1783	0	1711	1583
Right Turn on Red				No		No
Satd. Flow (RTOR)						
Link Speed (mph)		30	30		30	
Link Distance (ft)		2661	516		800	
Travel Time (s)		60.5	11.7		18.2	
Peak Hour Factor	0.90	0.90	0.96	0.96	0.87	0.87
Adj. Flow (vph)	66	690	523	42	51	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	756	565	0	51	74
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	100	100		20	20
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	20	6	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	

Lanes, Volumes, Timings
6: New Boston Road

12/06/2019

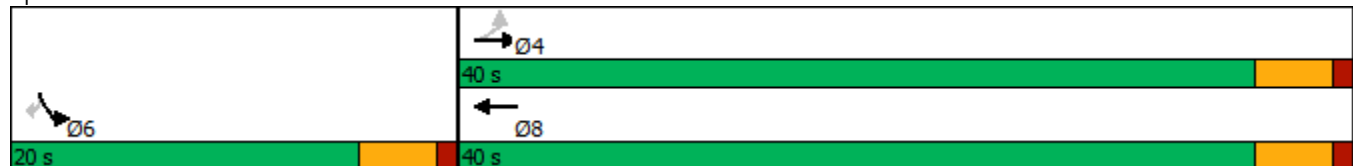


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	4					6
Detector Phase	4	4	8		6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	20.0	20.0	20.0		20.0	20.0
Total Split (s)	40.0	40.0	40.0		20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%		33.3%	33.3%
Maximum Green (s)	35.5	35.5	35.5		15.5	15.5
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	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)		4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	None		Min	Min
Act Effect Green (s)		24.7	24.7		7.8	7.8
Actuated g/C Ratio		0.59	0.59		0.19	0.19
v/c Ratio		0.78	0.54		0.16	0.25
Control Delay		12.9	7.3		18.5	19.8
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		12.9	7.3		18.5	19.8
LOS		B	A		B	B
Approach Delay		12.9	7.3		19.3	
Approach LOS		B	A		B	

Intersection Summary

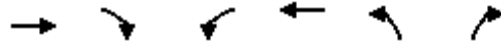
Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	42
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.78
Intersection Signal Delay:	11.3
Intersection LOS:	B
Intersection Capacity Utilization:	80.2%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 6: New Boston Road



Lanes, Volumes, Timings
8: Gелlette Road

12/06/2019



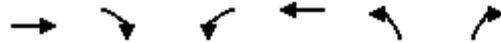
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	609	43	15	493	25	17
Future Volume (vph)	609	43	15	493	25	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.991				0.945	
Flt Protected					0.999	0.971
Satd. Flow (prot)	1784	0	0	1799	1652	0
Flt Permitted					0.999	0.971
Satd. Flow (perm)	1784	0	0	1799	1652	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			2679	535	
Travel Time (s)	11.7			60.9	12.2	
Peak Hour Factor	0.89	0.89	0.93	0.93	0.65	0.65
Adj. Flow (vph)	684	48	16	530	38	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	732	0	0	546	64	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	48.0% ICU Level of Service A
Analysis Period (min)	15

Lanes, Volumes, Timings
10: Shaw Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	410	142	15	450	31	4
Future Volume (vph)	410	142	15	450	31	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.965			0.984		
Flt Protected				0.998	0.958	
Satd. Flow (prot)	1738	0	0	1797	1873	0
Flt Permitted				0.998	0.958	
Satd. Flow (perm)	1738	0	0	1797	1873	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2679			2104	500	
Travel Time (s)	60.9			47.8	11.4	
Peak Hour Factor	0.92	0.92	0.94	0.94	0.84	0.84
Adj. Flow (vph)	446	154	16	479	37	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	600	0	0	495	42	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.92	0.92
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	45.8%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 12: Wareham Road & Creek Road

12/06/2019



Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	45	17	399	74	5	300
Future Volume (vph)	45	17	399	74	5	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.963		0.979			
Flt Protected	0.965					0.999
Satd. Flow (prot)	1673	0	1763	0	0	1799
Flt Permitted	0.965					0.999
Satd. Flow (perm)	1673	0	1763	0	0	1799
Link Speed (mph)	30		30			30
Link Distance (ft)	882		1429			3254
Travel Time (s)	20.0		32.5			74.0
Peak Hour Factor	0.60	0.60	0.93	0.93	0.95	0.95
Adj. Flow (vph)	75	28	429	80	5	316
Shared Lane Traffic (%)						
Lane Group Flow (vph)	103	0	509	0	0	321
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	35.7%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
14: Brandt Island Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	373	47	43	441	28	29
Future Volume (vph)	373	47	43	441	28	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985				0.931	
Flt Protected				0.996	0.976	
Satd. Flow (prot)	1774	0	0	1793	1636	0
Flt Permitted				0.996	0.976	
Satd. Flow (perm)	1774	0	0	1793	1636	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2104			2288	496	
Travel Time (s)	47.8			52.0	11.3	
Peak Hour Factor	0.90	0.90	0.94	0.94	0.66	0.66
Adj. Flow (vph)	414	52	46	469	42	44
Shared Lane Traffic (%)						
Lane Group Flow (vph)	466	0	0	515	86	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	61.4%
Analysis Period (min)	15
	ICU Level of Service B

Lanes, Volumes, Timings
16: Mattapoisett Neck Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	352	45	59	427	25	36
Future Volume (vph)	352	45	59	427	25	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985			0.920		
Flt Protected				0.994	0.980	
Satd. Flow (prot)	1774	0	0	1790	1623	0
Flt Permitted				0.994	0.980	
Satd. Flow (perm)	1774	0	0	1790	1623	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2288			494	531	
Travel Time (s)	52.0			11.2	12.1	
Peak Hour Factor	0.95	0.95	0.89	0.89	0.75	0.75
Adj. Flow (vph)	371	47	66	480	33	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	418	0	0	546	81	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	60.6%
Analysis Period (min)	15
	ICU Level of Service B

Lanes, Volumes, Timings
 18: Main Street & Fairhaven Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	4	381	39	27	476	39	57	16	13	26	11	7
Future Volume (vph)	4	381	39	27	476	39	57	16	13	26	11	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	16	16	16
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.990			0.980			0.979	
Flt Protected					0.997			0.968			0.971	
Satd. Flow (prot)	0	1779	0	0	1777	0	0	1826	0	0	2007	0
Flt Permitted		0.995			0.961			0.791			0.824	
Satd. Flow (perm)	0	1770	0	0	1713	0	0	1492	0	0	1703	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			9			15			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		4565			395			496			500	
Travel Time (s)		103.8			9.0			11.3			11.4	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.80	0.80	0.80	0.85	0.85	0.85
Adj. Flow (vph)	4	423	43	29	506	41	71	20	16	31	13	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	470	0	0	576	0	0	107	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	0.96	0.96	0.96	0.85	0.85	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
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												

Lanes, Volumes, Timings
 18: Main Street & Fairhaven Road

12/06/2019

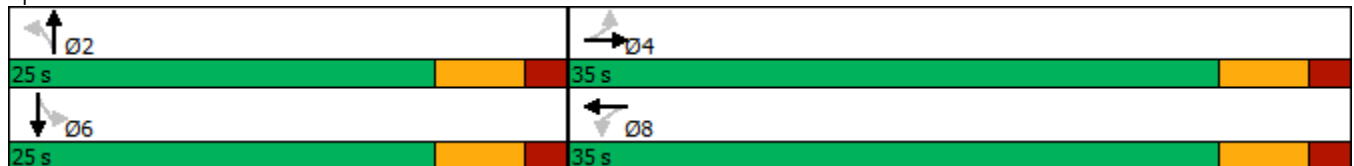


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%	
Maximum Green (s)	29.0	29.0		29.0	29.0		19.0	19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		22.3			22.3			19.3			19.3	
Actuated g/C Ratio		0.42			0.42			0.36			0.36	
v/c Ratio		0.63			0.80			0.20			0.08	
Control Delay		16.0			22.9			13.7			12.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.0			22.9			13.7			12.7	
LOS		B			C			B			B	
Approach Delay		16.0			22.9			13.7			12.7	
Approach LOS		B			C			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	53.7
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.80
Intersection Signal Delay:	19.0
Intersection LOS:	B
Intersection Capacity Utilization:	61.6%
ICU Level of Service:	B
Analysis Period (min):	15

Splits and Phases: 18: Main Street & Fairhaven Road



Lanes, Volumes, Timings
21: North Street

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	282	17	14	316	227	10	45	14	235	46	224
Future Volume (vph)	164	282	17	14	316	227	10	45	14	235	46	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	11	11	11
Storage Length (ft)	100		0	0		0	0		0	100		0
Storage Lanes	1		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Fr _t		0.992			0.945			0.972			0.886	
Fl _t Protected	0.950	0.997			0.999			0.993		0.950	0.996	
Satd. Flow (prot)	1625	1692	0	0	1700	0	0	1858	0	1625	1510	0
Fl _t Permitted	0.342	0.958			0.987			0.935		0.703	0.975	
Satd. Flow (perm)	585	1626	0	0	1679	0	0	1749	0	1203	1478	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			95			17			264	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		326			3802			502			502	
Travel Time (s)		7.4			86.4			11.4			11.4	
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.84	0.84	0.84	0.85	0.85	0.85
Adj. Flow (vph)	176	303	18	16	351	252	12	54	17	276	54	264
Shared Lane Traffic (%)	10%									10%		
Lane Group Flow (vph)	158	339	0	0	619	0	0	83	0	248	346	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	0.96	0.96	0.96	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	

Lanes, Volumes, Timings

21: North Street

12/06/2019

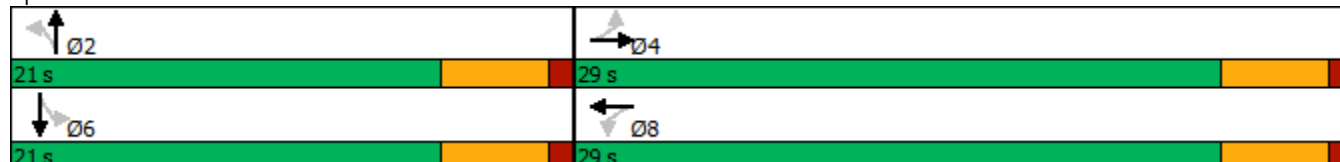


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	14.0	14.0		14.0	14.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	19.0	19.0		19.0	19.0		13.0	13.0		13.0	13.0	
Total Split (s)	29.0	29.0		29.0	29.0		21.0	21.0		21.0	21.0	
Total Split (%)	58.0%	58.0%		58.0%	58.0%		42.0%	42.0%		42.0%	42.0%	
Maximum Green (s)	24.0	24.0		24.0	24.0		16.0	16.0		16.0	16.0	
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		0.0	0.0	
Total Lost Time (s)	5.0	5.0			5.0			5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	20.1	20.1			20.1			18.1		18.1	18.1	
Actuated g/C Ratio	0.42	0.42			0.42			0.37		0.37	0.37	
v/c Ratio	0.65	0.50			0.82			0.12		0.55	0.48	
Control Delay	26.2	12.7			21.2			10.1		18.9	6.4	
Queue Delay	0.0	0.0			0.0			0.0		0.0	0.0	
Total Delay	26.2	12.7			21.2			10.1		18.9	6.4	
LOS	C	B			C			B		B	A	
Approach Delay		17.0			21.2			10.1			11.6	
Approach LOS		B			C			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 50
 Actuated Cycle Length: 48.3
 Natural Cycle: 50
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 16.4
 Intersection LOS: B
 Intersection Capacity Utilization 80.0%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 21: North Street



Lanes, Volumes, Timings
 24: Prospect Road/Randall Road & Marion Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	5	334	41	29	400	5	19	0	11	4	0	3
Future Volume (vph)	5	334	41	29	400	5	19	0	11	4	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.998			0.951			0.944	
Flt Protected		0.999			0.997			0.969			0.972	
Satd. Flow (prot)	0	1772	0	0	1792	0	0	1659	0	0	1652	0
Flt Permitted		0.999			0.997			0.969			0.972	
Satd. Flow (perm)	0	1772	0	0	1792	0	0	1659	0	0	1652	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1466			15280			657			606	
Travel Time (s)		33.3			347.3			14.9			13.8	
Peak Hour Factor	0.84	0.84	0.84	0.86	0.86	0.86	0.58	0.58	0.58	0.58	0.58	0.58
Adj. Flow (vph)	6	398	49	34	465	6	33	0	19	7	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	453	0	0	505	0	0	52	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	48.8%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
26: Church Street Ext

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	364	50	2	367	35	1
Future Volume (vph)	364	50	2	367	35	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.995		
Flt Protected				0.954		
Satd. Flow (prot)	1772	0	0	1801	1650	0
Flt Permitted				0.954		
Satd. Flow (perm)	1772	0	0	1801	1650	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	3802			1012	473	
Travel Time (s)	86.4			23.0	10.8	
Peak Hour Factor	0.81	0.81	0.83	0.83	0.92	0.92
Growth Factor	100%	100%	100%	100%	77%	77%
Adj. Flow (vph)	449	62	2	442	29	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	511	0	0	444	30	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	32.2%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
28: Marion Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Volume (vph)	294	1	1	342	30	27
Future Volume (vph)	294	1	1	342	30	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.923	
Flt Protected					0.979	
Satd. Flow (prot)	1801	0	0	1801	1627	0
Flt Permitted					0.979	
Satd. Flow (perm)	1801	0	0	1801	1627	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1012			1466	421	
Travel Time (s)	23.0			33.3	9.6	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.72	0.48
Adj. Flow (vph)	320	1	1	380	42	56
Shared Lane Traffic (%)						
Lane Group Flow (vph)	321	0	0	381	98	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	28.8%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
30: Marion Road & Converse Road

12/06/2019












Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	47	67	310	45	80	371
Future Volume (vph)	47	67	310	45	80	371
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.983			
Flt Protected	0.950					0.991
Satd. Flow (prot)	1770	1583	1770	0	0	1784
Flt Permitted	0.950					0.991
Satd. Flow (perm)	1770	1583	1770	0	0	1784
Link Speed (mph)	30		30			30
Link Distance (ft)	531		15280			1140
Travel Time (s)	12.1		347.3			25.9
Peak Hour Factor	0.81	0.81	0.91	0.91	0.87	0.87
Adj. Flow (vph)	58	83	341	49	92	426
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	83	390	0	0	518
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	56.3%
Analysis Period (min)	15
	ICU Level of Service B


















Lanes, Volumes, Timings
32: Main Street & Mill Street

12/06/2019

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	33	60	346	50	65	352
Future Volume (vph)	33	60	346	50	65	352
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.913		0.983			
Flt Protected	0.983					0.992
Satd. Flow (prot)	1672	0	1770	0	0	1786
Flt Permitted	0.983					0.992
Satd. Flow (perm)	1672	0	1770	0	0	1786
Link Speed (mph)	30		30			30
Link Distance (ft)	500		1140			4673
Travel Time (s)	11.4		25.9			106.2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.88	0.88
Adj. Flow (vph)	36	66	380	55	74	400
Shared Lane Traffic (%)						
Lane Group Flow (vph)	102	0	435	0	0	474
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	58.9%			ICU Level of Service B		
Analysis Period (min)	15					

Lanes, Volumes, Timings
34: Mill Street & Spring Street

12/06/2019

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	6	42	51	19	32	220	149	459	5	26	260	4
Future Volume (vph)	6	42	51	19	32	220	149	459	5	26	260	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.931			0.891			0.999			0.998	
Flt Protected		0.997			0.996		0.950				0.995	
Satd. Flow (prot)	0	1671	0	0	1598	0	1711	1799	0	0	1788	0
Flt Permitted		0.978			0.979		0.570				0.898	
Satd. Flow (perm)	0	1640	0	0	1571	0	1026	1799	0	0	1614	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		57			239			1			2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		499			498			4673			490	
Travel Time (s)		11.3			11.3			106.2			11.1	
Peak Hour Factor	0.89	0.89	0.89	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	7	47	57	21	35	239	162	499	5	29	286	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	111	0	0	295	0	162	504	0	0	319	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lanes, Volumes, Timings
34: Mill Street & Spring Street

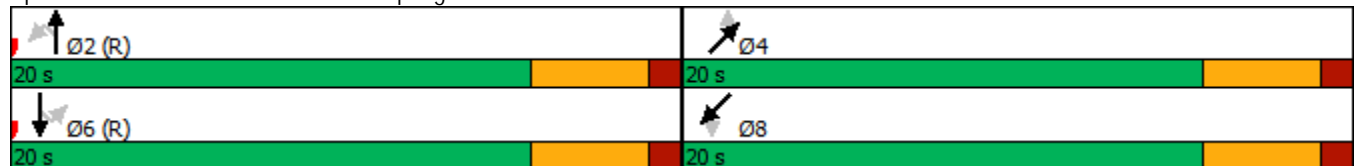
12/06/2019

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	15.5	15.5		15.5	15.5		15.5	15.5		15.5	15.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
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	
Total Lost Time (s)		4.5			4.5		4.5	4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Act Effect Green (s)		16.6			16.6		14.4	14.4			14.4	
Actuated g/C Ratio		0.42			0.42		0.36	0.36			0.36	
v/c Ratio		0.16			0.37		0.44	0.78			0.55	
Control Delay		5.4			4.1		13.6	21.8			13.9	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		5.4			4.1		13.6	21.8			13.9	
LOS		A			A		B	C			B	
Approach Delay		5.4			4.1			19.8			13.9	
Approach LOS		A			A			B			B	

Intersection Summary

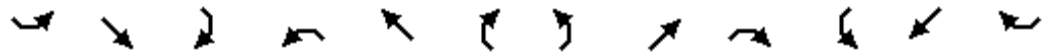
Area Type: Other
 Cycle Length: 40
 Actuated Cycle Length: 40
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 40
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 14.0 Intersection LOS: B
 Intersection Capacity Utilization 72.8% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 34: Mill Street & Spring Street



Lanes, Volumes, Timings
37: Front Street & Wareham Road

12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	192	75	14	28	109	85	189	200	12	44	219	170
Future Volume (vph)	192	75	14	28	109	85	189	200	12	44	219	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	11	11	11	11
Storage Length (ft)	100		0	0		0	50		0	50		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.977			0.948			0.992			0.934	
Fl _t Protected	0.950				0.994		0.950			0.950		
Satd. Flow (prot)	1770	1820	0	0	1755	0	1711	1786	0	1711	1682	0
Fl _t Permitted	0.671				0.960		0.398			0.615		
Satd. Flow (perm)	1250	1820	0	0	1695	0	717	1786	0	1107	1682	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			75			9			112	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			508			490			2182	
Travel Time (s)		11.4			11.5			11.1			49.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	209	82	15	30	118	92	205	217	13	48	238	185
Shared Lane Traffic (%)												
Lane Group Flow (vph)	209	97	0	0	240	0	205	230	0	48	423	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	

Lanes, Volumes, Timings
 37: Front Street & Wareham Road

12/06/2019

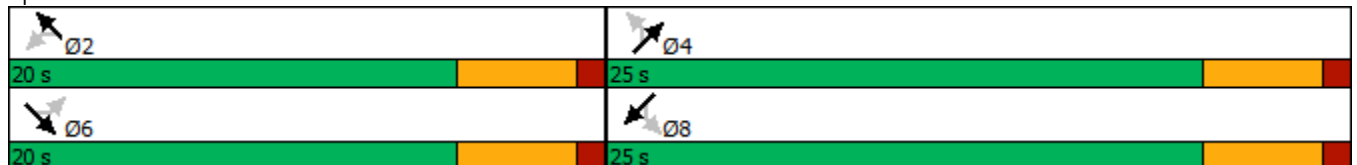


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		11.5	11.5	
Minimum Split (s)	12.0	12.0		12.0	12.0		17.0	17.0		17.0	17.0	
Total Split (s)	20.0	20.0		20.0	20.0		25.0	25.0		25.0	25.0	
Total Split (%)	44.4%	44.4%		44.4%	44.4%		55.6%	55.6%		55.6%	55.6%	
Maximum Green (s)	15.0	15.0		15.0	15.0		20.0	20.0		20.0	20.0	
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	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	18.1	18.1			18.1		15.8	15.8		15.8	15.8	
Actuated g/C Ratio	0.41	0.41			0.41		0.36	0.36		0.36	0.36	
v/c Ratio	0.41	0.13			0.32		0.79	0.35		0.12	0.62	
Control Delay	13.4	8.8			8.4		38.0	11.3		9.7	12.7	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	13.4	8.8			8.4		38.0	11.3		9.7	12.7	
LOS	B	A			A		D	B		A	B	
Approach Delay		11.9			8.4			23.9			12.4	
Approach LOS		B			A			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 45
 Actuated Cycle Length: 44
 Natural Cycle: 45
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay: 15.1
 Intersection LOS: B
 Intersection Capacity Utilization 72.2%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 37: Front Street & Wareham Road



Lanes, Volumes, Timings
40: Wareham Road & Hermitage Road

12/06/2019



Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	5	2	442	4	2	326
Future Volume (vph)	5	2	442	4	2	326
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.959		0.999			
Flt Protected	0.966					
Satd. Flow (prot)	1611	0	1799	0	0	1801
Flt Permitted	0.966					
Satd. Flow (perm)	1611	0	1799	0	0	1801
Link Speed (mph)	30		30			30
Link Distance (ft)	504		2182			1429
Travel Time (s)	11.5		49.6			32.5
Peak Hour Factor	0.35	0.35	0.90	0.90	0.89	0.89
Adj. Flow (vph)	14	6	491	4	2	366
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	495	0	0	368
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	33.5%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
42: Point Road & Wareham Road

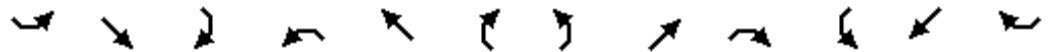
12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	59	31	18	18	20	61	16	296	2	98	284	94
Future Volume (vph)	59	31	18	18	20	61	16	296	2	98	284	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.977			0.917			0.999			0.973	
Flt Protected		0.974			0.991			0.998			0.990	
Satd. Flow (prot)	0	1713	0	0	1636	0	0	1795	0	0	1735	0
Flt Permitted		0.809			0.944			0.969			0.857	
Satd. Flow (perm)	0	1423	0	0	1559	0	0	1743	0	0	1501	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			66			1			29	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		784			806			3254			5829	
Travel Time (s)		17.8			18.3			74.0			132.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	64	34	20	20	22	66	17	322	2	107	309	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	118	0	0	108	0	0	341	0	0	518	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Minimum Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	25.0	25.0		25.0	25.0		35.0	35.0		35.0	35.0	
Total Split (%)	41.7%	41.7%		41.7%	41.7%		58.3%	58.3%		58.3%	58.3%	
Maximum Green (s)	20.0	20.0		20.0	20.0		30.0	30.0		30.0	30.0	
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?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		20.0			20.0			30.0			30.0	
Actuated g/C Ratio		0.33			0.33			0.50			0.50	
v/c Ratio		0.24			0.19			0.39			0.68	
Control Delay		14.1			8.0			11.0			16.2	
Queue Delay		0.0			0.0			0.0			0.0	

Lanes, Volumes, Timings
 42: Point Road & Wareham Road

12/06/2019

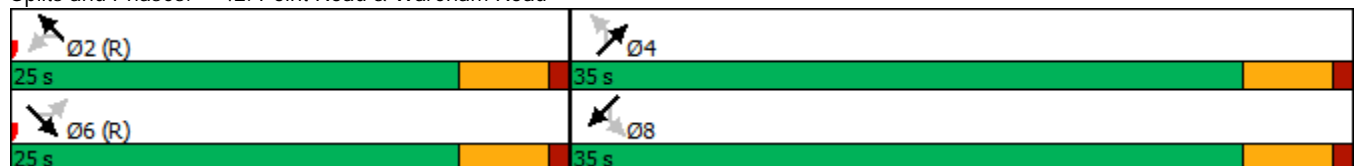


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay		14.1			8.0			11.0			16.2	
LOS		B			A			B			B	
Approach Delay		14.1			8.0			11.0			16.2	
Approach LOS		B			A			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	60
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.68
Intersection Signal Delay:	13.5
Intersection LOS:	B
Intersection Capacity Utilization	67.8%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 42: Point Road & Wareham Road



Lanes, Volumes, Timings
45: Wareham Road & Hathaway Street

12/06/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	25	70	52	358	440	41
Future Volume (vph)	25	70	52	358	440	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.901				0.988	
Flt Protected	0.987			0.994		
Satd. Flow (prot)	1657	0	0	1790	1779	0
Flt Permitted	0.987			0.994		
Satd. Flow (perm)	1657	0	0	1790	1779	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	590			5829	3420	
Travel Time (s)	13.4			132.5	77.7	
Peak Hour Factor	0.83	0.83	0.94	0.94	0.96	0.96
Adj. Flow (vph)	30	84	55	381	458	43
Shared Lane Traffic (%)						
Lane Group Flow (vph)	114	0	0	436	501	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	63.1%
Analysis Period (min)	15
	ICU Level of Service B

Lanes, Volumes, Timings
49: Cromesett Road & Marion Road

12/06/2019



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	49	85	423	63	123	498
Future Volume (vph)	49	85	423	63	123	498
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.914		0.982			
Flt Protected	0.982					0.990
Satd. Flow (prot)	1672	0	1768	0	0	1783
Flt Permitted	0.982					0.990
Satd. Flow (perm)	1672	0	1768	0	0	1783
Link Speed (mph)	30		30			30
Link Distance (ft)	565		3420			1505
Travel Time (s)	12.8		77.7			34.2
Peak Hour Factor	0.87	0.87	0.89	0.89	0.94	0.94
Adj. Flow (vph)	56	98	475	71	131	530
Shared Lane Traffic (%)						
Lane Group Flow (vph)	154	0	546	0	0	661
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	77.0%
Analysis Period (min)	15
	ICU Level of Service D

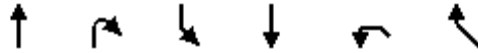
Lanes, Volumes, Timings
51: Marion Road & Swifts Beach Road

12/06/2019

	↑	↖	↙	↓	↘	↗
Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations	↑		↖	↑	↘	
Traffic Volume (vph)	493	71	193	606	63	165
Future Volume (vph)	493	71	193	606	63	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.983				0.904	
Flt Protected			0.950		0.986	
Satd. Flow (prot)	1770	0	1711	1801	1660	0
Flt Permitted			0.319		0.986	
Satd. Flow (perm)	1770	0	574	1801	1660	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	1505			1848	506	
Travel Time (s)	34.2			42.0	11.5	
Peak Hour Factor	0.92	0.90	0.89	0.89	0.69	0.74
Adj. Flow (vph)	536	79	217	681	91	223
Shared Lane Traffic (%)						
Lane Group Flow (vph)	615	0	217	681	314	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	

Lanes, Volumes, Timings
 51: Marion Road & Swifts Beach Road

12/06/2019

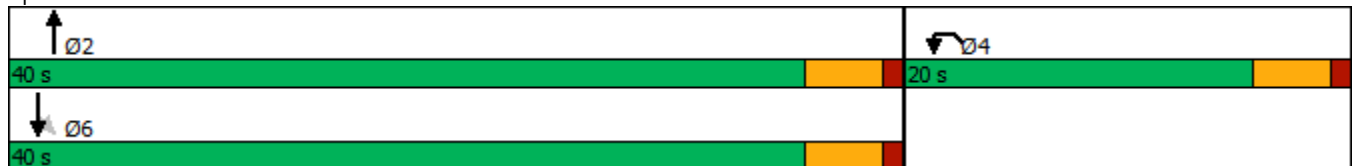


Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Permitted Phases			6			
Detector Phase	2		6	6	4	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	40.0		40.0	40.0	20.0	
Total Split (%)	66.7%		66.7%	66.7%	33.3%	
Maximum Green (s)	35.5		35.5	35.5	15.5	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Min		None	None	None	
Act Effect Green (s)	27.0		27.0	27.0	13.3	
Actuated g/C Ratio	0.54		0.54	0.54	0.27	
v/c Ratio	0.64		0.70	0.69	0.71	
Control Delay	11.6		23.2	12.9	28.8	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	11.6		23.2	12.9	28.8	
LOS	B		C	B	C	
Approach Delay	11.6			15.4	28.8	
Approach LOS	B			B	C	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	49.6
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.71
Intersection Signal Delay:	16.4
Intersection LOS:	B
Intersection Capacity Utilization:	65.8%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 51: Marion Road & Swifts Beach Road



Lanes, Volumes, Timings

53: Marion Road & Shaws

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	91	509	606	82	83	78
Future Volume (vph)	91	509	606	82	83	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	15	15
Storage Length (ft)	175			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.984		0.934	
Fl _t Protected	0.950				0.975	
Satd. Flow (prot)	1711	1801	1772	0	1866	0
Fl _t Permitted	0.950				0.975	
Satd. Flow (perm)	1711	1801	1772	0	1866	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			11		42	
Link Speed (mph)		30	30		30	
Link Distance (ft)		1848	285		278	
Travel Time (s)		42.0	6.5		6.3	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	99	553	697	94	90	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	99	553	791	0	175	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.88	0.88
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	
Detector Template	Left	Thru	Thru		Left	
Leading Detector (ft)	20	100	100		20	
Trailing Detector (ft)	0	0	0		0	
Detector 1 Position(ft)	0	0	0		0	
Detector 1 Size(ft)	20	6	6		20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA		Perm	
Protected Phases	7	4	8			

Lanes, Volumes, Timings
53: Marion Road & Shaws

12/06/2019

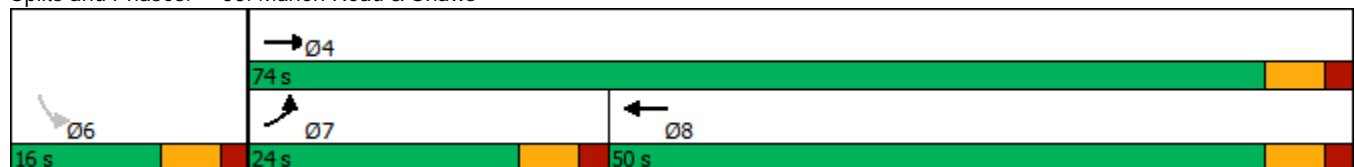


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases					6	
Detector Phase	7	4	8		6	
Switch Phase						
Minimum Initial (s)	11.0	5.0	5.0		5.0	
Minimum Split (s)	24.0	24.0	24.0		11.0	
Total Split (s)	24.0	74.0	50.0		16.0	
Total Split (%)	26.7%	82.2%	55.6%		17.8%	
Maximum Green (s)	18.0	68.0	44.0		10.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		Max	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effect Green (s)	12.5	53.6	40.1		18.8	
Actuated g/C Ratio	0.15	0.63	0.47		0.22	
v/c Ratio	0.40	0.49	0.94		0.39	
Control Delay	41.9	9.2	42.6		27.9	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	41.9	9.2	42.6		27.9	
LOS	D	A	D		C	
Approach Delay		14.2	42.6		27.9	
Approach LOS		B	D		C	

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	84.9
Natural Cycle:	90
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.94
Intersection Signal Delay:	29.6
Intersection LOS:	C
Intersection Capacity Utilization:	70.4%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 53: Marion Road & Shaws



Lanes, Volumes, Timings
55: Marion Road & Gibbs Avenue

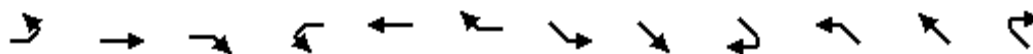
12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	169	381	444	18	21	242
Future Volume (vph)	169	381	444	18	21	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	16	16	12	12
Storage Length (ft)	125			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.876	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1711	1801	2101	0	1625	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1711	1801	2101	0	1625	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		285	1841		501	
Travel Time (s)		6.5	41.8		11.4	
Peak Hour Factor	0.94	0.94	0.91	0.91	0.93	0.93
Adj. Flow (vph)	180	405	488	20	23	260
Shared Lane Traffic (%)						
Lane Group Flow (vph)	180	405	508	0	283	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	0.85	0.85	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	59.9%			ICU Level of Service B		
Analysis Period (min)	15					

Lanes, Volumes, Timings
57: High Street & Marion Road

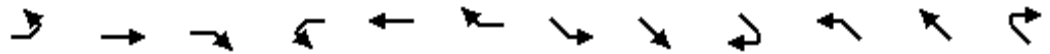
12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	29	290	139	4	346	15	20	77	31	161	57	19
Future Volume (vph)	29	290	139	4	346	15	20	77	31	161	57	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	15	15	15	12	12	12	14	14	14
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.959			0.995			0.967			0.962	
Fl _t Protected		0.997						0.992		0.950		
Satd. Flow (prot)	0	2018	0	0	2039	0	0	1787	0	1888	1911	0
Fl _t Permitted		0.961			0.996			0.955		0.713		
Satd. Flow (perm)	0	1946	0	0	2031	0	0	1720	0	1417	1911	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		52			5			29			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1841			479			513			510	
Travel Time (s)		41.8			10.9			11.7			11.6	
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	31	305	146	4	380	16	23	90	36	177	63	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	482	0	0	400	0	0	149	0	177	84	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			14			14	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.85	0.85	0.85	0.88	0.88	0.88	1.00	1.00	1.00	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%	
Maximum Green (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
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	0.0	
Total Lost Time (s)		5.0			5.0			5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		30.0			30.0			20.0		20.0	20.0	
Actuated g/C Ratio		0.50			0.50			0.33		0.33	0.33	

Lanes, Volumes, Timings
57: High Street & Marion Road

12/06/2019

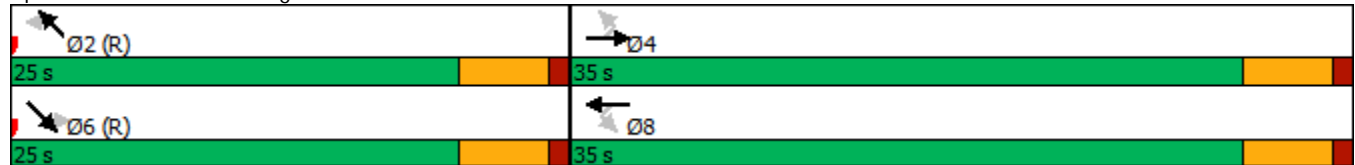


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio		0.48			0.39			0.25		0.38	0.13	
Control Delay		10.7			10.7			13.0		18.1	11.8	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		10.7			10.7			13.0		18.1	11.8	
LOS		B			B			B		B	B	
Approach Delay		10.7			10.7			13.0			16.1	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	60
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.48
Intersection Signal Delay:	12.1
Intersection LOS:	B
Intersection Capacity Utilization	66.6%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 57: High Street & Marion Road



Lanes, Volumes, Timings
61: Fairhaven Road & River Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	33	379	474	10	19	34
Future Volume (vph)	33	379	474	10	19	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.913	
Flt Protected		0.996			0.983	
Satd. Flow (prot)	0	1793	1795	0	1672	0
Flt Permitted		0.996			0.983	
Satd. Flow (perm)	0	1793	1795	0	1672	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		494	4565		394	
Travel Time (s)		11.2	103.8		9.0	
Peak Hour Factor	0.92	0.92	0.86	0.86	0.78	0.78
Adj. Flow (vph)	36	412	551	12	24	44
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	448	563	0	68	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	57.3%
Analysis Period (min)	15
	ICU Level of Service B

Lanes, Volumes, Timings 2: Huttleston Avenue & Mill Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↔		↔↔	
Traffic Volume (vph)	15	1036	752	9	35	33
Future Volume (vph)	15	1036	752	9	35	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.998		0.935	
Flt Protected		0.999			0.975	
Satd. Flow (prot)	0	3418	3414	0	1698	0
Flt Permitted		0.999			0.975	
Satd. Flow (perm)	0	3418	3414	0	1698	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1082	1396		506	
Travel Time (s)		24.6	31.7		11.5	
Peak Hour Factor	0.96	0.96	0.83	0.83	0.52	0.52
Adj. Flow (vph)	16	1079	906	11	67	63
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1095	917	0	130	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	49.9%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 4: Huttleston Avenue & Weeden Road

12/06/2019



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	19	7	597	63	3	470
Future Volume (vph)	19	7	597	63	3	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.964		0.986			
Flt Protected	0.965					
Satd. Flow (prot)	1733	0	3373	0	0	3421
Flt Permitted	0.965					
Satd. Flow (perm)	1733	0	3373	0	0	3421
Link Speed (mph)	30		30			30
Link Distance (ft)	498		1396			2661
Travel Time (s)	11.3		31.7			60.5
Peak Hour Factor	0.57	0.57	0.87	0.87	0.88	0.88
Adj. Flow (vph)	33	12	686	72	3	534
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	0	758	0	0	537
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	28.5%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
6: New Boston Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↔		↖	↗
Traffic Volume (vph)	59	621	502	40	44	64
Future Volume (vph)	59	621	502	40	44	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	12
Storage Length (ft)	0			0	0	160
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.989			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	3408	3384	0	1711	1583
Flt Permitted		0.873			0.950	
Satd. Flow (perm)	0	2987	3384	0	1711	1583
Right Turn on Red				No		No
Satd. Flow (RTOR)						
Link Speed (mph)		30	30		30	
Link Distance (ft)		2661	516		800	
Travel Time (s)		60.5	11.7		18.2	
Peak Hour Factor	0.90	0.90	0.96	0.96	0.87	0.87
Adj. Flow (vph)	66	690	523	42	51	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	756	565	0	51	74
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	100	100		20	20
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	20	6	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	

Lanes, Volumes, Timings
6: New Boston Road

12/06/2019

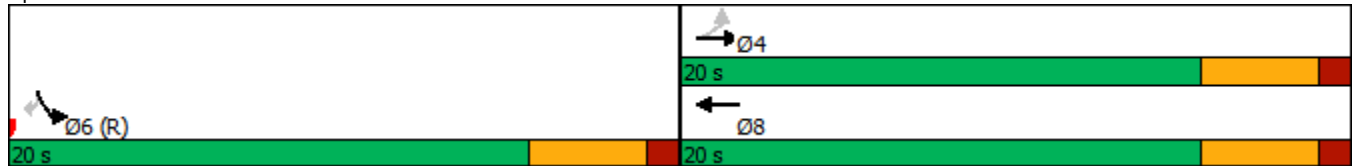


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	4					6
Detector Phase	4	4	8		6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	20.0	20.0	20.0		20.0	20.0
Total Split (s)	20.0	20.0	20.0		20.0	20.0
Total Split (%)	50.0%	50.0%	50.0%		50.0%	50.0%
Maximum Green (s)	15.5	15.5	15.5		15.5	15.5
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	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)		4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	Max	Max	Max		C-Min	C-Min
Act Effect Green (s)		23.6	23.6		7.4	7.4
Actuated g/C Ratio		0.59	0.59		0.18	0.18
v/c Ratio		0.43	0.28		0.16	0.25
Control Delay		5.8	4.8		14.2	15.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		5.8	4.8		14.2	15.6
LOS		A	A		B	B
Approach Delay		5.8	4.8		15.0	
Approach LOS		A	A		B	

Intersection Summary

Area Type: Other
 Cycle Length: 40
 Actuated Cycle Length: 40
 Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green
 Natural Cycle: 40
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.43
 Intersection Signal Delay: 6.2
 Intersection LOS: A
 Intersection Capacity Utilization 49.4%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 6: New Boston Road



Lanes, Volumes, Timings
8: Gелlette Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	609	43	15	493	25	17
Future Volume (vph)	609	43	15	493	25	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.990				0.945	
Flt Protected				0.999	0.971	
Satd. Flow (prot)	3387	0	0	3418	1652	0
Flt Permitted				0.999	0.971	
Satd. Flow (perm)	3387	0	0	3418	1652	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			2679	535	
Travel Time (s)	11.7			60.9	12.2	
Peak Hour Factor	0.89	0.89	0.93	0.93	0.65	0.65
Adj. Flow (vph)	684	48	16	530	38	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	732	0	0	546	64	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	34.5%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
10: Shaw Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	410	142	15	450	31	4
Future Volume (vph)	410	142	15	450	31	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	14	14
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.961				0.984	
Flt Protected				0.998	0.958	
Satd. Flow (prot)	3288	0	0	3414	1873	0
Flt Permitted				0.998	0.958	
Satd. Flow (perm)	3288	0	0	3414	1873	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2679			2104	500	
Travel Time (s)	60.9			47.8	11.4	
Peak Hour Factor	0.92	0.92	0.94	0.94	0.84	0.84
Adj. Flow (vph)	446	154	16	479	37	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	600	0	0	495	42	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.92	0.92
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	33.3%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
12: Wareham Road & Creek Road

12/06/2019



Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	45	17	399	74	5	300
Future Volume (vph)	45	17	399	74	5	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.963		0.976			
Flt Protected	0.965					0.999
Satd. Flow (prot)	1673	0	3339	0	0	3418
Flt Permitted	0.965					0.999
Satd. Flow (perm)	1673	0	3339	0	0	3418
Link Speed (mph)	30		30			30
Link Distance (ft)	882		1429			3254
Travel Time (s)	20.0		32.5			74.0
Peak Hour Factor	0.60	0.60	0.93	0.93	0.95	0.95
Adj. Flow (vph)	75	28	429	80	5	316
Shared Lane Traffic (%)						
Lane Group Flow (vph)	103	0	509	0	0	321
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	23.6%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
14: Brandt Island Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	373	47	43	441	28	29
Future Volume (vph)	373	47	43	441	28	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.983				0.931	
Flt Protected				0.996	0.976	
Satd. Flow (prot)	3363	0	0	3408	1636	0
Flt Permitted				0.996	0.976	
Satd. Flow (perm)	3363	0	0	3408	1636	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2104			2288	496	
Travel Time (s)	47.8			52.0	11.3	
Peak Hour Factor	0.90	0.90	0.94	0.94	0.66	0.66
Adj. Flow (vph)	414	52	46	469	42	44
Shared Lane Traffic (%)						
Lane Group Flow (vph)	466	0	0	515	86	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	38.6%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
16: Mattapoisett Neck Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	352	45	59	427	25	36
Future Volume (vph)	352	45	59	427	25	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.983				0.920	
Flt Protected				0.994	0.980	
Satd. Flow (prot)	3363	0	0	3401	1623	0
Flt Permitted				0.994	0.980	
Satd. Flow (perm)	3363	0	0	3401	1623	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2288			494	531	
Travel Time (s)	52.0			11.2	12.1	
Peak Hour Factor	0.95	0.95	0.89	0.89	0.75	0.75
Adj. Flow (vph)	371	47	66	480	33	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	418	0	0	546	81	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	38.3%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
18: Main Street & Fairhaven Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕				↕
Traffic Volume (vph)	4	381	39	27	476	39	57	16	13	26	11	7
Future Volume (vph)	4	381	39	27	476	39	57	16	13	26	11	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	16	16	16
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.989			0.980			0.979	
Flt Protected					0.997			0.968			0.971	
Satd. Flow (prot)	0	3036	0	0	3036	0	0	1643	0	0	1806	0
Flt Permitted		0.949			0.909			0.799			0.830	
Satd. Flow (perm)	0	2881	0	0	2768	0	0	1356	0	0	1544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			18			15			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		4565			395			496			500	
Travel Time (s)		103.8			9.0			11.3			11.4	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.80	0.80	0.80	0.85	0.85	0.85
Adj. Flow (vph)	4	423	43	29	506	41	71	20	16	31	13	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	470	0	0	576	0	0	107	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.10	1.10	1.10	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
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												

Lanes, Volumes, Timings
 18: Main Street & Fairhaven Road

12/06/2019

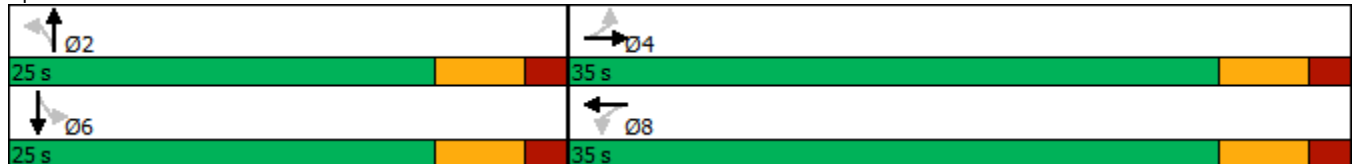


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%	
Maximum Green (s)	29.0	29.0		29.0	29.0		19.0	19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		15.3			15.3			19.1			19.1	
Actuated g/C Ratio		0.33			0.33			0.41			0.41	
v/c Ratio		0.49			0.63			0.19			0.08	
Control Delay		13.3			15.8			10.2			9.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		13.3			15.8			10.2			9.4	
LOS		B			B			B			A	
Approach Delay		13.3			15.8			10.2			9.4	
Approach LOS		B			B			B			A	

Intersection Summary

Area Type:	CBD
Cycle Length:	60
Actuated Cycle Length:	46.5
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.63
Intersection Signal Delay:	14.0
Intersection LOS:	B
Intersection Capacity Utilization:	51.8%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 18: Main Street & Fairhaven Road



Lanes, Volumes, Timings
21: North Street

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕			↕	
Traffic Volume (vph)	164	282	17	14	316	227	10	45	14	235	46	224
Future Volume (vph)	164	282	17	14	316	227	10	45	14	235	46	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.939			0.972			0.940	
Flt Protected		0.983			0.999			0.993			0.977	
Satd. Flow (prot)	0	3346	0	0	3209	0	0	1858	0	0	1654	0
Flt Permitted		0.626			0.935			0.916			0.811	
Satd. Flow (perm)	0	2131	0	0	3004	0	0	1714	0	0	1373	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			252			17			120	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		326			3802			502			502	
Travel Time (s)		7.4			86.4			11.4			11.4	
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.84	0.84	0.84	0.85	0.85	0.85
Adj. Flow (vph)	176	303	18	16	351	252	12	54	17	276	54	264
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	497	0	0	619	0	0	83	0	0	594	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	0.96	0.96	0.96	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
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												

Lanes, Volumes, Timings

21: North Street

12/06/2019

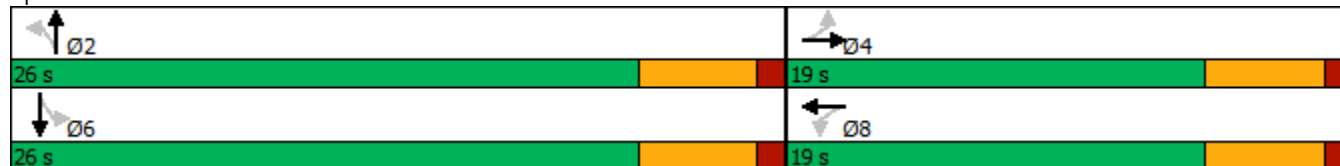


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	14.0	14.0		14.0	14.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	19.0	19.0		19.0	19.0		13.0	13.0		13.0	13.0	
Total Split (s)	19.0	19.0		19.0	19.0		26.0	26.0		26.0	26.0	
Total Split (%)	42.2%	42.2%		42.2%	42.2%		57.8%	57.8%		57.8%	57.8%	
Maximum Green (s)	14.0	14.0		14.0	14.0		21.0	21.0		21.0	21.0	
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?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		14.0			14.0			21.0			21.0	
Actuated g/C Ratio		0.31			0.31			0.47			0.47	
v/c Ratio		0.74			0.56			0.10			0.84	
Control Delay		22.8			9.7			6.1			23.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		22.8			9.7			6.1			23.2	
LOS		C			A			A			C	
Approach Delay		22.8			9.7			6.1			23.2	
Approach LOS		C			A			A			C	

Intersection Summary

Area Type:	Other
Cycle Length:	45
Actuated Cycle Length:	45
Natural Cycle:	45
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.84
Intersection Signal Delay:	17.7
Intersection LOS:	B
Intersection Capacity Utilization:	77.8%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 21: North Street



Lanes, Volumes, Timings
 24: Prospect Road/Randall Road & Marion Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕			↕	
Traffic Volume (vph)	5	334	41	29	400	5	19	0	11	4	0	3
Future Volume (vph)	5	334	41	29	400	5	19	0	11	4	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.998			0.951			0.944	
Flt Protected		0.999			0.997			0.969			0.972	
Satd. Flow (prot)	0	3363	0	0	3404	0	0	1659	0	0	1652	0
Flt Permitted		0.999			0.997			0.969			0.972	
Satd. Flow (perm)	0	3363	0	0	3404	0	0	1659	0	0	1652	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1466			15280			657			606	
Travel Time (s)		33.3			347.3			14.9			13.8	
Peak Hour Factor	0.84	0.84	0.84	0.86	0.86	0.86	0.58	0.58	0.58	0.58	0.58	0.58
Adj. Flow (vph)	6	398	49	34	465	6	33	0	19	7	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	453	0	0	505	0	0	52	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	36.1%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
26: Church Street Ext

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	364	50	2	367	35	1
Future Volume (vph)	364	50	2	367	35	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.982			0.995		
Flt Protected				0.954		
Satd. Flow (prot)	3360	0	0	3421	1650	0
Flt Permitted				0.954		
Satd. Flow (perm)	3360	0	0	3421	1650	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	3802			1012	473	
Travel Time (s)	86.4			23.0	10.8	
Peak Hour Factor	0.81	0.81	0.83	0.83	0.92	0.92
Growth Factor	100%	100%	100%	100%	77%	77%
Adj. Flow (vph)	449	62	2	442	29	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	511	0	0	444	30	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	21.7%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
28: Marion Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	
Traffic Volume (vph)	294	1	1	342	30	27
Future Volume (vph)	294	1	1	342	30	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.923	
Flt Protected					0.979	
Satd. Flow (prot)	3421	0	0	3421	1627	0
Flt Permitted					0.979	
Satd. Flow (perm)	3421	0	0	3421	1627	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1012			1466	421	
Travel Time (s)	23.0			33.3	9.6	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.72	0.48
Adj. Flow (vph)	320	1	1	380	42	56
Shared Lane Traffic (%)						
Lane Group Flow (vph)	321	0	0	381	98	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	20.1%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
30: Marion Road & Converse Road

12/06/2019



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	47	67	310	45	80	371
Future Volume (vph)	47	67	310	45	80	371
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt		0.850	0.981			
Flt Protected	0.950					0.991
Satd. Flow (prot)	1770	1583	3356	0	0	3390
Flt Permitted	0.950					0.991
Satd. Flow (perm)	1770	1583	3356	0	0	3390
Link Speed (mph)	30		30			30
Link Distance (ft)	531		15280			1140
Travel Time (s)	12.1		347.3			25.9
Peak Hour Factor	0.81	0.81	0.91	0.91	0.87	0.87
Adj. Flow (vph)	58	83	341	49	92	426
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	83	390	0	0	518
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	35.9%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
32: Main Street & Mill Street

12/06/2019



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	33	60	346	50	65	352
Future Volume (vph)	33	60	346	50	65	352
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.913		0.981			
Flt Protected	0.983					0.992
Satd. Flow (prot)	1672	0	3356	0	0	3394
Flt Permitted	0.983					0.992
Satd. Flow (perm)	1672	0	3356	0	0	3394
Link Speed (mph)	30		30			30
Link Distance (ft)	500		1140			4673
Travel Time (s)	11.4		25.9			106.2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.88	0.88
Adj. Flow (vph)	36	66	380	55	74	400
Shared Lane Traffic (%)						
Lane Group Flow (vph)	102	0	435	0	0	474
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	38.3%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
34: Mill Street & Spring Street

12/06/2019



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕↔			↕↔	
Traffic Volume (vph)	6	42	51	19	32	220	149	459	5	26	260	4
Future Volume (vph)	6	42	51	19	32	220	149	459	5	26	260	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.931			0.891			0.999			0.998	
Flt Protected		0.997			0.996			0.988			0.995	
Satd. Flow (prot)	0	1671	0	0	1598	0	0	3377	0	0	3397	0
Flt Permitted		0.997			0.996			0.988			0.995	
Satd. Flow (perm)	0	1671	0	0	1598	0	0	3377	0	0	3397	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		499			498			4673			490	
Travel Time (s)		11.3			11.3			106.2			11.1	
Peak Hour Factor	0.89	0.89	0.89	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	7	47	57	21	35	239	162	499	5	29	286	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	111	0	0	295	0	0	666	0	0	319	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	57.0%
ICU Level of Service	B
Analysis Period (min)	15

Lanes, Volumes, Timings
37: Front Street & Wareham Road

12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕↕			↕↕			↕↕			↕↕	
Traffic Volume (vph)	192	75	14	28	109	85	189	200	12	44	219	170
Future Volume (vph)	192	75	14	28	109	85	189	200	12	44	219	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.993			0.948			0.996			0.941	
Flt Protected		0.967			0.994			0.977			0.995	
Satd. Flow (prot)	0	1789	0	0	1755	0	0	3329	0	0	3203	0
Flt Permitted		0.699			0.937			0.663			0.869	
Satd. Flow (perm)	0	1293	0	0	1655	0	0	2259	0	0	2798	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			92			8			185	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			508			490			2182	
Travel Time (s)		11.4			11.5			11.1			49.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	209	82	15	30	118	92	205	217	13	48	238	185
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	306	0	0	240	0	0	435	0	0	471	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												

Lanes, Volumes, Timings
 37: Front Street & Wareham Road

12/06/2019

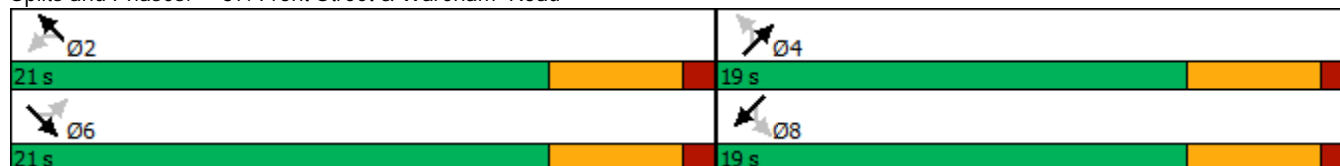


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		11.5	11.5	
Minimum Split (s)	12.0	12.0		12.0	12.0		17.0	17.0		17.0	17.0	
Total Split (s)	21.0	21.0		21.0	21.0		19.0	19.0		19.0	19.0	
Total Split (%)	52.5%	52.5%		52.5%	52.5%		47.5%	47.5%		47.5%	47.5%	
Maximum Green (s)	16.0	16.0		16.0	16.0		14.0	14.0		14.0	14.0	
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?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		18.0			18.0			12.9			12.9	
Actuated g/C Ratio		0.44			0.44			0.32			0.32	
v/c Ratio		0.53			0.31			0.61			0.47	
Control Delay		12.7			6.2			15.8			8.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.7			6.2			15.8			8.3	
LOS		B			A			B			A	
Approach Delay		12.7			6.2			15.8			8.3	
Approach LOS		B			A			B			A	

Intersection Summary

Area Type:	Other
Cycle Length:	40
Actuated Cycle Length:	40.9
Natural Cycle:	40
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.61
Intersection Signal Delay:	11.1
Intersection LOS:	B
Intersection Capacity Utilization:	68.8%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 37: Front Street & Wareham Road



Lanes, Volumes, Timings
40: Wareham Road & Hermitage Road

12/06/2019



Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	5	2	442	4	2	326
Future Volume (vph)	5	2	442	4	2	326
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.959		0.999			
Flt Protected	0.966					
Satd. Flow (prot)	1611	0	3418	0	0	3421
Flt Permitted	0.966					
Satd. Flow (perm)	1611	0	3418	0	0	3421
Link Speed (mph)	30		30			30
Link Distance (ft)	504		2182			1429
Travel Time (s)	11.5		49.6			32.5
Peak Hour Factor	0.35	0.35	0.90	0.90	0.89	0.89
Adj. Flow (vph)	14	6	491	4	2	366
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	495	0	0	368
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	22.3%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
42: Point Road & Wareham Road

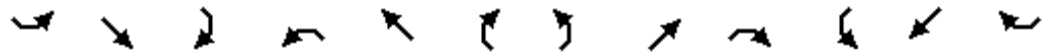
12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕↕			↕↕			↕↕			↕↕	
Traffic Volume (vph)	59	31	18	18	20	61	16	296	2	98	284	94
Future Volume (vph)	59	31	18	18	20	61	16	296	2	98	284	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.977			0.917			0.999			0.970	
Flt Protected		0.974			0.991			0.998			0.990	
Satd. Flow (prot)	0	1713	0	0	1636	0	0	3411	0	0	3285	0
Flt Permitted		0.813			0.945			0.924			0.804	
Satd. Flow (perm)	0	1430	0	0	1560	0	0	3158	0	0	2668	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			66			1			72	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		784			806			3254			5829	
Travel Time (s)		17.8			18.3			74.0			132.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	64	34	20	20	22	66	17	322	2	107	309	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	118	0	0	108	0	0	341	0	0	518	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Minimum Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (%)	45.5%	45.5%		45.5%	45.5%		54.5%	54.5%		54.5%	54.5%	
Maximum Green (s)	20.0	20.0		20.0	20.0		25.0	25.0		25.0	25.0	
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?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		20.0			20.0			25.0			25.0	
Actuated g/C Ratio		0.36			0.36			0.45			0.45	
v/c Ratio		0.22			0.18			0.24			0.41	
Control Delay		11.7			6.8			9.7			9.8	
Queue Delay		0.0			0.0			0.0			0.0	

Lanes, Volumes, Timings
 42: Point Road & Wareham Road

12/06/2019

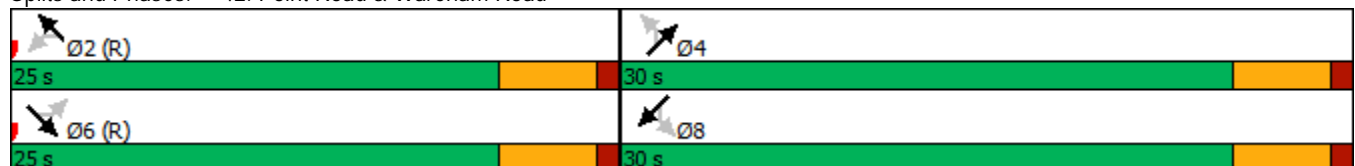


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay		11.7			6.8			9.7			9.8	
LOS		B			A			A			A	
Approach Delay		11.7			6.8			9.7			9.8	
Approach LOS		B			A			A			A	

Intersection Summary

Area Type:	Other
Cycle Length:	55
Actuated Cycle Length:	55
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	55
Control Type:	Pretimed
Maximum v/c Ratio:	0.41
Intersection Signal Delay:	9.7
Intersection LOS:	A
Intersection Capacity Utilization	47.6%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 42: Point Road & Wareham Road



Lanes, Volumes, Timings
45: Wareham Road & Hathaway Street

12/06/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	25	70	52	358	440	41
Future Volume (vph)	25	70	52	358	440	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.901				0.987	
Flt Protected	0.987			0.994		
Satd. Flow (prot)	1657	0	0	3401	3377	0
Flt Permitted	0.987			0.994		
Satd. Flow (perm)	1657	0	0	3401	3377	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	590			5829	3420	
Travel Time (s)	13.4			132.5	77.7	
Peak Hour Factor	0.83	0.83	0.94	0.94	0.96	0.96
Adj. Flow (vph)	30	84	55	381	458	43
Shared Lane Traffic (%)						
Lane Group Flow (vph)	114	0	0	436	501	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	40.6%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
49: Cromesett Road & Marion Road

12/06/2019



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	49	85	423	63	123	498
Future Volume (vph)	49	85	423	63	123	498
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.914		0.980			
Flt Protected	0.982					0.990
Satd. Flow (prot)	1672	0	3353	0	0	3387
Flt Permitted	0.982					0.990
Satd. Flow (perm)	1672	0	3353	0	0	3387
Link Speed (mph)	30		30			30
Link Distance (ft)	565		3420			1505
Travel Time (s)	12.8		77.7			34.2
Peak Hour Factor	0.87	0.87	0.89	0.89	0.94	0.94
Adj. Flow (vph)	56	98	475	71	131	530
Shared Lane Traffic (%)						
Lane Group Flow (vph)	154	0	546	0	0	661
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	49.0%
Analysis Period (min)	15
	ICU Level of Service A

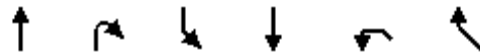
Lanes, Volumes, Timings
51: Marion Road & Swifts Beach Road

12/06/2019

	↑	↖	↙	↓	↘	↗
Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations	↑↑			↑↑	↘↗	
Traffic Volume (vph)	493	71	193	606	63	165
Future Volume (vph)	493	71	193	606	63	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.981				0.904	
Flt Protected				0.988	0.986	
Satd. Flow (prot)	3356	0	0	3380	1660	0
Flt Permitted				0.685	0.986	
Satd. Flow (perm)	3356	0	0	2344	1660	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	1505			1848	506	
Travel Time (s)	34.2			42.0	11.5	
Peak Hour Factor	0.92	0.90	0.89	0.89	0.69	0.74
Adj. Flow (vph)	536	79	217	681	91	223
Shared Lane Traffic (%)						
Lane Group Flow (vph)	615	0	0	898	314	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	
Permitted Phases			6			
Detector Phase	2		6	6	4	
Switch Phase						

Lanes, Volumes, Timings
 51: Marion Road & Swifts Beach Road

12/06/2019

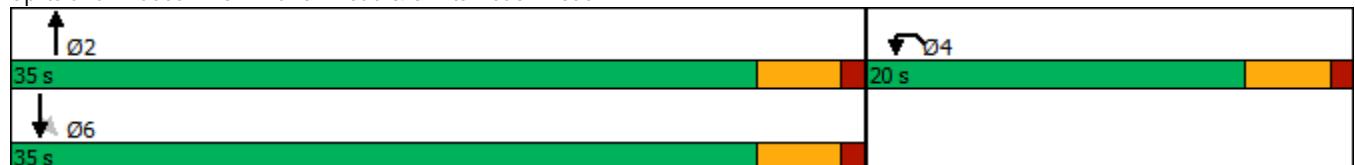


Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	35.0		35.0	35.0	20.0	
Total Split (%)	63.6%		63.6%	63.6%	36.4%	
Maximum Green (s)	30.5		30.5	30.5	15.5	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	4.5			4.5	4.5	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Min		None	None	None	
Act Effect Green (s)	26.0			26.0	13.1	
Actuated g/C Ratio	0.54			0.54	0.27	
v/c Ratio	0.34			0.71	0.70	
Control Delay	7.1			12.5	26.5	
Queue Delay	0.0			0.0	0.0	
Total Delay	7.1			12.5	26.5	
LOS	A			B	C	
Approach Delay	7.1			12.5	26.5	
Approach LOS	A			B	C	

Intersection Summary

Area Type: Other
 Cycle Length: 55
 Actuated Cycle Length: 48.2
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 13.1
 Intersection LOS: B
 Intersection Capacity Utilization 63.1%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 51: Marion Road & Swifts Beach Road



Lanes, Volumes, Timings

53: Marion Road & Shaws

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	91	509	606	82	83	78
Future Volume (vph)	91	509	606	82	83	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	15	15
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.982		0.934	
Flt Protected	0.950				0.975	
Satd. Flow (prot)	1711	1801	3360	0	1866	0
Flt Permitted	0.950				0.975	
Satd. Flow (perm)	1711	1801	3360	0	1866	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			25		63	
Link Speed (mph)		30	30		30	
Link Distance (ft)		1848	285		278	
Travel Time (s)		42.0	6.5		6.3	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	99	553	697	94	90	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	99	553	791	0	175	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.88	0.88
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	
Detector Template	Left	Thru	Thru		Left	
Leading Detector (ft)	20	100	100		20	
Trailing Detector (ft)	0	0	0		0	
Detector 1 Position(ft)	0	0	0		0	
Detector 1 Size(ft)	20	6	6		20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA		Perm	
Protected Phases	7	4	8			
Permitted Phases					6	
Detector Phase	7	4	8		6	
Switch Phase						

Lanes, Volumes, Timings
53: Marion Road & Shaws

12/06/2019

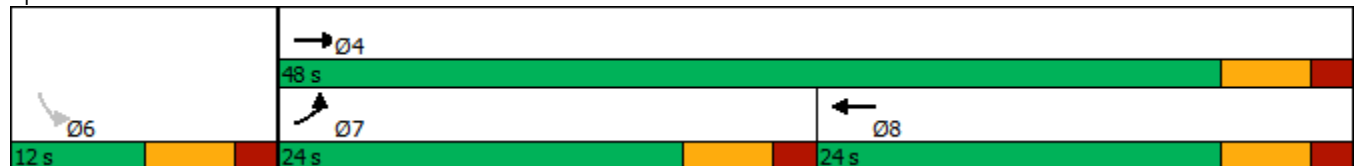


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)	11.0	5.0	5.0		5.0	
Minimum Split (s)	24.0	24.0	24.0		11.0	
Total Split (s)	24.0	48.0	24.0		12.0	
Total Split (%)	40.0%	80.0%	40.0%		20.0%	
Maximum Green (s)	18.0	42.0	18.0		6.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		Max	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effect Green (s)	11.7	29.9	16.9		18.5	
Actuated g/C Ratio	0.19	0.49	0.28		0.30	
v/c Ratio	0.30	0.62	0.83		0.29	
Control Delay	26.6	14.2	30.4		14.2	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	26.6	14.2	30.4		14.2	
LOS	C	B	C		B	
Approach Delay		16.0	30.4		14.2	
Approach LOS		B	C		B	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	60.8
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.83
Intersection Signal Delay:	22.9
Intersection LOS:	C
Intersection Capacity Utilization:	52.9%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 53: Marion Road & Shaws



Lanes, Volumes, Timings
55: Marion Road & Gibbs Avenue

12/06/2019



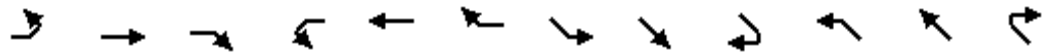
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	169	381	444	18	21	242
Future Volume (vph)	169	381	444	18	21	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	16	16	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.876	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1711	1801	2101	0	1625	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1711	1801	2101	0	1625	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		285	1841		501	
Travel Time (s)		6.5	41.8		11.4	
Peak Hour Factor	0.94	0.94	0.91	0.91	0.93	0.93
Adj. Flow (vph)	180	405	488	20	23	260
Shared Lane Traffic (%)						
Lane Group Flow (vph)	180	405	508	0	283	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	0.85	0.85	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	59.9%
	ICU Level of Service B
Analysis Period (min)	15

Lanes, Volumes, Timings
57: High Street & Marion Road

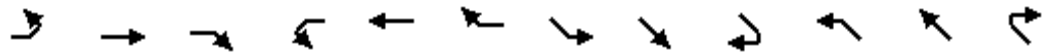
12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	29	290	139	4	346	15	20	77	31	161	57	19
Future Volume (vph)	29	290	139	4	346	15	20	77	31	161	57	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	15	15	15	12	12	12	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.959			0.995			0.967			0.989	
Flt Protected		0.997						0.992			0.967	
Satd. Flow (prot)	0	2018	0	0	2039	0	0	1787	0	0	1900	0
Flt Permitted		0.961			0.996			0.931			0.744	
Satd. Flow (perm)	0	1946	0	0	2031	0	0	1677	0	0	1462	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		52			5			29			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1841			479			513			510	
Travel Time (s)		41.8			10.9			11.7			11.6	
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	31	305	146	4	380	16	23	90	36	177	63	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	482	0	0	400	0	0	149	0	0	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.85	0.85	0.85	0.88	0.88	0.88	1.00	1.00	1.00	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%	
Maximum Green (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
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?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		30.0			30.0			20.0			20.0	
Actuated g/C Ratio		0.50			0.50			0.33			0.33	
v/c Ratio		0.48			0.39			0.26			0.53	
Control Delay		10.7			10.7			13.1			20.4	
Queue Delay		0.0			0.0			0.0			0.0	

Lanes, Volumes, Timings
 57: High Street & Marion Road

12/06/2019

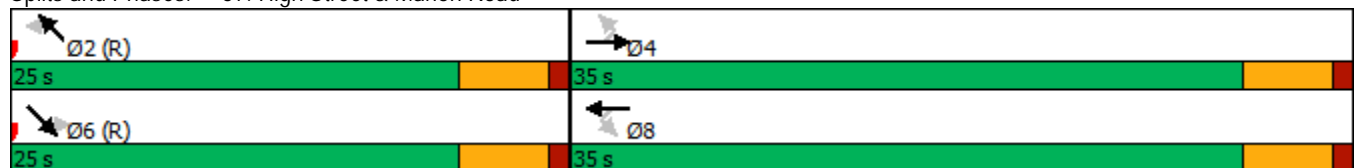


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay		10.7			10.7			13.1			20.4	
LOS		B			B			B			C	
Approach Delay		10.7			10.7			13.1			20.4	
Approach LOS		B			B			B			C	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	60
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.53
Intersection Signal Delay:	12.9
Intersection LOS:	B
Intersection Capacity Utilization	70.8%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 57: High Street & Marion Road



Lanes, Volumes, Timings
61: Fairhaven Road & River Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↔		↔↕	
Traffic Volume (vph)	33	379	474	10	19	34
Future Volume (vph)	33	379	474	10	19	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.997		0.913	
Flt Protected		0.996			0.983	
Satd. Flow (prot)	0	3408	3411	0	1672	0
Flt Permitted		0.996			0.983	
Satd. Flow (perm)	0	3408	3411	0	1672	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		494	4565		394	
Travel Time (s)		11.2	103.8		9.0	
Peak Hour Factor	0.92	0.92	0.86	0.86	0.78	0.78
Adj. Flow (vph)	36	412	551	12	24	44
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	448	563	0	68	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	38.2%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings 2: Huttleston Avenue & Mill Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↔		↔↔	
Traffic Volume (vph)	15	1036	752	9	35	33
Future Volume (vph)	15	1036	752	9	35	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.998		0.935	
Flt Protected		0.999			0.975	
Satd. Flow (prot)	0	3418	3414	0	1698	0
Flt Permitted		0.999			0.975	
Satd. Flow (perm)	0	3418	3414	0	1698	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1082	1396		506	
Travel Time (s)		24.6	31.7		11.5	
Peak Hour Factor	0.96	0.96	0.83	0.83	0.52	0.52
Adj. Flow (vph)	16	1079	906	11	67	63
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1095	917	0	130	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	49.9%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 4: Huttleston Avenue & Weeden Road

12/06/2019



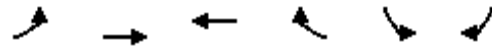
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	19	7	597	63	3	470
Future Volume (vph)	19	7	597	63	3	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.964		0.986			
Flt Protected	0.965					
Satd. Flow (prot)	1733	0	3373	0	0	3421
Flt Permitted	0.965					
Satd. Flow (perm)	1733	0	3373	0	0	3421
Link Speed (mph)	30		30			30
Link Distance (ft)	498		1396			2661
Travel Time (s)	11.3		31.7			60.5
Peak Hour Factor	0.57	0.57	0.87	0.87	0.88	0.88
Adj. Flow (vph)	33	12	686	72	3	534
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	0	758	0	0	537
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	28.5%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
6: New Boston Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↗	↗
Traffic Volume (vph)	59	621	502	40	44	64
Future Volume (vph)	59	621	502	40	44	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	12
Storage Length (ft)	0			0	0	160
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.989			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	3408	3384	0	1711	1583
Flt Permitted		0.996			0.950	
Satd. Flow (perm)	0	3408	3384	0	1711	1583
Link Speed (mph)		30	30		30	
Link Distance (ft)		2661	516		800	
Travel Time (s)		60.5	11.7		18.2	
Peak Hour Factor	0.90	0.90	0.96	0.96	0.87	0.87
Adj. Flow (vph)	66	690	523	42	51	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	756	565	0	51	74
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	47.4%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
8: Gелlette Road

12/06/2019



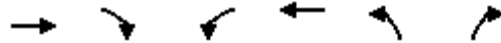
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	609	43	15	493	25	17
Future Volume (vph)	609	43	15	493	25	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.990			0.945		
Flt Protected				0.999	0.971	
Satd. Flow (prot)	3387	0	0	3418	1652	0
Flt Permitted				0.999	0.971	
Satd. Flow (perm)	3387	0	0	3418	1652	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			2679	535	
Travel Time (s)	11.7			60.9	12.2	
Peak Hour Factor	0.89	0.89	0.93	0.93	0.65	0.65
Adj. Flow (vph)	684	48	16	530	38	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	732	0	0	546	64	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	34.5% ICU Level of Service A
Analysis Period (min)	15

Lanes, Volumes, Timings
10: Shaw Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	410	142	15	450	31	4
Future Volume (vph)	410	142	15	450	31	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	14	14
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.961				0.984	
Flt Protected				0.998	0.958	
Satd. Flow (prot)	3288	0	0	3414	1873	0
Flt Permitted				0.998	0.958	
Satd. Flow (perm)	3288	0	0	3414	1873	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2679			2104	500	
Travel Time (s)	60.9			47.8	11.4	
Peak Hour Factor	0.92	0.92	0.94	0.94	0.84	0.84
Adj. Flow (vph)	446	154	16	479	37	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	600	0	0	495	42	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.92	0.92
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	33.3%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 12: Wareham Road & Creek Road

12/06/2019



Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	45	17	399	74	5	300
Future Volume (vph)	45	17	399	74	5	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.963		0.976			
Flt Protected	0.965					0.999
Satd. Flow (prot)	1673	0	3339	0	0	3418
Flt Permitted	0.965					0.999
Satd. Flow (perm)	1673	0	3339	0	0	3418
Link Speed (mph)	30		30			30
Link Distance (ft)	882		1429			3254
Travel Time (s)	20.0		32.5			74.0
Peak Hour Factor	0.60	0.60	0.93	0.93	0.95	0.95
Adj. Flow (vph)	75	28	429	80	5	316
Shared Lane Traffic (%)						
Lane Group Flow (vph)	103	0	509	0	0	321
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	23.6%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
14: Brandt Island Road

12/06/2019



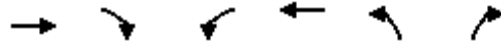
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	373	47	43	441	28	29
Future Volume (vph)	373	47	43	441	28	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.983				0.931	
Flt Protected				0.996	0.976	
Satd. Flow (prot)	3363	0	0	3408	1636	0
Flt Permitted				0.996	0.976	
Satd. Flow (perm)	3363	0	0	3408	1636	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2104			2288	496	
Travel Time (s)	47.8			52.0	11.3	
Peak Hour Factor	0.90	0.90	0.94	0.94	0.66	0.66
Adj. Flow (vph)	414	52	46	469	42	44
Shared Lane Traffic (%)						
Lane Group Flow (vph)	466	0	0	515	86	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	38.6%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
16: Mattapoisett Neck Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	352	45	59	427	25	36
Future Volume (vph)	352	45	59	427	25	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.983				0.920	
Flt Protected				0.994	0.980	
Satd. Flow (prot)	3363	0	0	3401	1623	0
Flt Permitted				0.994	0.980	
Satd. Flow (perm)	3363	0	0	3401	1623	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2288			494	531	
Travel Time (s)	52.0			11.2	12.1	
Peak Hour Factor	0.95	0.95	0.89	0.89	0.75	0.75
Adj. Flow (vph)	371	47	66	480	33	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	418	0	0	546	81	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	38.3%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
18: Main Street & Fairhaven Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	4	381	39	27	476	39	57	16	13	26	11	7
Future Volume (vph)	4	381	39	27	476	39	57	16	13	26	11	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	16	16	16
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.989			0.980			0.979	
Flt Protected					0.997			0.968			0.971	
Satd. Flow (prot)	0	3036	0	0	3036	0	0	1643	0	0	1806	0
Flt Permitted		0.949			0.909			0.810			0.843	
Satd. Flow (perm)	0	2881	0	0	2768	0	0	1375	0	0	1568	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			14			15			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		4565			395			496			500	
Travel Time (s)		103.8			9.0			11.3			11.4	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.80	0.80	0.80	0.85	0.85	0.85
Adj. Flow (vph)	4	423	43	29	506	41	71	20	16	31	13	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	470	0	0	576	0	0	107	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.10	1.10	1.10	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
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												

Lanes, Volumes, Timings
 18: Main Street & Fairhaven Road

12/06/2019

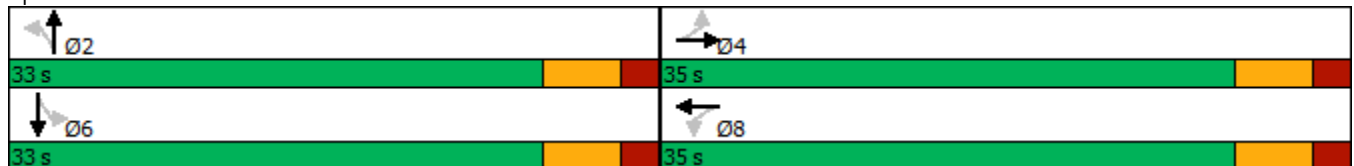


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		33.0	33.0		33.0	33.0	
Total Split (%)	51.5%	51.5%		51.5%	51.5%		48.5%	48.5%		48.5%	48.5%	
Maximum Green (s)	29.0	29.0		29.0	29.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		17.4			17.4			27.2			27.2	
Actuated g/C Ratio		0.31			0.31			0.48			0.48	
v/c Ratio		0.52			0.67			0.16			0.07	
Control Delay		17.4			20.6			9.6			8.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		17.4			20.6			9.6			8.9	
LOS		B			C			A			A	
Approach Delay		17.4			20.6			9.6			8.9	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type:	CBD
Cycle Length:	68
Actuated Cycle Length:	56.7
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.67
Intersection Signal Delay:	17.9
Intersection LOS:	B
Intersection Capacity Utilization:	51.8%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 18: Main Street & Fairhaven Road



Lanes, Volumes, Timings
21: North Street

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↔			↔	
Traffic Volume (vph)	164	282	17	14	316	227	10	45	14	235	46	224
Future Volume (vph)	164	282	17	14	316	227	10	45	14	235	46	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.939			0.972			0.940	
Flt Protected		0.983			0.999			0.993			0.977	
Satd. Flow (prot)	0	3346	0	0	3209	0	0	1858	0	0	1654	0
Flt Permitted		0.603			0.935			0.922			0.811	
Satd. Flow (perm)	0	2053	0	0	3004	0	0	1725	0	0	1373	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			252			17			111	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		326			3802			502			502	
Travel Time (s)		7.4			86.4			11.4			11.4	
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.84	0.84	0.84	0.85	0.85	0.85
Adj. Flow (vph)	176	303	18	16	351	252	12	54	17	276	54	264
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	497	0	0	619	0	0	83	0	0	594	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	0.96	0.96	0.96	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
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												

Lanes, Volumes, Timings

21: North Street

12/06/2019

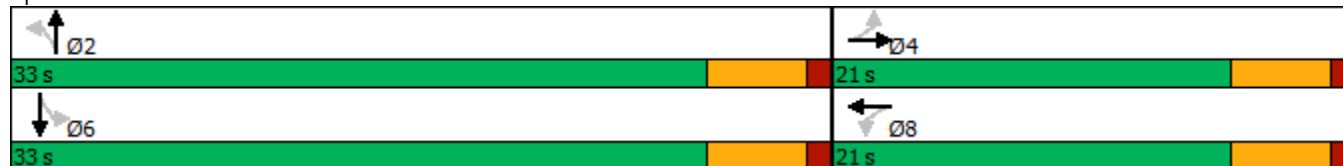


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	14.0	14.0		14.0	14.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	19.0	19.0		19.0	19.0		13.0	13.0		13.0	13.0	
Total Split (s)	21.0	21.0		21.0	21.0		33.0	33.0		33.0	33.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%		61.1%	61.1%		61.1%	61.1%	
Maximum Green (s)	16.0	16.0		16.0	16.0		28.0	28.0		28.0	28.0	
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?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		15.6			15.6			28.0			28.0	
Actuated g/C Ratio		0.29			0.29			0.52			0.52	
v/c Ratio		1.01dl			0.59			0.09			0.77	
Control Delay		31.9			11.9			5.9			17.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		31.9			11.9			5.9			17.5	
LOS		C			B			A			B	
Approach Delay		31.9			11.9			5.9			17.5	
Approach LOS		C			B			A			B	

Intersection Summary

Area Type: Other
 Cycle Length: 54
 Actuated Cycle Length: 53.6
 Natural Cycle: 45
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 19.0
 Intersection LOS: B
 Intersection Capacity Utilization 77.8%
 ICU Level of Service D
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 21: North Street



Lanes, Volumes, Timings
 24: Prospect Road/Randall Road & Marion Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕			↕	
Traffic Volume (vph)	5	334	41	29	400	5	19	0	11	4	0	3
Future Volume (vph)	5	334	41	29	400	5	19	0	11	4	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.998			0.951			0.944	
Flt Protected		0.999			0.997			0.969			0.972	
Satd. Flow (prot)	0	3363	0	0	3404	0	0	1659	0	0	1652	0
Flt Permitted		0.999			0.997			0.969			0.972	
Satd. Flow (perm)	0	3363	0	0	3404	0	0	1659	0	0	1652	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1466			15280			657			606	
Travel Time (s)		33.3			347.3			14.9			13.8	
Peak Hour Factor	0.84	0.84	0.84	0.86	0.86	0.86	0.58	0.58	0.58	0.58	0.58	0.58
Adj. Flow (vph)	6	398	49	34	465	6	33	0	19	7	0	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	453	0	0	505	0	0	52	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	36.1%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
26: Church Street Ext

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	
Traffic Volume (vph)	364	50	2	367	35	1
Future Volume (vph)	364	50	2	367	35	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.982			0.995		
Flt Protected				0.954		
Satd. Flow (prot)	3360	0	0	3421	1650	0
Flt Permitted				0.954		
Satd. Flow (perm)	3360	0	0	3421	1650	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	3802			1012	473	
Travel Time (s)	86.4			23.0	10.8	
Peak Hour Factor	0.81	0.81	0.83	0.83	0.92	0.92
Growth Factor	100%	100%	100%	100%	77%	77%
Adj. Flow (vph)	449	62	2	442	29	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	511	0	0	444	30	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	21.7%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
28: Marion Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	
Traffic Volume (vph)	294	1	1	342	30	27
Future Volume (vph)	294	1	1	342	30	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.923	
Flt Protected					0.979	
Satd. Flow (prot)	3421	0	0	3421	1627	0
Flt Permitted					0.979	
Satd. Flow (perm)	3421	0	0	3421	1627	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1012			1466	421	
Travel Time (s)	23.0			33.3	9.6	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.72	0.48
Adj. Flow (vph)	320	1	1	380	42	56
Shared Lane Traffic (%)						
Lane Group Flow (vph)	321	0	0	381	98	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	20.1%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
30: Marion Road & Converse Road

12/06/2019



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	47	67	310	45	80	371
Future Volume (vph)	47	67	310	45	80	371
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt		0.850	0.981			
Flt Protected	0.950					0.991
Satd. Flow (prot)	1770	1583	3356	0	0	3390
Flt Permitted	0.950					0.991
Satd. Flow (perm)	1770	1583	3356	0	0	3390
Link Speed (mph)	30		30			30
Link Distance (ft)	531		15280			1140
Travel Time (s)	12.1		347.3			25.9
Peak Hour Factor	0.81	0.81	0.91	0.91	0.87	0.87
Adj. Flow (vph)	58	83	341	49	92	426
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	83	390	0	0	518
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	35.9%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
32: Main Street & Mill Street

12/06/2019



















Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	33	60	346	50	65	352
Future Volume (vph)	33	60	346	50	65	352
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.913		0.981			
Flt Protected	0.983					0.992
Satd. Flow (prot)	1672	0	3356	0	0	3394
Flt Permitted	0.983					0.992
Satd. Flow (perm)	1672	0	3356	0	0	3394
Link Speed (mph)	30		30			30
Link Distance (ft)	500		1140			4673
Travel Time (s)	11.4		25.9			106.2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.88	0.88
Adj. Flow (vph)	36	66	380	55	74	400
Shared Lane Traffic (%)						
Lane Group Flow (vph)	102	0	435	0	0	474
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	38.3%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
34: Mill Street & Spring Street

12/06/2019

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	6	42	51	19	32	220	149	459	5	26	260	4
Future Volume (vph)	6	42	51	19	32	220	149	459	5	26	260	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.931			0.891			0.999			0.998	
Flt Protected		0.997			0.996			0.988			0.995	
Satd. Flow (prot)	0	1671	0	0	1598	0	0	3377	0	0	3397	0
Flt Permitted		0.997			0.996			0.988			0.995	
Satd. Flow (perm)	0	1671	0	0	1598	0	0	3377	0	0	3397	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		499			498			4673			490	
Travel Time (s)		11.3			11.3			106.2			11.1	
Peak Hour Factor	0.89	0.89	0.89	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	7	47	57	21	35	239	162	499	5	29	286	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	111	0	0	295	0	0	666	0	0	319	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	57.0%					ICU Level of Service B						
Analysis Period (min)	15											

Lanes, Volumes, Timings
37: Front Street & Wareham Road

12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕↔			↕↔	
Traffic Volume (vph)	192	75	14	28	109	85	189	200	12	44	219	170
Future Volume (vph)	192	75	14	28	109	85	189	200	12	44	219	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.993			0.948			0.996			0.941	
Flt Protected		0.967			0.994			0.977			0.995	
Satd. Flow (prot)	0	1789	0	0	1755	0	0	3329	0	0	3203	0
Flt Permitted		0.697			0.938			0.659			0.871	
Satd. Flow (perm)	0	1289	0	0	1656	0	0	2246	0	0	2804	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			64			7			185	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			508			490			2182	
Travel Time (s)		11.4			11.5			11.1			49.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	209	82	15	30	118	92	205	217	13	48	238	185
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	306	0	0	240	0	0	435	0	0	471	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												

Lanes, Volumes, Timings
 37: Front Street & Wareham Road

12/06/2019

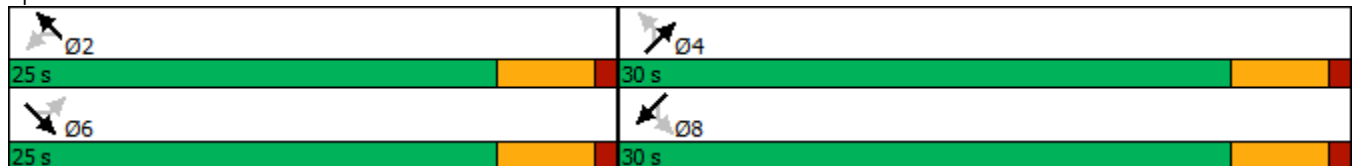


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		11.5	11.5	
Minimum Split (s)	12.0	12.0		12.0	12.0		17.0	17.0		17.0	17.0	
Total Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (%)	45.5%	45.5%		45.5%	45.5%		54.5%	54.5%		54.5%	54.5%	
Maximum Green (s)	20.0	20.0		20.0	20.0		25.0	25.0		25.0	25.0	
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?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		20.1			20.1			14.8			14.8	
Actuated g/C Ratio		0.45			0.45			0.33			0.33	
v/c Ratio		0.53			0.31			0.59			0.45	
Control Delay		14.1			7.9			15.7			8.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		14.1			7.9			15.7			8.2	
LOS		B			A			B			A	
Approach Delay		14.1			7.9			15.7			8.2	
Approach LOS		B			A			B			A	

Intersection Summary

Area Type:	Other
Cycle Length:	55
Actuated Cycle Length:	44.9
Natural Cycle:	40
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.59
Intersection Signal Delay:	11.6
Intersection LOS:	B
Intersection Capacity Utilization:	68.8%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 37: Front Street & Wareham Road



Lanes, Volumes, Timings
40: Wareham Road & Hermitage Road

12/06/2019



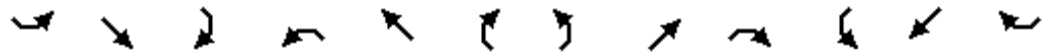
Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	5	2	442	4	2	326
Future Volume (vph)	5	2	442	4	2	326
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.959		0.999			
Flt Protected	0.966					
Satd. Flow (prot)	1611	0	3418	0	0	3421
Flt Permitted	0.966					
Satd. Flow (perm)	1611	0	3418	0	0	3421
Link Speed (mph)	30		30			30
Link Distance (ft)	504		2182			1429
Travel Time (s)	11.5		49.6			32.5
Peak Hour Factor	0.35	0.35	0.90	0.90	0.89	0.89
Adj. Flow (vph)	14	6	491	4	2	366
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	495	0	0	368
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	22.3%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
42: Point Road & Wareham Road

12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕↔			↕↔	
Traffic Volume (vph)	59	31	18	18	20	61	16	296	2	98	284	94
Future Volume (vph)	59	31	18	18	20	61	16	296	2	98	284	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.977			0.917			0.999			0.970	
Flt Protected		0.974			0.991			0.998			0.990	
Satd. Flow (prot)	0	1713	0	0	1636	0	0	3411	0	0	3285	0
Flt Permitted		0.816			0.947			0.923			0.799	
Satd. Flow (perm)	0	1436	0	0	1564	0	0	3155	0	0	2652	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			66			1			61	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		784			806			3254			5829	
Travel Time (s)		17.8			18.3			74.0			132.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	64	34	20	20	22	66	17	322	2	107	309	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	118	0	0	108	0	0	341	0	0	518	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Minimum Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	30.0	30.0		30.0	30.0		35.0	35.0		35.0	35.0	
Total Split (%)	46.2%	46.2%		46.2%	46.2%		53.8%	53.8%		53.8%	53.8%	
Maximum Green (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
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?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		25.0			25.0			30.0			30.0	
Actuated g/C Ratio		0.38			0.38			0.46			0.46	
v/c Ratio		0.21			0.17			0.23			0.41	
Control Delay		12.6			7.1			11.1			11.4	
Queue Delay		0.0			0.0			0.0			0.0	

Lanes, Volumes, Timings
 42: Point Road & Wareham Road

12/06/2019

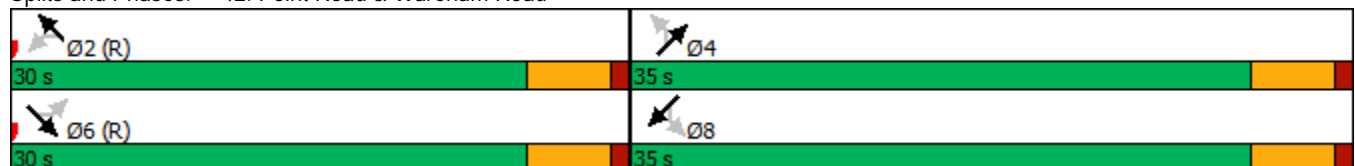


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay		12.6			7.1			11.1			11.4	
LOS		B			A			B			B	
Approach Delay		12.6			7.1			11.1			11.4	
Approach LOS		B			A			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	65
Actuated Cycle Length:	65
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	55
Control Type:	Pretimed
Maximum v/c Ratio:	0.41
Intersection Signal Delay:	11.0
Intersection LOS:	B
Intersection Capacity Utilization	47.6%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 42: Point Road & Wareham Road



Lanes, Volumes, Timings
45: Wareham Road & Hathaway Street

12/06/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	25	70	52	358	440	41
Future Volume (vph)	25	70	52	358	440	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.901				0.987	
Flt Protected	0.987			0.994		
Satd. Flow (prot)	1657	0	0	3401	3377	0
Flt Permitted	0.987			0.994		
Satd. Flow (perm)	1657	0	0	3401	3377	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	590			5829	3420	
Travel Time (s)	13.4			132.5	77.7	
Peak Hour Factor	0.83	0.83	0.94	0.94	0.96	0.96
Adj. Flow (vph)	30	84	55	381	458	43
Shared Lane Traffic (%)						
Lane Group Flow (vph)	114	0	0	436	501	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	40.6%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 49: Cromesett Road & Marion Road

12/06/2019



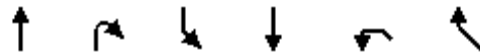
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	49	85	423	63	123	498
Future Volume (vph)	49	85	423	63	123	498
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.914		0.980			
Flt Protected	0.982					0.990
Satd. Flow (prot)	1672	0	3353	0	0	3387
Flt Permitted	0.982					0.990
Satd. Flow (perm)	1672	0	3353	0	0	3387
Link Speed (mph)	30		30			30
Link Distance (ft)	565		3420			1505
Travel Time (s)	12.8		77.7			34.2
Peak Hour Factor	0.87	0.87	0.89	0.89	0.94	0.94
Adj. Flow (vph)	56	98	475	71	131	530
Shared Lane Traffic (%)						
Lane Group Flow (vph)	154	0	546	0	0	661
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	49.0%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 51: Marion Road & Swifts Beach Road

12/06/2019



Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations	↑↑			↑↑	↘↗	
Traffic Volume (vph)	493	71	193	606	63	165
Future Volume (vph)	493	71	193	606	63	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.981				0.904	
Flt Protected				0.988	0.986	
Satd. Flow (prot)	3356	0	0	3380	1660	0
Flt Permitted				0.988	0.986	
Satd. Flow (perm)	3356	0	0	3380	1660	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1505			1848	506	
Travel Time (s)	34.2			42.0	11.5	
Peak Hour Factor	0.92	0.90	0.89	0.89	0.69	0.74
Adj. Flow (vph)	536	79	217	681	91	223
Shared Lane Traffic (%)						
Lane Group Flow (vph)	615	0	0	898	314	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

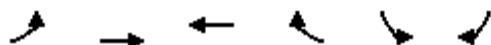
Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	61.9%
Analysis Period (min)	15
	ICU Level of Service B

Lanes, Volumes, Timings

53: Marion Road & Shaws

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	91	509	606	82	83	78
Future Volume (vph)	91	509	606	82	83	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	15	15
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.982		0.934	
Flt Protected	0.950				0.975	
Satd. Flow (prot)	1711	1801	3360	0	1866	0
Flt Permitted	0.950				0.975	
Satd. Flow (perm)	1711	1801	3360	0	1866	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			26		63	
Link Speed (mph)		30	30		30	
Link Distance (ft)		1848	285		278	
Travel Time (s)		42.0	6.5		6.3	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	99	553	697	94	90	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	99	553	791	0	175	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.88	0.88
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	
Detector Template	Left	Thru	Thru		Left	
Leading Detector (ft)	20	100	100		20	
Trailing Detector (ft)	0	0	0		0	
Detector 1 Position(ft)	0	0	0		0	
Detector 1 Size(ft)	20	6	6		20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA		Perm	
Protected Phases	7	4	8			
Permitted Phases					6	
Detector Phase	7	4	8		6	
Switch Phase						

Lanes, Volumes, Timings
53: Marion Road & Shaws

12/06/2019

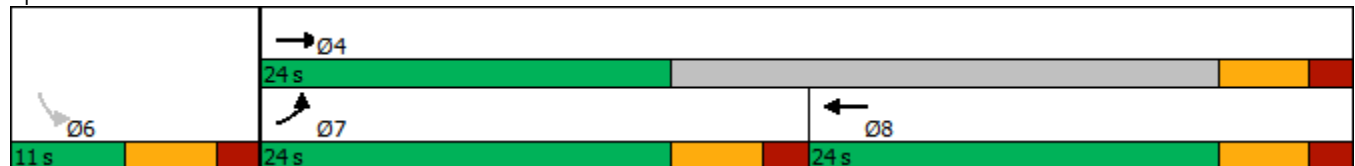


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)	11.0	5.0	5.0		5.0	
Minimum Split (s)	24.0	24.0	24.0		11.0	
Total Split (s)	24.0	24.0	24.0		11.0	
Total Split (%)	40.7%	40.7%	40.7%		18.6%	
Maximum Green (s)	18.0	18.0	18.0		5.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		Max	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effect Green (s)	11.8	26.0	16.8		18.7	
Actuated g/C Ratio	0.21	0.45	0.29		0.33	
v/c Ratio	0.28	0.68	0.79		0.27	
Control Delay	25.2	15.9	26.8		13.5	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	25.2	15.9	26.8		13.5	
LOS	C	B	C		B	
Approach Delay		17.3	26.8		13.5	
Approach LOS		B	C		B	

Intersection Summary

Area Type:	Other
Cycle Length:	59
Actuated Cycle Length:	57.2
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.79
Intersection Signal Delay:	21.5
Intersection LOS:	C
Intersection Capacity Utilization:	52.9%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 53: Marion Road & Shaws



Lanes, Volumes, Timings
55: Marion Road & Gibbs Avenue

12/06/2019



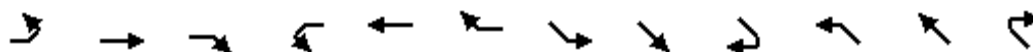
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	169	381	444	18	21	242
Future Volume (vph)	169	381	444	18	21	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	16	16	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.876	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1711	1801	2101	0	1625	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1711	1801	2101	0	1625	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		285	1841		501	
Travel Time (s)		6.5	41.8		11.4	
Peak Hour Factor	0.94	0.94	0.91	0.91	0.93	0.93
Adj. Flow (vph)	180	405	488	20	23	260
Shared Lane Traffic (%)						
Lane Group Flow (vph)	180	405	508	0	283	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	0.85	0.85	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	59.9%
ICU Level of Service	B
Analysis Period (min)	15

Lanes, Volumes, Timings
57: High Street & Marion Road

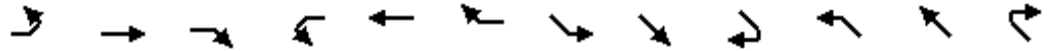
12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	29	290	139	4	346	15	20	77	31	161	57	19
Future Volume (vph)	29	290	139	4	346	15	20	77	31	161	57	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	15	15	15	12	12	12	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.959			0.995			0.967			0.989	
Flt Protected		0.997						0.992			0.967	
Satd. Flow (prot)	0	2018	0	0	2039	0	0	1787	0	0	1900	0
Flt Permitted		0.961			0.996			0.931			0.744	
Satd. Flow (perm)	0	1946	0	0	2031	0	0	1677	0	0	1462	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		52			5			29			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1841			479			513			510	
Travel Time (s)		41.8			10.9			11.7			11.6	
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	31	305	146	4	380	16	23	90	36	177	63	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	482	0	0	400	0	0	149	0	0	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.85	0.85	0.85	0.88	0.88	0.88	1.00	1.00	1.00	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%	
Maximum Green (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
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?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		30.0			30.0			20.0			20.0	
Actuated g/C Ratio		0.50			0.50			0.33			0.33	
v/c Ratio		0.48			0.39			0.26			0.53	
Control Delay		10.7			10.7			13.1			20.4	
Queue Delay		0.0			0.0			0.0			0.0	

Lanes, Volumes, Timings
57: High Street & Marion Road

12/06/2019

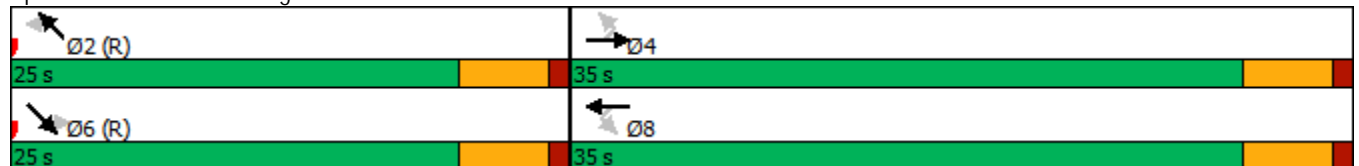


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay		10.7			10.7			13.1			20.4	
LOS		B			B			B			C	
Approach Delay		10.7			10.7			13.1			20.4	
Approach LOS		B			B			B			C	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	60
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.53
Intersection Signal Delay:	12.9
Intersection LOS:	B
Intersection Capacity Utilization	70.8%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 57: High Street & Marion Road



Lanes, Volumes, Timings
61: Fairhaven Road & River Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↔		↘↘	
Traffic Volume (vph)	33	379	474	10	19	34
Future Volume (vph)	33	379	474	10	19	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.997		0.913	
Flt Protected		0.996			0.983	
Satd. Flow (prot)	0	3408	3411	0	1672	0
Flt Permitted		0.996			0.983	
Satd. Flow (perm)	0	3408	3411	0	1672	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		494	4565		394	
Travel Time (s)		11.2	103.8		9.0	
Peak Hour Factor	0.92	0.92	0.86	0.86	0.78	0.78
Adj. Flow (vph)	36	412	551	12	24	44
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	448	563	0	68	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	38.2%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
2: Huttleston Avenue & Mill Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	1181	858	10	40	38
Future Volume (vph)	17	1181	858	10	40	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.998		0.934	
Flt Protected		0.999			0.975	
Satd. Flow (prot)	0	1619	1617	0	1527	0
Flt Permitted		0.999			0.975	
Satd. Flow (perm)	0	1619	1617	0	1527	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1082	1396		506	
Travel Time (s)		24.6	31.7		11.5	
Peak Hour Factor	0.96	0.96	0.83	0.83	0.52	0.52
Adj. Flow (vph)	18	1230	1034	12	77	73
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1248	1046	0	150	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.19	1.19	1.19	1.19	1.14	1.14
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	CBD
Control Type:	Unsignalized
Intersection Capacity Utilization	95.9%
Analysis Period (min)	15
	ICU Level of Service F

Lanes, Volumes, Timings
 4: Huttleston Avenue & Weeden Road

12/06/2019



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	22	9	681	72	4	536
Future Volume (vph)	22	9	681	72	4	536
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.961		0.987			
Flt Protected	0.966					
Satd. Flow (prot)	1729	0	1777	0	0	1801
Flt Permitted	0.966					
Satd. Flow (perm)	1729	0	1777	0	0	1801
Link Speed (mph)	30		30			30
Link Distance (ft)	498		1396			2661
Travel Time (s)	11.3		31.7			60.5
Peak Hour Factor	0.57	0.57	0.87	0.87	0.88	0.88
Adj. Flow (vph)	39	16	783	83	5	609
Shared Lane Traffic (%)						
Lane Group Flow (vph)	55	0	866	0	0	614
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	50.2%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
6: New Boston Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	↗
Traffic Volume (vph)	67	708	572	45	50	73
Future Volume (vph)	67	708	572	45	50	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	12
Storage Length (ft)	0			0	0	160
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.990			0.850
Fl _t Protected		0.996			0.950	
Satd. Flow (prot)	0	1793	1783	0	1711	1583
Fl _t Permitted		0.911			0.950	
Satd. Flow (perm)	0	1640	1783	0	1711	1583
Right Turn on Red				No		No
Satd. Flow (RTOR)						
Link Speed (mph)		30	30		30	
Link Distance (ft)		2661	516		800	
Travel Time (s)		60.5	11.7		18.2	
Peak Hour Factor	0.90	0.90	0.96	0.96	0.87	0.87
Adj. Flow (vph)	74	787	596	47	57	84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	861	643	0	57	84
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	100	100		20	20
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	20	6	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	

Lanes, Volumes, Timings
6: New Boston Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	4					6
Detector Phase	4	4	8		6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	20.0	20.0	20.0		20.0	20.0
Total Split (s)	40.0	40.0	40.0		20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%		33.3%	33.3%
Maximum Green (s)	35.5	35.5	35.5		15.5	15.5
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	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)		4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	None		Min	Min
Act Effect Green (s)		30.6	30.6		8.1	8.1
Actuated g/C Ratio		0.64	0.64		0.17	0.17
v/c Ratio		0.82	0.57		0.20	0.31
Control Delay		16.0	7.4		20.6	22.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		16.0	7.4		20.6	22.6
LOS		B	A		C	C
Approach Delay		16.0	7.4		21.8	
Approach LOS		B	A		C	

Intersection Summary

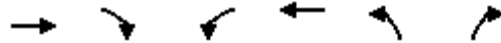
Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	48.1
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.82
Intersection Signal Delay:	13.1
Intersection LOS:	B
Intersection Capacity Utilization:	89.2%
ICU Level of Service:	E
Analysis Period (min):	15

Splits and Phases: 6: New Boston Road



Lanes, Volumes, Timings
8: Gелlette Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	694	40	17	562	28	20
Future Volume (vph)	694	40	17	562	28	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993			0.943		
Flt Protected				0.999	0.972	
Satd. Flow (prot)	1788	0	0	1799	1650	0
Flt Permitted				0.999	0.972	
Satd. Flow (perm)	1788	0	0	1799	1650	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			2679	535	
Travel Time (s)	11.7			60.9	12.2	
Peak Hour Factor	0.89	0.89	0.93	0.93	0.65	0.65
Adj. Flow (vph)	780	45	18	604	43	31
Shared Lane Traffic (%)						
Lane Group Flow (vph)	825	0	0	622	74	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	53.3%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
10: Shaw Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	467	133	17	514	35	5
Future Volume (vph)	467	133	17	514	35	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.970			0.983		
Flt Protected				0.998	0.958	
Satd. Flow (prot)	1747	0	0	1797	1871	0
Flt Permitted				0.998	0.958	
Satd. Flow (perm)	1747	0	0	1797	1871	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2679			2104	500	
Travel Time (s)	60.9			47.8	11.4	
Peak Hour Factor	0.92	0.92	0.94	0.94	0.84	0.84
Adj. Flow (vph)	508	145	18	547	42	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	653	0	0	565	48	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.92	0.92
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	50.8%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 12: Wareham Road & Creek Road

12/06/2019



Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	51	20	455	84	6	342
Future Volume (vph)	51	20	455	84	6	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.962		0.979			
Flt Protected	0.965					0.999
Satd. Flow (prot)	1672	0	1763	0	0	1799
Flt Permitted	0.965					0.999
Satd. Flow (perm)	1672	0	1763	0	0	1799
Link Speed (mph)	30		30			30
Link Distance (ft)	882		1429			3254
Travel Time (s)	20.0		32.5			74.0
Peak Hour Factor	0.60	0.60	0.93	0.93	0.95	0.95
Adj. Flow (vph)	85	33	489	90	6	360
Shared Lane Traffic (%)						
Lane Group Flow (vph)	118	0	579	0	0	366
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	39.8%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
14: Brandt Island Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	426	44	49	503	32	33
Future Volume (vph)	426	44	49	503	32	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.987			0.931		
Flt Protected				0.996	0.976	
Satd. Flow (prot)	1777	0	0	1793	1636	0
Flt Permitted				0.996	0.976	
Satd. Flow (perm)	1777	0	0	1793	1636	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2104			2288	496	
Travel Time (s)	47.8			52.0	11.3	
Peak Hour Factor	0.90	0.90	0.94	0.94	0.66	0.66
Adj. Flow (vph)	473	49	52	535	48	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	522	0	0	587	98	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	68.1%
ICU Level of Service	C
Analysis Period (min)	15

Lanes, Volumes, Timings
16: Mattapoisett Neck Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	401	42	67	487	28	41
Future Volume (vph)	401	42	67	487	28	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.987			0.919		
Flt Protected				0.994	0.980	
Satd. Flow (prot)	1777	0	0	1790	1622	0
Flt Permitted				0.994	0.980	
Satd. Flow (perm)	1777	0	0	1790	1622	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2288			494	531	
Travel Time (s)	52.0			11.2	12.1	
Peak Hour Factor	0.95	0.95	0.89	0.89	0.75	0.75
Adj. Flow (vph)	422	44	75	547	37	55
Shared Lane Traffic (%)						
Lane Group Flow (vph)	466	0	0	622	92	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	67.1%
Analysis Period (min)	15
	ICU Level of Service C

Lanes, Volumes, Timings
 18: Main Street & Fairhaven Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	5	434	36	31	543	44	65	18	15	29	12	9
Future Volume (vph)	5	434	36	31	543	44	65	18	15	29	12	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	16	16	16
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.990			0.979			0.975	
Flt Protected		0.999			0.997			0.968			0.972	
Satd. Flow (prot)	0	1603	0	0	1600	0	0	1642	0	0	1801	0
Flt Permitted		0.992			0.958			0.777			0.813	
Satd. Flow (perm)	0	1592	0	0	1537	0	0	1318	0	0	1506	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			9			16			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		4565			395			496			500	
Travel Time (s)		103.8			9.0			11.3			11.4	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.80	0.80	0.80	0.85	0.85	0.85
Adj. Flow (vph)	6	482	40	33	578	47	81	23	19	34	14	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	528	0	0	658	0	0	123	0	0	59	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.10	1.10	1.10	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
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												

Lanes, Volumes, Timings
 18: Main Street & Fairhaven Road

12/06/2019

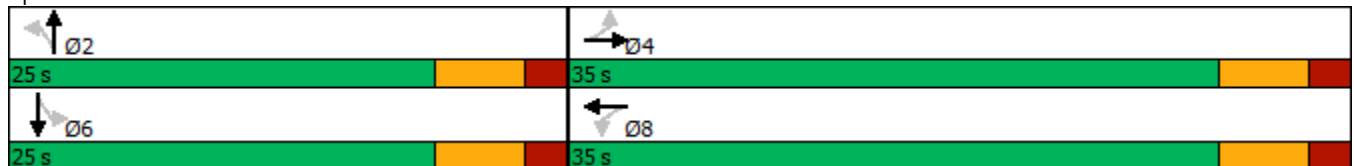


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%	
Maximum Green (s)	29.0	29.0		29.0	29.0		19.0	19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		27.1			27.1			19.1			19.1	
Actuated g/C Ratio		0.47			0.47			0.33			0.33	
v/c Ratio		0.71			0.92			0.28			0.12	
Control Delay		18.3			34.8			15.7			13.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		18.3			34.8			15.7			13.3	
LOS		B			C			B			B	
Approach Delay		18.3			34.8			15.7			13.3	
Approach LOS		B			C			B			B	

Intersection Summary

Area Type:	CBD
Cycle Length:	60
Actuated Cycle Length:	58.2
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.92
Intersection Signal Delay:	25.8
Intersection LOS:	C
Intersection Capacity Utilization:	74.3%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 18: Main Street & Fairhaven Road



Lanes, Volumes, Timings
21: North Street

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	187	322	16	16	360	259	11	51	16	268	52	255
Future Volume (vph)	187	322	16	16	360	259	11	51	16	268	52	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	11	11	11
Storage Length (ft)	100		0	0		0	0		0	100		0
Storage Lanes	1		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.993			0.945			0.972			0.875	
Fl _t Protected	0.950				0.999			0.993		0.950		
Satd. Flow (prot)	1711	1788	0	0	1700	0	0	1858	0	1711	1576	0
Fl _t Permitted	0.201				0.986			0.924		0.594		
Satd. Flow (perm)	362	1788	0	0	1678	0	0	1729	0	1070	1576	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			55			13			300	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		326			3802			502			502	
Travel Time (s)		7.4			86.4			11.4			11.4	
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.84	0.84	0.84	0.85	0.85	0.85
Adj. Flow (vph)	201	346	17	18	400	288	13	61	19	315	61	300
Shared Lane Traffic (%)												
Lane Group Flow (vph)	201	363	0	0	706	0	0	93	0	315	361	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	0.96	0.96	0.96	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases	7	4			8			2		1	6	

Lanes, Volumes, Timings

21: North Street

12/06/2019

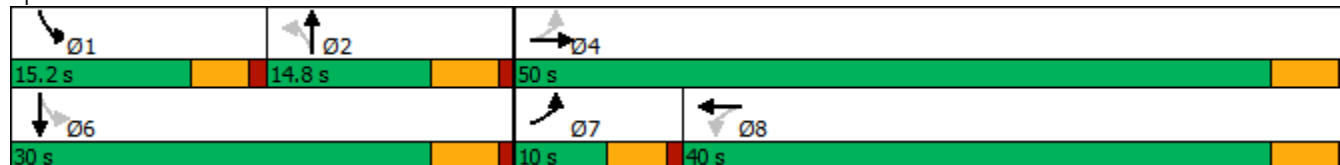


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	14.0		14.0	14.0		8.0	8.0		5.0	8.0	
Minimum Split (s)	9.5	19.0		19.0	19.0		13.0	13.0		9.5	13.0	
Total Split (s)	10.0	50.0		40.0	40.0		14.8	14.8		15.2	30.0	
Total Split (%)	12.5%	62.5%		50.0%	50.0%		18.5%	18.5%		19.0%	37.5%	
Maximum Green (s)	5.5	45.0		35.0	35.0		9.8	9.8		10.7	25.0	
Yellow Time (s)	3.5	4.0		4.0	4.0		4.0	4.0		3.5	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)	4.5	5.0			5.0			5.0		4.5	5.0	
Lead/Lag	Lead			Lag	Lag		Lag	Lag		Lead		
Lead-Lag Optimize?	Yes						Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		None	Max	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0			11.0	
Pedestrian Calls (#/hr)		0		0	0		0	0			0	
Act Effct Green (s)	44.7	44.2			34.2			18.0		33.7	33.2	
Actuated g/C Ratio	0.51	0.51			0.39			0.21		0.39	0.38	
v/c Ratio	0.75	0.40			1.02			0.25		0.64	0.46	
Control Delay	32.3	14.8			66.7			27.5		27.8	6.4	
Queue Delay	0.0	0.0			0.0			0.0		0.0	0.0	
Total Delay	32.3	14.8			66.7			27.5		27.8	6.4	
LOS	C	B			E			C		C	A	
Approach Delay		21.0			66.7			27.5			16.4	
Approach LOS		C			E			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 87.4
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.02
 Intersection Signal Delay: 35.6
 Intersection LOS: D
 Intersection Capacity Utilization 87.6%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 21: North Street



Lanes, Volumes, Timings
 24: Prospect Road/Randall Road & Marion Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	6	381	38	33	456	6	22	0	12	5	0	4
Future Volume (vph)	6	381	38	33	456	6	22	0	12	5	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.998			0.952			0.941	
Flt Protected		0.999			0.997			0.969			0.973	
Satd. Flow (prot)	0	1777	0	0	1792	0	0	1661	0	0	1649	0
Flt Permitted		0.999			0.997			0.969			0.973	
Satd. Flow (perm)	0	1777	0	0	1792	0	0	1661	0	0	1649	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1466			15280			657			606	
Travel Time (s)		33.3			347.3			14.9			13.8	
Peak Hour Factor	0.84	0.84	0.84	0.86	0.86	0.86	0.58	0.58	0.58	0.58	0.58	0.58
Adj. Flow (vph)	7	454	45	38	530	7	38	0	21	9	0	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	506	0	0	575	0	0	59	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	53.8%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
26: Church Street Ext

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	415	47	2	418	40	1
Future Volume (vph)	415	47	2	418	40	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.986			0.996		
Flt Protected				0.954		
Satd. Flow (prot)	1775	0	0	1801	1652	0
Flt Permitted				0.954		
Satd. Flow (perm)	1775	0	0	1801	1652	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	3802			1012	473	
Travel Time (s)	86.4			23.0	10.8	
Peak Hour Factor	0.81	0.81	0.83	0.83	0.92	0.92
Growth Factor	100%	100%	100%	100%	77%	77%
Adj. Flow (vph)	512	58	2	504	33	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	570	0	0	506	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	34.7%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
28: Marion Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	336	1	1	390	34	31
Future Volume (vph)	336	1	1	390	34	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.922	
Flt Protected					0.979	
Satd. Flow (prot)	1801	0	0	1801	1625	0
Flt Permitted					0.979	
Satd. Flow (perm)	1801	0	0	1801	1625	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1012			1466	421	
Travel Time (s)	23.0			33.3	9.6	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.72	0.48
Adj. Flow (vph)	365	1	1	433	47	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	366	0	0	434	112	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	31.8%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
30: Marion Road & Converse Road

12/06/2019












Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	54	77	354	51	92	423
Future Volume (vph)	54	77	354	51	92	423
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.983			
Flt Protected	0.950					0.991
Satd. Flow (prot)	1770	1583	1770	0	0	1784
Flt Permitted	0.950					0.991
Satd. Flow (perm)	1770	1583	1770	0	0	1784
Link Speed (mph)	30		30			30
Link Distance (ft)	531		15280			1140
Travel Time (s)	12.1		347.3			25.9
Peak Hour Factor	0.81	0.81	0.91	0.91	0.87	0.87
Adj. Flow (vph)	67	95	389	56	106	486
Shared Lane Traffic (%)						
Lane Group Flow (vph)	67	95	445	0	0	592
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	62.4%
Analysis Period (min)	15
	ICU Level of Service B


















Lanes, Volumes, Timings
32: Main Street & Mill Street

12/06/2019

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	38	68	394	57	74	401
Future Volume (vph)	38	68	394	57	74	401
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.913		0.983			
Flt Protected	0.982					0.992
Satd. Flow (prot)	1670	0	1770	0	0	1786
Flt Permitted	0.982					0.992
Satd. Flow (perm)	1670	0	1770	0	0	1786
Link Speed (mph)	30		30			30
Link Distance (ft)	500		1140			4673
Travel Time (s)	11.4		25.9			106.2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.88	0.88
Adj. Flow (vph)	42	75	433	63	84	456
Shared Lane Traffic (%)						
Lane Group Flow (vph)	117	0	496	0	0	540
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	65.7%			ICU Level of Service C		
Analysis Period (min)	15					

Lanes, Volumes, Timings
34: Mill Street & Spring Street

12/06/2019

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	48	48	22	37	251	170	523	6	29	296	5
Future Volume (vph)	7	48	48	22	37	251	170	523	6	29	296	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.937			0.891			0.998			0.998	
Flt Protected		0.997			0.996		0.950				0.996	
Satd. Flow (prot)	0	1682	0	0	1598	0	1711	1797	0	0	1790	0
Flt Permitted		0.974			0.978		0.347				0.920	
Satd. Flow (perm)	0	1643	0	0	1569	0	625	1797	0	0	1653	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		54			273			2			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		499			498			4673			490	
Travel Time (s)		11.3			11.3			106.2			11.1	
Peak Hour Factor	0.89	0.89	0.89	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	8	54	54	24	40	273	185	568	7	32	325	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	0	0	337	0	185	575	0	0	362	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		2			6		7	4			8	

Lanes, Volumes, Timings
34: Mill Street & Spring Street

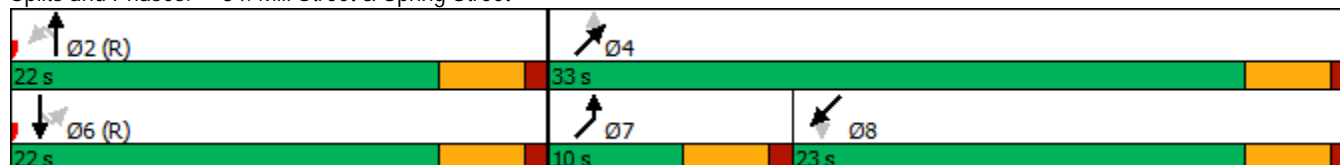
12/06/2019

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		7	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		9.5	20.0		20.0	20.0	
Total Split (s)	22.0	22.0		22.0	22.0		10.0	33.0		23.0	23.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		18.2%	60.0%		41.8%	41.8%	
Maximum Green (s)	17.5	17.5		17.5	17.5		5.5	28.5		18.5	18.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
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	
Total Lost Time (s)		4.5			4.5		4.5	4.5			4.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Act Effect Green (s)		21.2			21.2		24.8	24.8			16.8	
Actuated g/C Ratio		0.39			0.39		0.45	0.45			0.31	
v/c Ratio		0.17			0.44		0.48	0.71			0.72	
Control Delay		9.0			5.9		12.4	16.9			25.8	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		9.0			5.9		12.4	16.9			25.8	
LOS		A			A		B	B			C	
Approach Delay		9.0			5.9			15.8			25.8	
Approach LOS		A			A			B			C	

Intersection Summary




















Area Type: Other
 Cycle Length: 55
 Actuated Cycle Length: 55
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 15.5
 Intersection LOS: B
 Intersection Capacity Utilization 81.0%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 34: Mill Street & Spring Street



Lanes, Volumes, Timings
37: Front Street & Wareham Road

12/06/2019

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	218	85	13	32	124	96	216	228	13	50	250	194
Future Volume (vph)	218	85	13	32	124	96	216	228	13	50	250	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	11	11	11	11
Storage Length (ft)	100		0	0		0	50		0	50		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.980			0.949			0.992			0.934	
Fl _t Protected	0.950				0.994		0.950			0.950		
Satd. Flow (prot)	1770	1825	0	0	1757	0	1711	1786	0	1711	1682	0
Fl _t Permitted	0.429				0.952		0.304			0.560		
Satd. Flow (perm)	799	1825	0	0	1683	0	547	1786	0	1008	1682	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			47			6			85	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			508			490			2182	
Travel Time (s)		11.4			11.5			11.1			49.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	237	92	14	35	135	104	235	248	14	54	272	211
Shared Lane Traffic (%)												
Lane Group Flow (vph)	237	106	0	0	274	0	235	262	0	54	483	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			8	

Lanes, Volumes, Timings
 37: Front Street & Wareham Road

12/06/2019

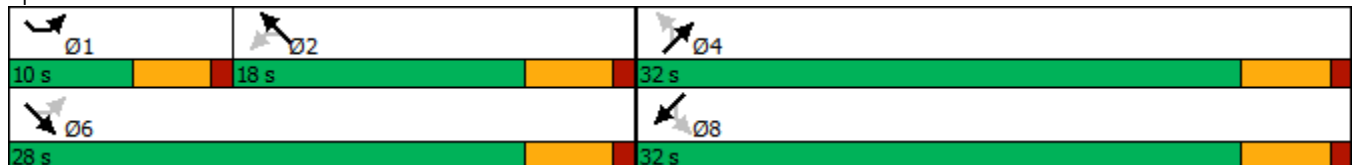


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6			2			4			8		
Detector Phase	1	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	7.0		7.0	7.0		12.0	12.0		11.5	11.5	
Minimum Split (s)	9.5	12.0		12.0	12.0		17.0	17.0		17.0	17.0	
Total Split (s)	10.0	28.0		18.0	18.0		32.0	32.0		32.0	32.0	
Total Split (%)	16.7%	46.7%		30.0%	30.0%		53.3%	53.3%		53.3%	53.3%	
Maximum Green (s)	5.5	23.0		13.0	13.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	3.5	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	0.0		0.0	0.0	
Total Lost Time (s)	4.5	5.0			5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max		Max	Max		None	None		None	None	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0	
Act Effect Green (s)	28.7	28.2			18.1		23.9	23.9		23.9	23.9	
Actuated g/C Ratio	0.46	0.45			0.29		0.38	0.38		0.38	0.38	
v/c Ratio	0.52	0.13			0.52		1.12	0.38		0.14	0.69	
Control Delay	16.5	10.4			20.4		121.1	14.9		13.0	18.7	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	16.5	10.4			20.4		121.1	14.9		13.0	18.7	
LOS	B	B			C		F	B		B	B	
Approach Delay		14.6			20.4			65.1			18.1	
Approach LOS		B			C			E			B	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	62.2
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.12
Intersection Signal Delay:	31.9
Intersection LOS:	C
Intersection Capacity Utilization:	79.9%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 37: Front Street & Wareham Road



Lanes, Volumes, Timings
40: Wareham Road & Hermitage Road

12/06/2019



Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	6	2	504	5	2	372
Future Volume (vph)	6	2	504	5	2	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.965		0.999			
Flt Protected	0.964					
Satd. Flow (prot)	1617	0	1799	0	0	1801
Flt Permitted	0.964					
Satd. Flow (perm)	1617	0	1799	0	0	1801
Link Speed (mph)	30		30			30
Link Distance (ft)	504		2182			1429
Travel Time (s)	11.5		49.6			32.5
Peak Hour Factor	0.35	0.35	0.90	0.90	0.89	0.89
Adj. Flow (vph)	17	6	560	6	2	418
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	0	566	0	0	420
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	36.8%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
42: Point Road & Wareham Road

12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	67	35	17	21	23	70	18	338	2	112	323	107
Future Volume (vph)	67	35	17	21	23	70	18	338	2	112	323	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.981			0.917			0.999			0.963	
Fl _t Protected		0.972			0.991			0.997		0.950		
Satd. Flow (prot)	0	1717	0	0	1636	0	0	1793	0	1711	1734	0
Fl _t Permitted		0.783			0.938			0.967		0.383		
Satd. Flow (perm)	0	1383	0	0	1549	0	0	1739	0	690	1734	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			76						40	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		784			806			3254			5829	
Travel Time (s)		17.8			18.3			74.0			132.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	38	18	23	25	76	20	367	2	122	351	116
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	0	0	124	0	0	389	0	122	467	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		6			2			4		3	8	
Permitted Phases	6			2			4			8		
Minimum Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		9.5	30.0	
Total Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		10.0	40.0	
Total Split (%)	38.5%	38.5%		38.5%	38.5%		46.2%	46.2%		15.4%	61.5%	
Maximum Green (s)	20.0	20.0		20.0	20.0		25.0	25.0		5.5	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		3.5	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	
Total Lost Time (s)		5.0			5.0			5.0		4.5	5.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0			0	
Act Effct Green (s)		20.0			20.0			25.0		35.5	35.0	
Actuated g/C Ratio		0.31			0.31			0.38		0.55	0.54	

Lanes, Volumes, Timings
42: Point Road & Wareham Road

12/06/2019

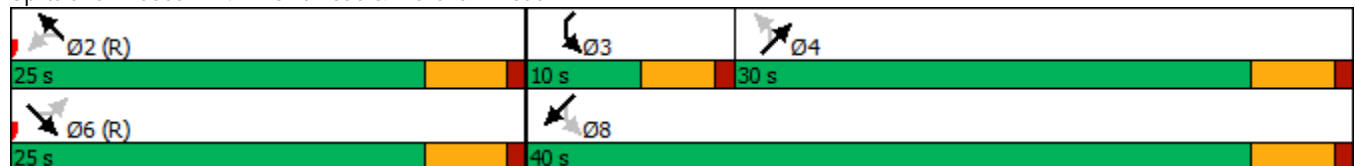


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
v/c Ratio		0.30			0.23			0.58		0.26	0.49	
Control Delay		17.7			9.2			20.2		8.8	10.7	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		17.7			9.2			20.2		8.8	10.7	
LOS		B			A			C		A	B	
Approach Delay		17.7			9.2			20.2			10.3	
Approach LOS		B			A			C			B	

Intersection Summary

Area Type:	Other
Cycle Length:	65
Actuated Cycle Length:	65
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	65
Control Type:	Pretimed
Maximum v/c Ratio:	0.58
Intersection Signal Delay:	14.1
Intersection LOS:	B
Intersection Capacity Utilization	68.2%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 42: Point Road & Wareham Road



Lanes, Volumes, Timings
45: Wareham Road & Hathaway Street

12/06/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	28	65	60	409	501	46
Future Volume (vph)	28	65	60	409	501	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.906				0.989	
Flt Protected	0.985			0.994		
Satd. Flow (prot)	1662	0	0	1790	1781	0
Flt Permitted	0.985			0.994		
Satd. Flow (perm)	1662	0	0	1790	1781	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	590			5829	3420	
Travel Time (s)	13.4			132.5	77.7	
Peak Hour Factor	0.83	0.83	0.94	0.94	0.96	0.96
Adj. Flow (vph)	34	78	64	435	522	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	112	0	0	499	570	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			11	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	69.6%
Analysis Period (min)	15
	ICU Level of Service C

Lanes, Volumes, Timings
 49: Cromesett Road & Marion Road

12/06/2019



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	56	96	482	72	140	567
Future Volume (vph)	56	96	482	72	140	567
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.915		0.982			
Flt Protected	0.982					0.990
Satd. Flow (prot)	1674	0	1768	0	0	1783
Flt Permitted	0.982					0.990
Satd. Flow (perm)	1674	0	1768	0	0	1783
Link Speed (mph)	30		30			30
Link Distance (ft)	565		3420			1505
Travel Time (s)	12.8		77.7			34.2
Peak Hour Factor	0.87	0.87	0.89	0.89	0.94	0.94
Adj. Flow (vph)	64	110	542	81	149	603
Shared Lane Traffic (%)						
Lane Group Flow (vph)	174	0	623	0	0	752
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	86.3%
Analysis Period (min)	15
	ICU Level of Service E

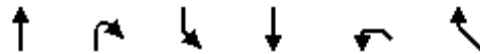
Lanes, Volumes, Timings
51: Marion Road & Swifts Beach Road

12/06/2019

	↑	↖	↙	↓	↘	↗
Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations	↗		↖	↑	↘	
Traffic Volume (vph)	562	81	220	691	72	188
Future Volume (vph)	562	81	220	691	72	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t	0.983				0.904	
Fl _t Protected			0.950		0.986	
Satd. Flow (prot)	1770	0	1711	1801	1660	0
Fl _t Permitted			0.158		0.986	
Satd. Flow (perm)	1770	0	285	1801	1660	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	1505			1848	506	
Travel Time (s)	34.2			42.0	11.5	
Peak Hour Factor	0.92	0.90	0.89	0.89	0.69	0.74
Adj. Flow (vph)	611	90	247	776	104	254
Shared Lane Traffic (%)						
Lane Group Flow (vph)	701	0	247	776	358	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	2		1	6	4	

Lanes, Volumes, Timings
 51: Marion Road & Swifts Beach Road

12/06/2019



Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Permitted Phases			6			
Detector Phase	2		1	6	4	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	20.0		9.5	20.0	20.0	
Total Split (s)	43.0		13.0	56.0	24.0	
Total Split (%)	53.8%		16.3%	70.0%	30.0%	
Maximum Green (s)	38.5		8.5	51.5	19.5	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		None	None	None	
Act Effect Green (s)	38.5		51.4	51.4	18.8	
Actuated g/C Ratio	0.49		0.65	0.65	0.24	
v/c Ratio	0.82		0.74	0.66	0.91	
Control Delay	27.3		23.2	12.3	58.7	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	27.3		23.2	12.3	58.7	
LOS	C		C	B	E	
Approach Delay	27.3			14.9	58.7	
Approach LOS	C			B	E	

Intersection Summary

Area Type:	Other
Cycle Length:	80
Actuated Cycle Length:	79.2
Natural Cycle:	80
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.91
Intersection Signal Delay:	26.6
Intersection LOS:	C
Intersection Capacity Utilization:	73.5%
ICU Level of Service:	D
Analysis Period (min):	15

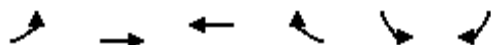
Splits and Phases: 51: Marion Road & Swifts Beach Road



Lanes, Volumes, Timings

53: Marion Road & Shaws

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	104	581	691	94	95	89
Future Volume (vph)	104	581	691	94	95	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	15	15
Storage Length (ft)	175			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.984		0.935	
Fl _t Protected	0.950				0.975	
Satd. Flow (prot)	1711	1801	1772	0	1868	0
Fl _t Permitted	0.950				0.975	
Satd. Flow (perm)	1711	1801	1772	0	1868	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			11		42	
Link Speed (mph)		30	30		30	
Link Distance (ft)		1848	285		278	
Travel Time (s)		42.0	6.5		6.3	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	113	632	794	108	103	97
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	632	902	0	200	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.88	0.88
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	
Detector Template	Left	Thru	Thru		Left	
Leading Detector (ft)	20	100	100		20	
Trailing Detector (ft)	0	0	0		0	
Detector 1 Position(ft)	0	0	0		0	
Detector 1 Size(ft)	20	6	6		20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA		Perm	
Protected Phases	7	4	8			

Lanes, Volumes, Timings

53: Marion Road & Shaws

12/06/2019

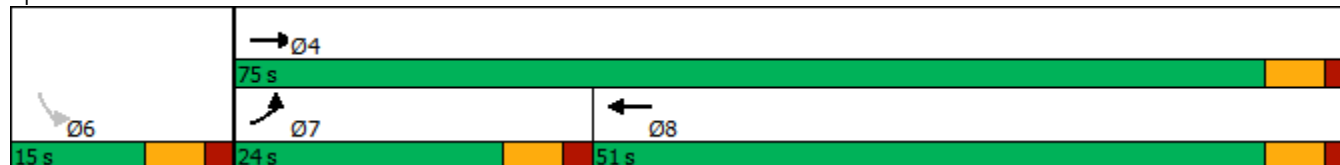


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases					6	
Detector Phase	7	4	8		6	
Switch Phase						
Minimum Initial (s)	11.0	5.0	5.0		5.0	
Minimum Split (s)	24.0	24.0	24.0		11.0	
Total Split (s)	24.0	75.0	51.0		15.0	
Total Split (%)	26.7%	83.3%	56.7%		16.7%	
Maximum Green (s)	18.0	69.0	45.0		9.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		Max	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)	12.6	60.0	45.4		18.1	
Actuated g/C Ratio	0.14	0.67	0.50		0.20	
v/c Ratio	0.47	0.53	1.01		0.49	
Control Delay	44.1	9.5	57.2		31.3	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	44.1	9.5	57.2		31.3	
LOS	D	A	E		C	
Approach Delay		14.7	57.2		31.3	
Approach LOS		B	E		C	

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90.2
Natural Cycle:	90
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.01
Intersection Signal Delay:	37.3
Intersection LOS:	D
Intersection Capacity Utilization:	77.0%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 53: Marion Road & Shaws



Lanes, Volumes, Timings
55: Marion Road & Gibbs Avenue

12/06/2019



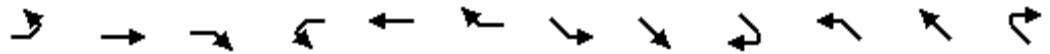
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	193	434	506	21	24	276
Future Volume (vph)	193	434	506	21	24	276
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	16	16	12	12
Storage Length (ft)	125			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.876	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1711	1801	2101	0	1625	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1711	1801	2101	0	1625	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		285	1841		501	
Travel Time (s)		6.5	41.8		11.4	
Peak Hour Factor	0.94	0.94	0.91	0.91	0.93	0.93
Adj. Flow (vph)	205	462	556	23	26	297
Shared Lane Traffic (%)						
Lane Group Flow (vph)	205	462	579	0	323	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	0.85	0.85	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	67.0%
Analysis Period (min)	15
	ICU Level of Service C

Lanes, Volumes, Timings
57: High Street & Marion Road

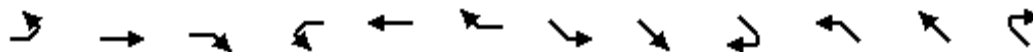
12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	33	331	130	5	394	17	23	88	35	183	65	22
Future Volume (vph)	33	331	130	5	394	17	23	88	35	183	65	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	15	15	15	12	12	12	14	14	14
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.964			0.994			0.967			0.962	
Fl _t Protected		0.997			0.999			0.992		0.950		
Satd. Flow (prot)	0	2029	0	0	2035	0	0	1787	0	1888	1911	0
Fl _t Permitted		0.951			0.995			0.947		0.539		
Satd. Flow (perm)	0	1935	0	0	2027	0	0	1706	0	1071	1911	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			4			23			24	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1841			479			513			510	
Travel Time (s)		41.8			10.9			11.7			11.6	
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	35	348	137	5	433	19	27	102	41	201	71	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	520	0	0	457	0	0	170	0	201	95	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			14			14	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.85	0.85	0.85	0.88	0.88	0.88	1.00	1.00	1.00	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			6		5	2	
Permitted Phases	4			8			6			2		
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		9.5	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		10.0	35.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		35.7%	35.7%		14.3%	50.0%	
Maximum Green (s)	30.0	30.0		30.0	30.0		20.0	20.0		5.5	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		3.5	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	
Total Lost Time (s)		5.0			5.0			5.0		4.5	5.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0			8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0			0	
Act Effct Green (s)		30.0			30.0			20.0		30.5	30.0	
Actuated g/C Ratio		0.43			0.43			0.29		0.44	0.43	

Lanes, Volumes, Timings
57: High Street & Marion Road

12/06/2019

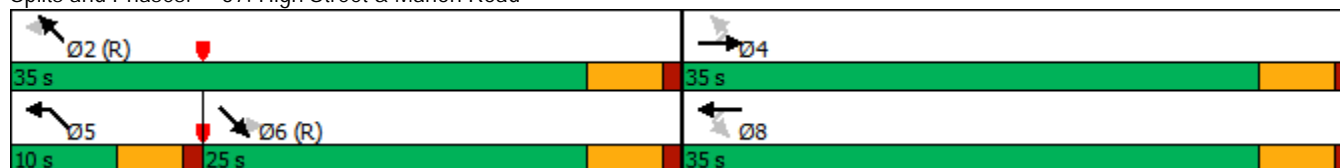


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio		0.61			0.52			0.34		0.38	0.11	
Control Delay		18.3			17.3			19.3		15.0	9.9	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		18.3			17.3			19.3		15.0	9.9	
LOS		B			B			B		B	A	
Approach Delay		18.3			17.3			19.3			13.3	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	70
Actuated Cycle Length:	70
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	70
Control Type:	Pretimed
Maximum v/c Ratio:	0.61
Intersection Signal Delay:	17.1
Intersection LOS:	B
Intersection Capacity Utilization	77.1%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 57: High Street & Marion Road



Lanes, Volumes, Timings
61: Fairhaven Road & River Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↘	↙
Traffic Volume (vph)	38	432	540	11	22	39
Future Volume (vph)	38	432	540	11	22	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.913	
Flt Protected		0.996			0.982	
Satd. Flow (prot)	0	1793	1795	0	1670	0
Flt Permitted		0.996			0.982	
Satd. Flow (perm)	0	1793	1795	0	1670	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		494	4565		394	
Travel Time (s)		11.2	103.8		9.0	
Peak Hour Factor	0.92	0.92	0.86	0.86	0.78	0.78
Adj. Flow (vph)	41	470	628	13	28	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	511	641	0	78	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	64.5%
Analysis Period (min)	15
	ICU Level of Service C

Lanes, Volumes, Timings
2: Huttleston Avenue & Mill Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	1181	858	10	40	38
Future Volume (vph)	17	1181	858	10	40	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.998		0.934	
Flt Protected		0.999			0.975	
Satd. Flow (prot)	0	1619	1617	0	1527	0
Flt Permitted		0.999			0.975	
Satd. Flow (perm)	0	1619	1617	0	1527	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1082	1396		506	
Travel Time (s)		24.6	31.7		11.5	
Peak Hour Factor	0.96	0.96	0.83	0.83	0.52	0.52
Adj. Flow (vph)	18	1230	1034	12	77	73
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1248	1046	0	150	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.19	1.19	1.19	1.19	1.14	1.14
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	CBD
Control Type:	Unsignalized
Intersection Capacity Utilization	95.9%
ICU Level of Service	F
Analysis Period (min)	15

Lanes, Volumes, Timings
 4: Huttleston Avenue & Weeden Road

12/06/2019



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	22	9	681	72	4	536
Future Volume (vph)	22	9	681	72	4	536
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.961		0.987			
Flt Protected	0.966					
Satd. Flow (prot)	1729	0	1777	0	0	1801
Flt Permitted	0.966					
Satd. Flow (perm)	1729	0	1777	0	0	1801
Link Speed (mph)	30		30			30
Link Distance (ft)	498		1396			2661
Travel Time (s)	11.3		31.7			60.5
Peak Hour Factor	0.57	0.57	0.87	0.87	0.88	0.88
Adj. Flow (vph)	39	16	783	83	5	609
Shared Lane Traffic (%)						
Lane Group Flow (vph)	55	0	866	0	0	614
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	50.2%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
6: New Boston Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↘	↙
Traffic Volume (vph)	67	708	572	45	50	73
Future Volume (vph)	67	708	572	45	50	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	12
Storage Length (ft)	0			0	0	160
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.990			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	1793	1783	0	1711	1583
Flt Permitted		0.911			0.950	
Satd. Flow (perm)	0	1640	1783	0	1711	1583
Right Turn on Red				No		No
Satd. Flow (RTOR)						
Link Speed (mph)		30	30		30	
Link Distance (ft)		2661	516		800	
Travel Time (s)		60.5	11.7		18.2	
Peak Hour Factor	0.90	0.90	0.96	0.96	0.87	0.87
Adj. Flow (vph)	74	787	596	47	57	84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	861	643	0	57	84
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	100	100		20	20
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	20	6	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	

Lanes, Volumes, Timings
6: New Boston Road

12/06/2019

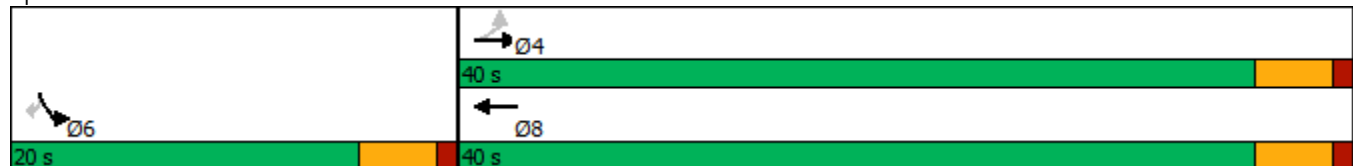


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	4					6
Detector Phase	4	4	8		6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	20.0	20.0	20.0		20.0	20.0
Total Split (s)	40.0	40.0	40.0		20.0	20.0
Total Split (%)	66.7%	66.7%	66.7%		33.3%	33.3%
Maximum Green (s)	35.5	35.5	35.5		15.5	15.5
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	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)		4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	None		Min	Min
Act Effect Green (s)		30.6	30.6		8.1	8.1
Actuated g/C Ratio		0.64	0.64		0.17	0.17
v/c Ratio		0.82	0.57		0.20	0.31
Control Delay		16.0	7.4		20.6	22.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		16.0	7.4		20.6	22.6
LOS		B	A		C	C
Approach Delay		16.0	7.4		21.8	
Approach LOS		B	A		C	

Intersection Summary

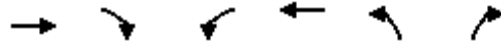
Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	48.1
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.82
Intersection Signal Delay:	13.1
Intersection LOS:	B
Intersection Capacity Utilization:	89.2%
ICU Level of Service:	E
Analysis Period (min):	15

Splits and Phases: 6: New Boston Road



Lanes, Volumes, Timings
8: Gелlette Road

12/06/2019



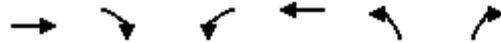
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	694	40	17	562	28	20
Future Volume (vph)	694	40	17	562	28	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993			0.943		
Flt Protected				0.999	0.972	
Satd. Flow (prot)	1788	0	0	1799	1650	0
Flt Permitted				0.999	0.972	
Satd. Flow (perm)	1788	0	0	1799	1650	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			2679	535	
Travel Time (s)	11.7			60.9	12.2	
Peak Hour Factor	0.89	0.89	0.93	0.93	0.65	0.65
Adj. Flow (vph)	780	45	18	604	43	31
Shared Lane Traffic (%)						
Lane Group Flow (vph)	825	0	0	622	74	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	53.3%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
10: Shaw Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	467	133	17	514	35	5
Future Volume (vph)	467	133	17	514	35	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.970			0.983		
Flt Protected				0.998	0.958	
Satd. Flow (prot)	1747	0	0	1797	1871	0
Flt Permitted				0.998	0.958	
Satd. Flow (perm)	1747	0	0	1797	1871	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2679			2104	500	
Travel Time (s)	60.9			47.8	11.4	
Peak Hour Factor	0.92	0.92	0.94	0.94	0.84	0.84
Adj. Flow (vph)	508	145	18	547	42	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	653	0	0	565	48	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.92	0.92
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	50.8%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 12: Wareham Road & Creek Road

12/06/2019



Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	51	20	455	84	6	342
Future Volume (vph)	51	20	455	84	6	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.962		0.979			
Flt Protected	0.965					0.999
Satd. Flow (prot)	1672	0	1763	0	0	1799
Flt Permitted	0.965					0.999
Satd. Flow (perm)	1672	0	1763	0	0	1799
Link Speed (mph)	30		30			30
Link Distance (ft)	882		1429			3254
Travel Time (s)	20.0		32.5			74.0
Peak Hour Factor	0.60	0.60	0.93	0.93	0.95	0.95
Adj. Flow (vph)	85	33	489	90	6	360
Shared Lane Traffic (%)						
Lane Group Flow (vph)	118	0	579	0	0	366
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	39.8%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
14: Brandt Island Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	426	44	49	503	32	33
Future Volume (vph)	426	44	49	503	32	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.987				0.931	
Flt Protected				0.996	0.976	
Satd. Flow (prot)	1777	0	0	1793	1636	0
Flt Permitted				0.996	0.976	
Satd. Flow (perm)	1777	0	0	1793	1636	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2104			2288	496	
Travel Time (s)	47.8			52.0	11.3	
Peak Hour Factor	0.90	0.90	0.94	0.94	0.66	0.66
Adj. Flow (vph)	473	49	52	535	48	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	522	0	0	587	98	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	68.1%
ICU Level of Service	C
Analysis Period (min)	15

Lanes, Volumes, Timings
16: Mattapoisett Neck Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	401	42	67	487	28	41
Future Volume (vph)	401	42	67	487	28	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.987			0.919		
Flt Protected				0.994	0.980	
Satd. Flow (prot)	1777	0	0	1790	1622	0
Flt Permitted				0.994	0.980	
Satd. Flow (perm)	1777	0	0	1790	1622	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2288			494	531	
Travel Time (s)	52.0			11.2	12.1	
Peak Hour Factor	0.95	0.95	0.89	0.89	0.75	0.75
Adj. Flow (vph)	422	44	75	547	37	55
Shared Lane Traffic (%)						
Lane Group Flow (vph)	466	0	0	622	92	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	67.1%
Analysis Period (min)	15
	ICU Level of Service C

Lanes, Volumes, Timings
18: Main Street & Fairhaven Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	434	36	31	543	44	65	18	15	29	12	9
Future Volume (vph)	5	434	36	31	543	44	65	18	15	29	12	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	16	16	16
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.990			0.979			0.975	
Flt Protected		0.999			0.997			0.968			0.972	
Satd. Flow (prot)	0	1603	0	0	1600	0	0	1642	0	0	1801	0
Flt Permitted		0.992			0.958			0.777			0.813	
Satd. Flow (perm)	0	1592	0	0	1537	0	0	1318	0	0	1506	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			9			16			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		4565			395			496			500	
Travel Time (s)		103.8			9.0			11.3			11.4	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.80	0.80	0.80	0.85	0.85	0.85
Adj. Flow (vph)	6	482	40	33	578	47	81	23	19	34	14	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	528	0	0	658	0	0	123	0	0	59	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.10	1.10	1.10	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
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												

Lanes, Volumes, Timings
 18: Main Street & Fairhaven Road

12/06/2019

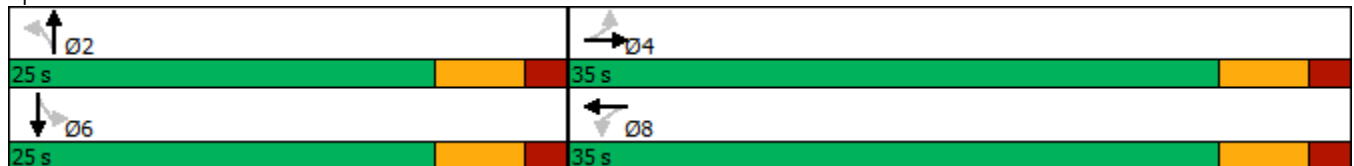


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%	
Maximum Green (s)	29.0	29.0		29.0	29.0		19.0	19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		27.1			27.1			19.1			19.1	
Actuated g/C Ratio		0.47			0.47			0.33			0.33	
v/c Ratio		0.71			0.92			0.28			0.12	
Control Delay		18.3			34.8			15.7			13.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		18.3			34.8			15.7			13.3	
LOS		B			C			B			B	
Approach Delay		18.3			34.8			15.7			13.3	
Approach LOS		B			C			B			B	

Intersection Summary

Area Type:	CBD	
Cycle Length:	60	
Actuated Cycle Length:	58.2	
Natural Cycle:	60	
Control Type:	Actuated-Uncoordinated	
Maximum v/c Ratio:	0.92	
Intersection Signal Delay:	25.8	Intersection LOS: C
Intersection Capacity Utilization	74.3%	ICU Level of Service D
Analysis Period (min)	15	

Splits and Phases: 18: Main Street & Fairhaven Road



Lanes, Volumes, Timings
21: North Street

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	187	322	16	16	360	259	11	51	16	268	52	255
Future Volume (vph)	187	322	16	16	360	259	11	51	16	268	52	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	11	11	11
Storage Length (ft)	100		0	0		0	0		0	100		0
Storage Lanes	1		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.993			0.945			0.972			0.875	
Fl _t Protected	0.950				0.999			0.993		0.950		
Satd. Flow (prot)	1711	1788	0	0	1700	0	0	1858	0	1711	1576	0
Fl _t Permitted	0.314				0.987			0.935		0.697		
Satd. Flow (perm)	565	1788	0	0	1679	0	0	1749	0	1255	1576	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			89			19				300
Link Speed (mph)		30			30			30				30
Link Distance (ft)		326			3802			502				502
Travel Time (s)		7.4			86.4			11.4				11.4
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.84	0.84	0.84	0.85	0.85	0.85
Adj. Flow (vph)	201	346	17	18	400	288	13	61	19	315	61	300
Shared Lane Traffic (%)												
Lane Group Flow (vph)	201	363	0	0	706	0	0	93	0	315	361	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	0.96	0.96	0.96	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	

Lanes, Volumes, Timings

21: North Street

12/06/2019

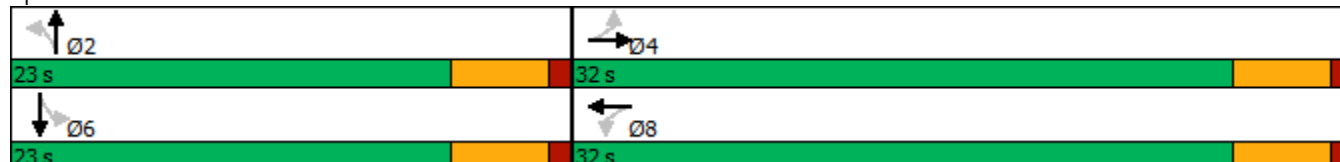


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	14.0	14.0		14.0	14.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	19.0	19.0		19.0	19.0		13.0	13.0		13.0	13.0	
Total Split (s)	32.0	32.0		32.0	32.0		23.0	23.0		23.0	23.0	
Total Split (%)	58.2%	58.2%		58.2%	58.2%		41.8%	41.8%		41.8%	41.8%	
Maximum Green (s)	27.0	27.0		27.0	27.0		18.0	18.0		18.0	18.0	
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		0.0	0.0	
Total Lost Time (s)	5.0	5.0			5.0			5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	23.3	23.3			23.3			18.2		18.2	18.2	
Actuated g/C Ratio	0.45	0.45			0.45			0.35		0.35	0.35	
v/c Ratio	0.79	0.45			0.87			0.15		0.71	0.48	
Control Delay	37.2	11.2			25.2			11.6		28.2	6.0	
Queue Delay	0.0	0.0			0.0			0.0		0.0	0.0	
Total Delay	37.2	11.2			25.2			11.6		28.2	6.0	
LOS	D	B			C			B		C	A	
Approach Delay		20.5			25.2			11.6			16.4	
Approach LOS		C			C			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 55
 Actuated Cycle Length: 51.6
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 20.3
 Intersection LOS: C
 Intersection Capacity Utilization 87.6%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 21: North Street



Lanes, Volumes, Timings
 24: Prospect Road/Randall Road & Marion Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	6	381	38	33	456	6	22	0	12	5	0	4
Future Volume (vph)	6	381	38	33	456	6	22	0	12	5	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.998			0.952			0.941	
Flt Protected		0.999			0.997			0.969			0.973	
Satd. Flow (prot)	0	1777	0	0	1792	0	0	1661	0	0	1649	0
Flt Permitted		0.999			0.997			0.969			0.973	
Satd. Flow (perm)	0	1777	0	0	1792	0	0	1661	0	0	1649	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1466			15280			657			606	
Travel Time (s)		33.3			347.3			14.9			13.8	
Peak Hour Factor	0.84	0.84	0.84	0.86	0.86	0.86	0.58	0.58	0.58	0.58	0.58	0.58
Adj. Flow (vph)	7	454	45	38	530	7	38	0	21	9	0	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	506	0	0	575	0	0	59	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	53.8%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
26: Church Street Ext

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	415	47	2	418	40	1
Future Volume (vph)	415	47	2	418	40	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.986			0.996		
Flt Protected				0.954		
Satd. Flow (prot)	1775	0	0	1801	1652	0
Flt Permitted				0.954		
Satd. Flow (perm)	1775	0	0	1801	1652	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	3802			1012	473	
Travel Time (s)	86.4			23.0	10.8	
Peak Hour Factor	0.81	0.81	0.83	0.83	0.92	0.92
Growth Factor	100%	100%	100%	100%	77%	77%
Adj. Flow (vph)	512	58	2	504	33	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	570	0	0	506	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	34.7%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
28: Marion Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	336	1	1	390	34	31
Future Volume (vph)	336	1	1	390	34	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.922	
Flt Protected					0.979	
Satd. Flow (prot)	1801	0	0	1801	1625	0
Flt Permitted					0.979	
Satd. Flow (perm)	1801	0	0	1801	1625	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1012			1466	421	
Travel Time (s)	23.0			33.3	9.6	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.72	0.48
Adj. Flow (vph)	365	1	1	433	47	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	366	0	0	434	112	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	31.8%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
30: Marion Road & Converse Road

12/06/2019












Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	54	77	354	51	92	423
Future Volume (vph)	54	77	354	51	92	423
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.983			
Flt Protected	0.950					0.991
Satd. Flow (prot)	1770	1583	1770	0	0	1784
Flt Permitted	0.950					0.991
Satd. Flow (perm)	1770	1583	1770	0	0	1784
Link Speed (mph)	30		30			30
Link Distance (ft)	531		15280			1140
Travel Time (s)	12.1		347.3			25.9
Peak Hour Factor	0.81	0.81	0.91	0.91	0.87	0.87
Adj. Flow (vph)	67	95	389	56	106	486
Shared Lane Traffic (%)						
Lane Group Flow (vph)	67	95	445	0	0	592
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	62.4%
Analysis Period (min)	15
	ICU Level of Service B


















Lanes, Volumes, Timings
32: Main Street & Mill Street

12/06/2019

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	38	68	394	57	74	401
Future Volume (vph)	38	68	394	57	74	401
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.913		0.983			
Flt Protected	0.982					0.992
Satd. Flow (prot)	1670	0	1770	0	0	1786
Flt Permitted	0.982					0.992
Satd. Flow (perm)	1670	0	1770	0	0	1786
Link Speed (mph)	30		30			30
Link Distance (ft)	500		1140			4673
Travel Time (s)	11.4		25.9			106.2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.88	0.88
Adj. Flow (vph)	42	75	433	63	84	456
Shared Lane Traffic (%)						
Lane Group Flow (vph)	117	0	496	0	0	540
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	65.7%			ICU Level of Service C		
Analysis Period (min)	15					

Lanes, Volumes, Timings
34: Mill Street & Spring Street

12/06/2019

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	48	48	22	37	251	170	523	6	29	296	5
Future Volume (vph)	7	48	48	22	37	251	170	523	6	29	296	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.937			0.891			0.998			0.998	
Flt Protected		0.997			0.996		0.950				0.996	
Satd. Flow (prot)	0	1682	0	0	1598	0	1711	1797	0	0	1790	0
Flt Permitted		0.973			0.978		0.528				0.873	
Satd. Flow (perm)	0	1642	0	0	1569	0	951	1797	0	0	1569	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		54			273			2			2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		499			498			4673			490	
Travel Time (s)		11.3			11.3			106.2			11.1	
Peak Hour Factor	0.89	0.89	0.89	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	8	54	54	24	40	273	185	568	7	32	325	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	0	0	337	0	185	575	0	0	362	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	

Lanes, Volumes, Timings
 34: Mill Street & Spring Street

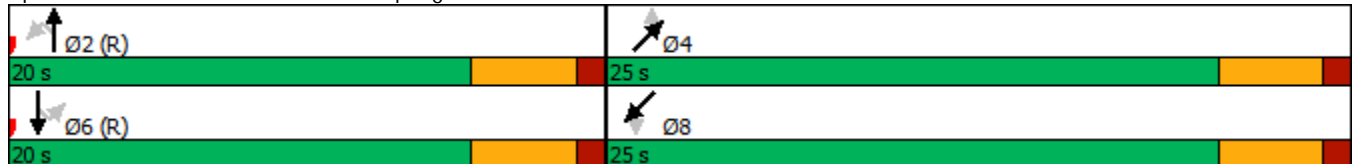
12/06/2019

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	20.0		20.0	20.0		25.0	25.0		25.0	25.0	
Total Split (%)	44.4%	44.4%		44.4%	44.4%		55.6%	55.6%		55.6%	55.6%	
Maximum Green (s)	15.5	15.5		15.5	15.5		20.5	20.5		20.5	20.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
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	
Total Lost Time (s)		4.5			4.5		4.5	4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Act Effect Green (s)		17.6			17.6		18.4	18.4			18.4	
Actuated g/C Ratio		0.39			0.39		0.41	0.41			0.41	
v/c Ratio		0.17			0.43		0.48	0.78			0.56	
Control Delay		7.2			5.1		13.7	20.0			13.5	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		7.2			5.1		13.7	20.0			13.5	
LOS		A			A		B	C			B	
Approach Delay		7.2			5.1			18.5			13.5	
Approach LOS		A			A			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 45
 Actuated Cycle Length: 45
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 45
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 13.6 Intersection LOS: B
 Intersection Capacity Utilization 81.0% ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 34: Mill Street & Spring Street



Lanes, Volumes, Timings
37: Front Street & Wareham Road

12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	218	85	13	32	124	96	216	228	13	50	250	194
Future Volume (vph)	218	85	13	32	124	96	216	228	13	50	250	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	11	11	11	11
Storage Length (ft)	100		0	0		0	50		0	50		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.980			0.949			0.992			0.934	
Fl _t Protected	0.950				0.994		0.950			0.950		
Satd. Flow (prot)	1770	1825	0	0	1757	0	1711	1786	0	1711	1682	0
Fl _t Permitted	0.610				0.956		0.353			0.597		
Satd. Flow (perm)	1136	1825	0	0	1690	0	636	1786	0	1075	1682	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			67			8			103	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			508			490			2182	
Travel Time (s)		11.4			11.5			11.1			49.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	237	92	14	35	135	104	235	248	14	54	272	211
Shared Lane Traffic (%)												
Lane Group Flow (vph)	237	106	0	0	274	0	235	262	0	54	483	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	

Lanes, Volumes, Timings
 37: Front Street & Wareham Road

12/06/2019

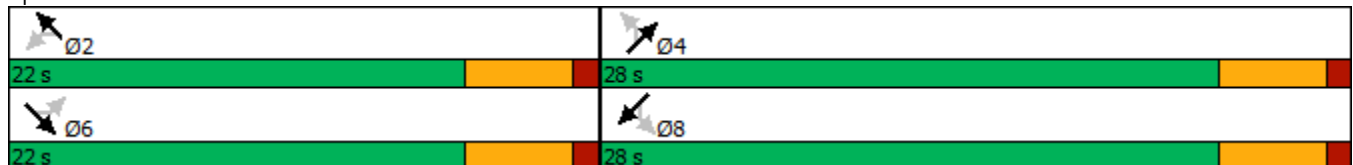


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		11.5	11.5	
Minimum Split (s)	12.0	12.0		12.0	12.0		17.0	17.0		17.0	17.0	
Total Split (s)	22.0	22.0		22.0	22.0		28.0	28.0		28.0	28.0	
Total Split (%)	44.0%	44.0%		44.0%	44.0%		56.0%	56.0%		56.0%	56.0%	
Maximum Green (s)	17.0	17.0		17.0	17.0		23.0	23.0		23.0	23.0	
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	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	18.2	18.2			18.2		19.4	19.4		19.4	19.4	
Actuated g/C Ratio	0.38	0.38			0.38		0.41	0.41		0.41	0.41	
v/c Ratio	0.55	0.15			0.40		0.91	0.36		0.12	0.65	
Control Delay	19.0	10.7			11.2		55.3	10.7		9.1	13.1	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	19.0	10.7			11.2		55.3	10.7		9.1	13.1	
LOS	B	B			B		E	B		A	B	
Approach Delay		16.4			11.2			31.8			12.7	
Approach LOS		B			B			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 50
 Actuated Cycle Length: 47.7
 Natural Cycle: 50
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.91
 Intersection Signal Delay: 19.0
 Intersection LOS: B
 Intersection Capacity Utilization 79.9%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 37: Front Street & Wareham Road



Lanes, Volumes, Timings
40: Wareham Road & Hermitage Road

12/06/2019



Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	6	2	504	5	2	372
Future Volume (vph)	6	2	504	5	2	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.965		0.999			
Flt Protected	0.964					
Satd. Flow (prot)	1617	0	1799	0	0	1801
Flt Permitted	0.964					
Satd. Flow (perm)	1617	0	1799	0	0	1801
Link Speed (mph)	30		30			30
Link Distance (ft)	504		2182			1429
Travel Time (s)	11.5		49.6			32.5
Peak Hour Factor	0.35	0.35	0.90	0.90	0.89	0.89
Adj. Flow (vph)	17	6	560	6	2	418
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	0	566	0	0	420
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	36.8%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
42: Point Road & Wareham Road

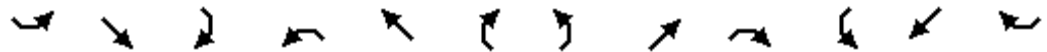
12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	67	35	17	21	23	70	18	338	2	112	323	107
Future Volume (vph)	67	35	17	21	23	70	18	338	2	112	323	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.981			0.917			0.999			0.963	
Flt Protected		0.972			0.991			0.997		0.950		
Satd. Flow (prot)	0	1717	0	0	1636	0	0	1793	0	1711	1734	0
Flt Permitted		0.793			0.941			0.968		0.507		
Satd. Flow (perm)	0	1401	0	0	1554	0	0	1741	0	913	1734	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			76			1			40	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		784			806			3254			5829	
Travel Time (s)		17.8			18.3			74.0			132.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	38	18	23	25	76	20	367	2	122	351	116
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	0	0	124	0	0	389	0	122	467	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Minimum Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (%)	45.5%	45.5%		45.5%	45.5%		54.5%	54.5%		54.5%	54.5%	
Maximum Green (s)	20.0	20.0		20.0	20.0		25.0	25.0		25.0	25.0	
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	0.0	
Total Lost Time (s)		5.0			5.0			5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		20.0			20.0			25.0		25.0	25.0	
Actuated g/C Ratio		0.36			0.36			0.45		0.45	0.45	
v/c Ratio		0.25			0.20			0.49		0.29	0.58	
Control Delay		12.3			6.8			13.2		11.9	13.6	
Queue Delay		0.0			0.0			0.0		0.0	0.0	

Lanes, Volumes, Timings
 42: Point Road & Wareham Road

12/06/2019

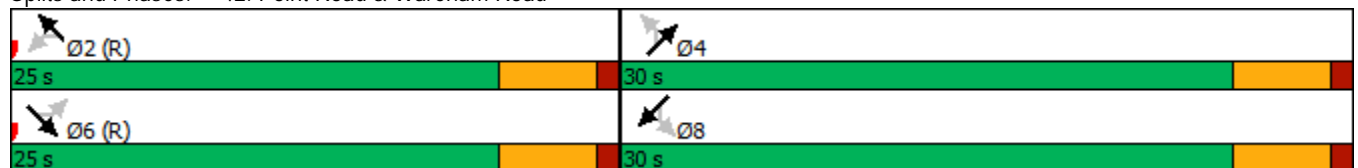


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay		12.3			6.8			13.2		11.9	13.6	
LOS		B			A			B		B	B	
Approach Delay		12.3			6.8			13.2			13.2	
Approach LOS		B			A			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	55
Actuated Cycle Length:	55
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	55
Control Type:	Pretimed
Maximum v/c Ratio:	0.58
Intersection Signal Delay:	12.5
Intersection LOS:	B
Intersection Capacity Utilization	68.2%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 42: Point Road & Wareham Road



Lanes, Volumes, Timings
45: Wareham Road & Hathaway Street

12/06/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	28	65	60	409	501	46
Future Volume (vph)	28	65	60	409	501	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.906				0.989	
Flt Protected	0.985			0.994		
Satd. Flow (prot)	1662	0	0	1790	1781	0
Flt Permitted	0.985			0.994		
Satd. Flow (perm)	1662	0	0	1790	1781	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	590			5829	3420	
Travel Time (s)	13.4			132.5	77.7	
Peak Hour Factor	0.83	0.83	0.94	0.94	0.96	0.96
Adj. Flow (vph)	34	78	64	435	522	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	112	0	0	499	570	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	69.6%
ICU Level of Service	C
Analysis Period (min)	15

Lanes, Volumes, Timings
49: Cromesett Road & Marion Road

12/06/2019



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	56	96	482	72	140	567
Future Volume (vph)	56	96	482	72	140	567
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.915		0.982			
Flt Protected	0.982					0.990
Satd. Flow (prot)	1674	0	1768	0	0	1783
Flt Permitted	0.982					0.990
Satd. Flow (perm)	1674	0	1768	0	0	1783
Link Speed (mph)	30		30			30
Link Distance (ft)	565		3420			1505
Travel Time (s)	12.8		77.7			34.2
Peak Hour Factor	0.87	0.87	0.89	0.89	0.94	0.94
Adj. Flow (vph)	64	110	542	81	149	603
Shared Lane Traffic (%)						
Lane Group Flow (vph)	174	0	623	0	0	752
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	86.3%
Analysis Period (min)	15
	ICU Level of Service E

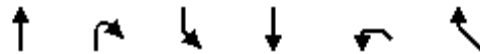
Lanes, Volumes, Timings
51: Marion Road & Swifts Beach Road

12/06/2019

	↑	↖	↙	↓	↘	↗
Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations	↗		↖	↑	↘	
Traffic Volume (vph)	562	81	220	691	72	188
Future Volume (vph)	562	81	220	691	72	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.983				0.904	
Flt Protected			0.950		0.986	
Satd. Flow (prot)	1770	0	1711	1801	1660	0
Flt Permitted			0.288		0.986	
Satd. Flow (perm)	1770	0	519	1801	1660	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	1505			1848	506	
Travel Time (s)	34.2			42.0	11.5	
Peak Hour Factor	0.92	0.90	0.89	0.89	0.69	0.74
Adj. Flow (vph)	611	90	247	776	104	254
Shared Lane Traffic (%)						
Lane Group Flow (vph)	701	0	247	776	358	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	

Lanes, Volumes, Timings
 51: Marion Road & Swifts Beach Road

12/06/2019



Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Permitted Phases			6			
Detector Phase	2		6	6	4	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	48.0		48.0	48.0	22.0	
Total Split (%)	68.6%		68.6%	68.6%	31.4%	
Maximum Green (s)	43.5		43.5	43.5	17.5	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		None	None	None	
Act Effect Green (s)	43.5		43.5	43.5	16.9	
Actuated g/C Ratio	0.63		0.63	0.63	0.24	
v/c Ratio	0.63		0.76	0.69	0.89	
Control Delay	11.4		28.7	12.7	51.7	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	11.4		28.7	12.7	51.7	
LOS	B		C	B	D	
Approach Delay	11.4			16.6	51.7	
Approach LOS	B			B	D	

Intersection Summary

Area Type:	Other
Cycle Length:	70
Actuated Cycle Length:	69.4
Natural Cycle:	70
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.89
Intersection Signal Delay:	20.9
Intersection LOS:	C
Intersection Capacity Utilization:	73.5%
ICU Level of Service:	D
Analysis Period (min):	15

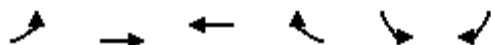
Splits and Phases: 51: Marion Road & Swifts Beach Road



Lanes, Volumes, Timings

53: Marion Road & Shaws

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	104	581	691	94	95	89
Future Volume (vph)	104	581	691	94	95	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	15	15
Storage Length (ft)	175			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.984		0.935	
Fl _t Protected	0.950				0.975	
Satd. Flow (prot)	1711	1801	1772	0	1868	0
Fl _t Permitted	0.950				0.975	
Satd. Flow (perm)	1711	1801	1772	0	1868	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			11		42	
Link Speed (mph)		30	30		30	
Link Distance (ft)		1848	285		278	
Travel Time (s)		42.0	6.5		6.3	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	113	632	794	108	103	97
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	632	902	0	200	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.88	0.88
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	
Detector Template	Left	Thru	Thru		Left	
Leading Detector (ft)	20	100	100		20	
Trailing Detector (ft)	0	0	0		0	
Detector 1 Position(ft)	0	0	0		0	
Detector 1 Size(ft)	20	6	6		20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA		Perm	
Protected Phases	7	4	8			

Lanes, Volumes, Timings

53: Marion Road & Shaws

12/06/2019

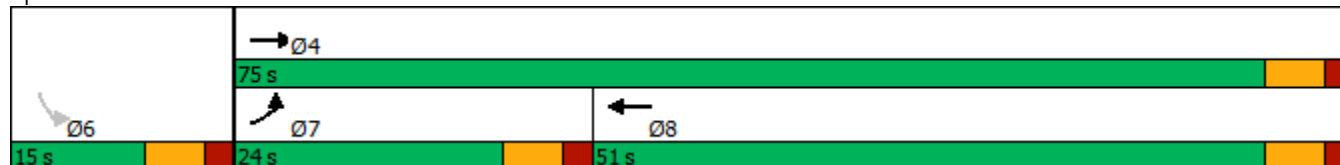


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases					6	
Detector Phase	7	4	8		6	
Switch Phase						
Minimum Initial (s)	11.0	5.0	5.0		5.0	
Minimum Split (s)	24.0	24.0	24.0		11.0	
Total Split (s)	24.0	75.0	51.0		15.0	
Total Split (%)	26.7%	83.3%	56.7%		16.7%	
Maximum Green (s)	18.0	69.0	45.0		9.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		Max	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)	12.6	60.0	45.4		18.1	
Actuated g/C Ratio	0.14	0.67	0.50		0.20	
v/c Ratio	0.47	0.53	1.01		0.49	
Control Delay	44.1	9.5	57.2		31.3	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	44.1	9.5	57.2		31.3	
LOS	D	A	E		C	
Approach Delay		14.7	57.2		31.3	
Approach LOS		B	E		C	

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90.2
Natural Cycle:	90
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.01
Intersection Signal Delay:	37.3
Intersection LOS:	D
Intersection Capacity Utilization:	77.0%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 53: Marion Road & Shaws



Lanes, Volumes, Timings
55: Marion Road & Gibbs Avenue

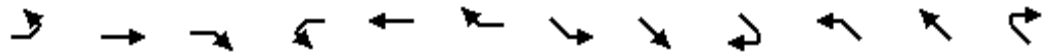
12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	193	434	506	21	24	276
Future Volume (vph)	193	434	506	21	24	276
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	16	16	12	12
Storage Length (ft)	125			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.876	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1711	1801	2101	0	1625	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1711	1801	2101	0	1625	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		285	1841		501	
Travel Time (s)		6.5	41.8		11.4	
Peak Hour Factor	0.94	0.94	0.91	0.91	0.93	0.93
Adj. Flow (vph)	205	462	556	23	26	297
Shared Lane Traffic (%)						
Lane Group Flow (vph)	205	462	579	0	323	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	0.85	0.85	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	67.0%			ICU Level of Service C		
Analysis Period (min)	15					

Lanes, Volumes, Timings
57: High Street & Marion Road

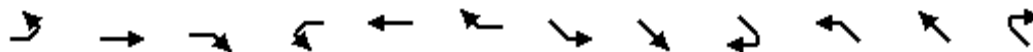
12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	33	331	130	5	394	17	23	88	35	183	65	22
Future Volume (vph)	33	331	130	5	394	17	23	88	35	183	65	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	15	15	15	12	12	12	14	14	14
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.964			0.994			0.967			0.962	
Fl _t Protected		0.997			0.999			0.992		0.950		
Satd. Flow (prot)	0	2029	0	0	2035	0	0	1787	0	1888	1911	0
Fl _t Permitted		0.953			0.995			0.950		0.682		
Satd. Flow (perm)	0	1939	0	0	2027	0	0	1711	0	1355	1911	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		43			5			29			24	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1841			479			513			510	
Travel Time (s)		41.8			10.9			11.7			11.6	
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	35	348	137	5	433	19	27	102	41	201	71	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	520	0	0	457	0	0	170	0	201	95	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			14			14	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.85	0.85	0.85	0.88	0.88	0.88	1.00	1.00	1.00	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%	
Maximum Green (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
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	0.0	
Total Lost Time (s)		5.0			5.0			5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		30.0			30.0			20.0		20.0	20.0	
Actuated g/C Ratio		0.50			0.50			0.33		0.33	0.33	

Lanes, Volumes, Timings
57: High Street & Marion Road

12/06/2019

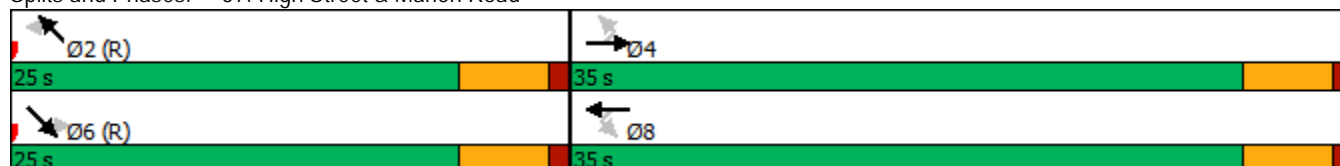


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio		0.52			0.45			0.29		0.45	0.15	
Control Delay		11.6			11.4			13.8		19.6	11.9	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		11.6			11.4			13.8		19.6	11.9	
LOS		B			B			B		B	B	
Approach Delay		11.6			11.4			13.8			17.1	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	60
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.52
Intersection Signal Delay:	12.9
Intersection LOS:	B
Intersection Capacity Utilization	77.1%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 57: High Street & Marion Road



Lanes, Volumes, Timings
61: Fairhaven Road & River Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Volume (vph)	38	432	540	11	22	39
Future Volume (vph)	38	432	540	11	22	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.913	
Flt Protected		0.996			0.982	
Satd. Flow (prot)	0	1793	1795	0	1670	0
Flt Permitted		0.996			0.982	
Satd. Flow (perm)	0	1793	1795	0	1670	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		494	4565		394	
Travel Time (s)		11.2	103.8		9.0	
Peak Hour Factor	0.92	0.92	0.86	0.86	0.78	0.78
Adj. Flow (vph)	41	470	628	13	28	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	511	641	0	78	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	64.5%
Analysis Period (min)	15
	ICU Level of Service C

Lanes, Volumes, Timings
2: Huttleston Avenue & Mill Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↔		↔↔	
Traffic Volume (vph)	17	1181	858	10	40	38
Future Volume (vph)	17	1181	858	10	40	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.998		0.934	
Flt Protected		0.999			0.975	
Satd. Flow (prot)	0	3076	3073	0	1527	0
Flt Permitted		0.999			0.975	
Satd. Flow (perm)	0	3076	3073	0	1527	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1082	1396		506	
Travel Time (s)		24.6	31.7		11.5	
Peak Hour Factor	0.96	0.96	0.83	0.83	0.52	0.52
Adj. Flow (vph)	18	1230	1034	12	77	73
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1248	1046	0	150	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.19	1.19	1.19	1.19	1.14	1.14
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	CBD
Control Type:	Unsignalized
Intersection Capacity Utilization	61.3%
Analysis Period (min)	15
	ICU Level of Service B

Lanes, Volumes, Timings
 4: Huttleston Avenue & Weeden Road

12/06/2019



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	22	9	681	72	4	536
Future Volume (vph)	22	9	681	72	4	536
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.961		0.986			
Flt Protected	0.966					
Satd. Flow (prot)	1729	0	3373	0	0	3421
Flt Permitted	0.966					
Satd. Flow (perm)	1729	0	3373	0	0	3421
Link Speed (mph)	30		30			30
Link Distance (ft)	498		1396			2661
Travel Time (s)	11.3		31.7			60.5
Peak Hour Factor	0.57	0.57	0.87	0.87	0.88	0.88
Adj. Flow (vph)	39	16	783	83	5	609
Shared Lane Traffic (%)						
Lane Group Flow (vph)	55	0	866	0	0	614
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	31.1%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings

6: New Boston Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↔		↖	↗
Traffic Volume (vph)	67	708	572	45	50	73
Future Volume (vph)	67	708	572	45	50	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	12
Storage Length (ft)	0			0	0	160
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.989			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	3408	3384	0	1711	1583
Flt Permitted		0.856			0.950	
Satd. Flow (perm)	0	2929	3384	0	1711	1583
Right Turn on Red				No		No
Satd. Flow (RTOR)						
Link Speed (mph)		30	30		30	
Link Distance (ft)		2661	516		800	
Travel Time (s)		60.5	11.7		18.2	
Peak Hour Factor	0.90	0.90	0.96	0.96	0.87	0.87
Adj. Flow (vph)	74	787	596	47	57	84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	861	643	0	57	84
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	100	100		20	20
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	20	6	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	

Lanes, Volumes, Timings
6: New Boston Road

12/06/2019

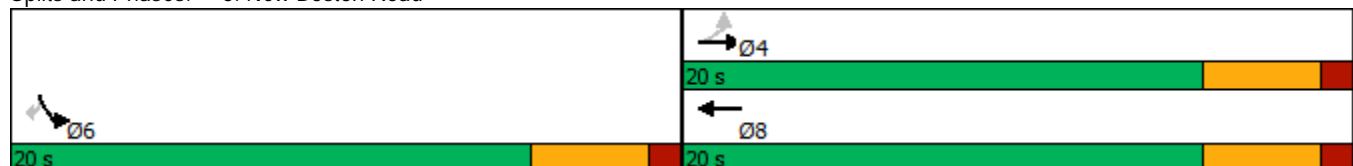


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	4					6
Detector Phase	4	4	8		6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	20.0	20.0	20.0		20.0	20.0
Total Split (s)	20.0	20.0	20.0		20.0	20.0
Total Split (%)	50.0%	50.0%	50.0%		50.0%	50.0%
Maximum Green (s)	15.5	15.5	15.5		15.5	15.5
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	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)		4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	None		Min	Min
Act Effect Green (s)		14.0	14.0		7.1	7.1
Actuated g/C Ratio		0.46	0.46		0.24	0.24
v/c Ratio		0.63	0.41		0.14	0.23
Control Delay		8.8	6.4		10.5	11.4
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		8.8	6.4		10.5	11.4
LOS		A	A		B	B
Approach Delay		8.8	6.4		11.0	
Approach LOS		A	A		B	

Intersection Summary

Area Type:	Other
Cycle Length:	40
Actuated Cycle Length:	30.2
Natural Cycle:	40
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.63
Intersection Signal Delay:	8.1
Intersection LOS:	A
Intersection Capacity Utilization:	54.2%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 6: New Boston Road



Lanes, Volumes, Timings
8: Gелlette Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	694	40	17	562	28	20
Future Volume (vph)	694	40	17	562	28	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.992				0.943	
Flt Protected				0.999	0.972	
Satd. Flow (prot)	3394	0	0	3418	1650	0
Flt Permitted				0.999	0.972	
Satd. Flow (perm)	3394	0	0	3418	1650	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			2679	535	
Travel Time (s)	11.7			60.9	12.2	
Peak Hour Factor	0.89	0.89	0.93	0.93	0.65	0.65
Adj. Flow (vph)	780	45	18	604	43	31
Shared Lane Traffic (%)						
Lane Group Flow (vph)	825	0	0	622	74	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	37.8%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
10: Shaw Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	467	133	17	514	35	5
Future Volume (vph)	467	133	17	514	35	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	14	14
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.967			0.983		
Flt Protected				0.998	0.958	
Satd. Flow (prot)	3308	0	0	3414	1871	0
Flt Permitted				0.998	0.958	
Satd. Flow (perm)	3308	0	0	3414	1871	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2679			2104	500	
Travel Time (s)	60.9			47.8	11.4	
Peak Hour Factor	0.92	0.92	0.94	0.94	0.84	0.84
Adj. Flow (vph)	508	145	18	547	42	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	653	0	0	565	48	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.92	0.92
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	36.5%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 12: Wareham Road & Creek Road

12/06/2019



Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	51	20	455	84	6	342
Future Volume (vph)	51	20	455	84	6	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.962		0.977			
Flt Protected	0.965					0.999
Satd. Flow (prot)	1672	0	3343	0	0	3418
Flt Permitted	0.965					0.999
Satd. Flow (perm)	1672	0	3343	0	0	3418
Link Speed (mph)	30		30			30
Link Distance (ft)	882		1429			3254
Travel Time (s)	20.0		32.5			74.0
Peak Hour Factor	0.60	0.60	0.93	0.93	0.95	0.95
Adj. Flow (vph)	85	33	489	90	6	360
Shared Lane Traffic (%)						
Lane Group Flow (vph)	118	0	579	0	0	366
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	26.0%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
14: Brandt Island Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	426	44	49	503	32	33
Future Volume (vph)	426	44	49	503	32	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.986			0.931		
Flt Protected				0.996	0.976	
Satd. Flow (prot)	3373	0	0	3408	1636	0
Flt Permitted				0.996	0.976	
Satd. Flow (perm)	3373	0	0	3408	1636	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2104			2288	496	
Travel Time (s)	47.8			52.0	11.3	
Peak Hour Factor	0.90	0.90	0.94	0.94	0.66	0.66
Adj. Flow (vph)	473	49	52	535	48	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	522	0	0	587	98	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	42.3% ICU Level of Service A
Analysis Period (min)	15

Lanes, Volumes, Timings
16: Mattapoisett Neck Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	401	42	67	487	28	41
Future Volume (vph)	401	42	67	487	28	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.986			0.919		
Flt Protected				0.994	0.980	
Satd. Flow (prot)	3373	0	0	3401	1622	0
Flt Permitted				0.994	0.980	
Satd. Flow (perm)	3373	0	0	3401	1622	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2288			494	531	
Travel Time (s)	52.0			11.2	12.1	
Peak Hour Factor	0.95	0.95	0.89	0.89	0.75	0.75
Adj. Flow (vph)	422	44	75	547	37	55
Shared Lane Traffic (%)						
Lane Group Flow (vph)	466	0	0	622	92	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.9% ICU Level of Service A
Analysis Period (min)	15

Lanes, Volumes, Timings
18: Main Street & Fairhaven Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		↕↕			↕↕			↕			↕		
Traffic Volume (vph)	5	434	36	31	543	44	65	18	15	29	12	9	
Future Volume (vph)	5	434	36	31	543	44	65	18	15	29	12	9	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	11	11	11	11	11	13	13	13	16	16	16	
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.989			0.989			0.979			0.975		
Flt Protected		0.999			0.997			0.968			0.972		
Satd. Flow (prot)	0	3042	0	0	3036	0	0	1642	0	0	1801	0	
Flt Permitted		0.945			0.904			0.787			0.822		
Satd. Flow (perm)	0	2878	0	0	2753	0	0	1335	0	0	1523	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		20			18			16			11		
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		4565			395			496			500		
Travel Time (s)		103.8			9.0			11.3			11.4		
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.80	0.80	0.80	0.85	0.85	0.85	
Adj. Flow (vph)	6	482	40	33	578	47	81	23	19	34	14	11	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	528	0	0	658	0	0	123	0	0	59	0	
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right	
Median Width(ft)		0			0			0			0		
Link Offset(ft)		0			0			0			0		
Crosswalk Width(ft)		16			16			16			16		
Two way Left Turn Lane													
Headway Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.10	1.10	1.10	0.97	0.97	0.97	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Number of Detectors	1	2		1	2		1	2		1	2		
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru		
Leading Detector (ft)	20	100		20	100		20	100		20	100		
Trailing Detector (ft)	0	0		0	0		0	0		0	0		
Detector 1 Position(ft)	0	0		0	0		0	0		0	0		
Detector 1 Size(ft)	20	6		20	6		20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 2 Position(ft)		94			94			94			94		
Detector 2 Size(ft)		6			6			6			6		
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel													
Detector 2 Extend (s)		0.0			0.0			0.0			0.0		
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													

Lanes, Volumes, Timings
 18: Main Street & Fairhaven Road

12/06/2019

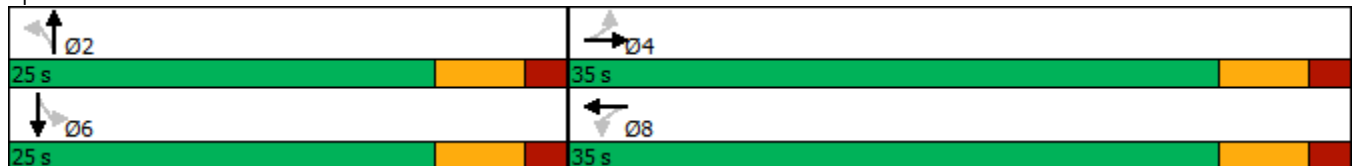


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%	
Maximum Green (s)	29.0	29.0		29.0	29.0		19.0	19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		17.4			17.4			19.2			19.2	
Actuated g/C Ratio		0.36			0.36			0.39			0.39	
v/c Ratio		0.51			0.66			0.23			0.10	
Control Delay		13.2			16.0			11.9			10.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		13.2			16.0			11.9			10.3	
LOS		B			B			B			B	
Approach Delay		13.2			16.0			11.9			10.3	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type:	CBD
Cycle Length:	60
Actuated Cycle Length:	48.7
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.66
Intersection Signal Delay:	14.3
Intersection LOS:	B
Intersection Capacity Utilization:	56.7%
ICU Level of Service:	B
Analysis Period (min):	15

Splits and Phases: 18: Main Street & Fairhaven Road



Lanes, Volumes, Timings
21: North Street

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕			↕	
Traffic Volume (vph)	187	322	16	16	360	259	11	51	16	268	52	255
Future Volume (vph)	187	322	16	16	360	259	11	51	16	268	52	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.939			0.972			0.940	
Flt Protected		0.982			0.999			0.993			0.977	
Satd. Flow (prot)	0	3343	0	0	3209	0	0	1858	0	0	1654	0
Flt Permitted		0.578			0.933			0.913			0.805	
Satd. Flow (perm)	0	1968	0	0	2997	0	0	1708	0	0	1363	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			288			19			106	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		326			3802			502			502	
Travel Time (s)		7.4			86.4			11.4			11.4	
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.84	0.84	0.84	0.85	0.85	0.85
Adj. Flow (vph)	201	346	17	18	400	288	13	61	19	315	61	300
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	564	0	0	706	0	0	93	0	0	676	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	0.96	0.96	0.96	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
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												

Lanes, Volumes, Timings

21: North Street

12/06/2019

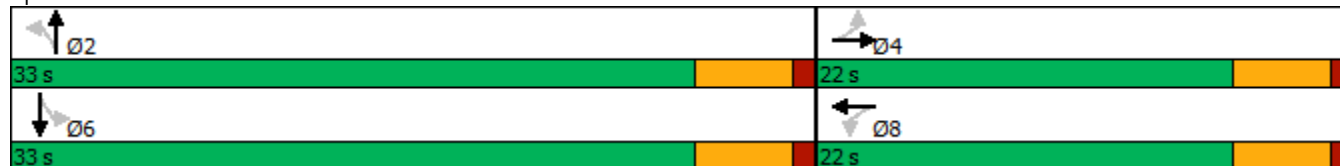


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	14.0	14.0		14.0	14.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	19.0	19.0		19.0	19.0		13.0	13.0		13.0	13.0	
Total Split (s)	22.0	22.0		22.0	22.0		33.0	33.0		33.0	33.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	17.0	17.0		17.0	17.0		28.0	28.0		28.0	28.0	
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?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		16.9			16.9			28.0			28.0	
Actuated g/C Ratio		0.31			0.31			0.51			0.51	
v/c Ratio		1.30dl			0.63			0.11			0.91	
Control Delay		43.6			12.3			6.3			30.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		43.6			12.3			6.3			30.3	
LOS		D			B			A			C	
Approach Delay		43.6			12.3			6.3			30.3	
Approach LOS		D			B			A			C	

Intersection Summary

Area Type: Other
 Cycle Length: 55
 Actuated Cycle Length: 54.9
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 26.6
 Intersection LOS: C
 Intersection Capacity Utilization 85.9%
 ICU Level of Service E
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 21: North Street



Lanes, Volumes, Timings
 24: Prospect Road/Randall Road & Marion Road

12/06/2019



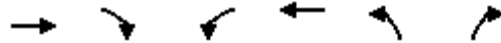
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕			↕	
Traffic Volume (vph)	6	381	38	33	456	6	22	0	12	5	0	4
Future Volume (vph)	6	381	38	33	456	6	22	0	12	5	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.998			0.952			0.941	
Flt Protected		0.999			0.997			0.969			0.973	
Satd. Flow (prot)	0	3373	0	0	3404	0	0	1661	0	0	1649	0
Flt Permitted		0.999			0.997			0.969			0.973	
Satd. Flow (perm)	0	3373	0	0	3404	0	0	1661	0	0	1649	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1466			15280			657			606	
Travel Time (s)		33.3			347.3			14.9			13.8	
Peak Hour Factor	0.84	0.84	0.84	0.86	0.86	0.86	0.58	0.58	0.58	0.58	0.58	0.58
Adj. Flow (vph)	7	454	45	38	530	7	38	0	21	9	0	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	506	0	0	575	0	0	59	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	39.0%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
26: Church Street Ext

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	415	47	2	418	40	1
Future Volume (vph)	415	47	2	418	40	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.985			0.996		
Flt Protected				0.954		
Satd. Flow (prot)	3370	0	0	3421	1652	0
Flt Permitted				0.954		
Satd. Flow (perm)	3370	0	0	3421	1652	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	3802			1012	473	
Travel Time (s)	86.4			23.0	10.8	
Peak Hour Factor	0.81	0.81	0.83	0.83	0.92	0.92
Growth Factor	100%	100%	100%	100%	77%	77%
Adj. Flow (vph)	512	58	2	504	33	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	570	0	0	506	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	23.0%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
28: Marion Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	
Traffic Volume (vph)	336	1	1	390	34	31
Future Volume (vph)	336	1	1	390	34	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.922	
Flt Protected					0.979	
Satd. Flow (prot)	3421	0	0	3421	1625	0
Flt Permitted					0.979	
Satd. Flow (perm)	3421	0	0	3421	1625	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1012			1466	421	
Travel Time (s)	23.0			33.3	9.6	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.72	0.48
Adj. Flow (vph)	365	1	1	433	47	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	366	0	0	434	112	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	21.9%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
30: Marion Road & Converse Road

12/06/2019



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	54	77	354	51	92	423
Future Volume (vph)	54	77	354	51	92	423
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt		0.850	0.981			
Flt Protected	0.950					0.991
Satd. Flow (prot)	1770	1583	3356	0	0	3390
Flt Permitted	0.950					0.991
Satd. Flow (perm)	1770	1583	3356	0	0	3390
Link Speed (mph)	30		30			30
Link Distance (ft)	531		15280			1140
Travel Time (s)	12.1		347.3			25.9
Peak Hour Factor	0.81	0.81	0.91	0.91	0.87	0.87
Adj. Flow (vph)	67	95	389	56	106	486
Shared Lane Traffic (%)						
Lane Group Flow (vph)	67	95	445	0	0	592
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	39.1%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
32: Main Street & Mill Street

12/06/2019



















Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	38	68	394	57	74	401
Future Volume (vph)	38	68	394	57	74	401
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.913		0.981			
Flt Protected	0.982					0.992
Satd. Flow (prot)	1670	0	3356	0	0	3394
Flt Permitted	0.982					0.992
Satd. Flow (perm)	1670	0	3356	0	0	3394
Link Speed (mph)	30		30			30
Link Distance (ft)	500		1140			4673
Travel Time (s)	11.4		25.9			106.2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.88	0.88
Adj. Flow (vph)	42	75	433	63	84	456
Shared Lane Traffic (%)						
Lane Group Flow (vph)	117	0	496	0	0	540
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	42.2%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 34: Mill Street & Spring Street

12/06/2019

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	48	48	22	37	251	170	523	6	29	296	5
Future Volume (vph)	7	48	48	22	37	251	170	523	6	29	296	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.937			0.891			0.999			0.998	
Flt Protected		0.997			0.996			0.988			0.996	
Satd. Flow (prot)	0	1682	0	0	1598	0	0	3377	0	0	3401	0
Flt Permitted		0.997			0.996			0.988			0.996	
Satd. Flow (perm)	0	1682	0	0	1598	0	0	3377	0	0	3401	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		499			498			4673			490	
Travel Time (s)		11.3			11.3			106.2			11.1	
Peak Hour Factor	0.89	0.89	0.89	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	8	54	54	24	40	273	185	568	7	32	325	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	0	0	337	0	0	760	0	0	362	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	63.2%						ICU Level of Service B					
Analysis Period (min)	15											

Lanes, Volumes, Timings
37: Front Street & Wareham Road

12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕↔			↕↔	
Traffic Volume (vph)	218	85	13	32	124	96	216	228	13	50	250	194
Future Volume (vph)	218	85	13	32	124	96	216	228	13	50	250	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.994			0.949			0.996			0.941	
Flt Protected		0.967			0.994			0.977			0.995	
Satd. Flow (prot)	0	1790	0	0	1757	0	0	3329	0	0	3203	0
Flt Permitted		0.683			0.928			0.643			0.857	
Satd. Flow (perm)	0	1265	0	0	1640	0	0	2191	0	0	2759	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			96			8			211	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			508			490			2182	
Travel Time (s)		11.4			11.5			11.1			49.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	237	92	14	35	135	104	235	248	14	54	272	211
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	343	0	0	274	0	0	497	0	0	537	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												

Lanes, Volumes, Timings
 37: Front Street & Wareham Road

12/06/2019

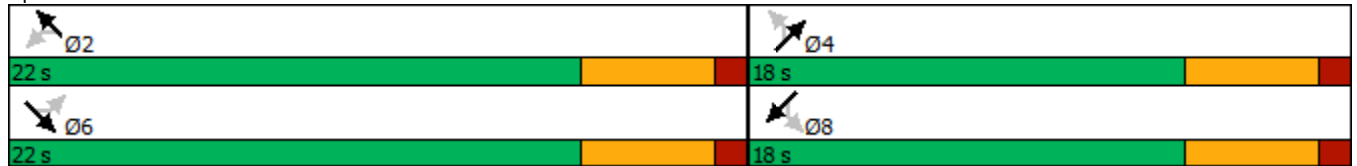


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		11.5	11.5	
Minimum Split (s)	12.0	12.0		12.0	12.0		17.0	17.0		17.0	17.0	
Total Split (s)	22.0	22.0		22.0	22.0		18.0	18.0		18.0	18.0	
Total Split (%)	55.0%	55.0%		55.0%	55.0%		45.0%	45.0%		45.0%	45.0%	
Maximum Green (s)	17.0	17.0		17.0	17.0		13.0	13.0		13.0	13.0	
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?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		18.0			18.0			12.6			12.6	
Actuated g/C Ratio		0.44			0.44			0.31			0.31	
v/c Ratio		0.61			0.35			0.93dl			0.54	
Control Delay		14.4			6.5			20.4			9.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		14.4			6.5			20.4			9.1	
LOS		B			A			C			A	
Approach Delay		14.4			6.5			20.4			9.1	
Approach LOS		B			A			C			A	

Intersection Summary

Area Type: Other
 Cycle Length: 40
 Actuated Cycle Length: 40.6
 Natural Cycle: 40
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 13.2
 Intersection LOS: B
 Intersection Capacity Utilization 75.7%
 ICU Level of Service D
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 37: Front Street & Wareham Road



Lanes, Volumes, Timings
40: Wareham Road & Hermitage Road

12/06/2019



Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	6	2	504	5	2	372
Future Volume (vph)	6	2	504	5	2	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.965		0.998			
Flt Protected	0.964					
Satd. Flow (prot)	1617	0	3414	0	0	3421
Flt Permitted	0.964					
Satd. Flow (perm)	1617	0	3414	0	0	3421
Link Speed (mph)	30		30			30
Link Distance (ft)	504		2182			1429
Travel Time (s)	11.5		49.6			32.5
Peak Hour Factor	0.35	0.35	0.90	0.90	0.89	0.89
Adj. Flow (vph)	17	6	560	6	2	418
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	0	566	0	0	420
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	24.1%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
42: Point Road & Wareham Road

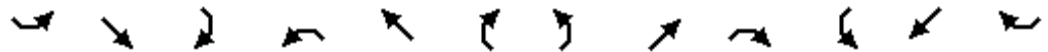
12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕↕			↕↕			↕↕			↕↕	
Traffic Volume (vph)	67	35	17	21	23	70	18	338	2	112	323	107
Future Volume (vph)	67	35	17	21	23	70	18	338	2	112	323	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.981			0.917			0.999			0.970	
Flt Protected		0.972			0.991			0.997			0.990	
Satd. Flow (prot)	0	1717	0	0	1636	0	0	3408	0	0	3285	0
Flt Permitted		0.793			0.941			0.916			0.783	
Satd. Flow (perm)	0	1401	0	0	1554	0	0	3131	0	0	2598	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			76			1			72	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		784			806			3254			5829	
Travel Time (s)		17.8			18.3			74.0			132.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	38	18	23	25	76	20	367	2	122	351	116
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	0	0	124	0	0	389	0	0	589	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Minimum Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (%)	45.5%	45.5%		45.5%	45.5%		54.5%	54.5%		54.5%	54.5%	
Maximum Green (s)	20.0	20.0		20.0	20.0		25.0	25.0		25.0	25.0	
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?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		20.0			20.0			25.0			25.0	
Actuated g/C Ratio		0.36			0.36			0.45			0.45	
v/c Ratio		0.25			0.20			0.27			0.48	
Control Delay		12.3			6.8			10.0			10.7	
Queue Delay		0.0			0.0			0.0			0.0	

Lanes, Volumes, Timings
 42: Point Road & Wareham Road

12/06/2019

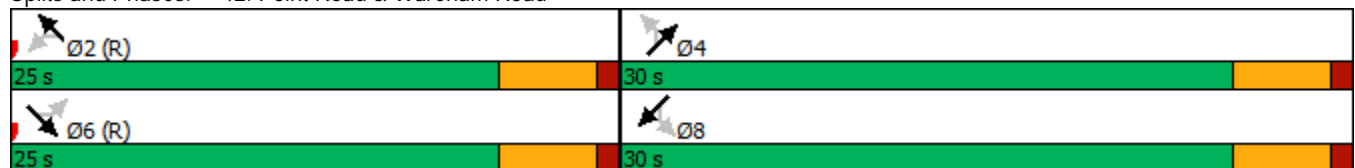


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay		12.3			6.8			10.0			10.7	
LOS		B			A			A			B	
Approach Delay		12.3			6.8			10.0			10.7	
Approach LOS		B			A			A			B	

Intersection Summary

Area Type:	Other
Cycle Length:	55
Actuated Cycle Length:	55
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	55
Control Type:	Pretimed
Maximum v/c Ratio:	0.48
Intersection Signal Delay:	10.2
Intersection LOS:	B
Intersection Capacity Utilization	51.3%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 42: Point Road & Wareham Road



Lanes, Volumes, Timings
45: Wareham Road & Hathaway Street

12/06/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	28	65	60	409	501	46
Future Volume (vph)	28	65	60	409	501	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.906				0.987	
Flt Protected	0.985			0.994		
Satd. Flow (prot)	1662	0	0	3401	3377	0
Flt Permitted	0.985			0.994		
Satd. Flow (perm)	1662	0	0	3401	3377	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	590			5829	3420	
Travel Time (s)	13.4			132.5	77.7	
Peak Hour Factor	0.83	0.83	0.94	0.94	0.96	0.96
Adj. Flow (vph)	34	78	64	435	522	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	112	0	0	499	570	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	43.9%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
49: Cromesett Road & Marion Road

12/06/2019



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	56	96	482	72	140	567
Future Volume (vph)	56	96	482	72	140	567
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.915		0.980			
Flt Protected	0.982					0.990
Satd. Flow (prot)	1674	0	3353	0	0	3387
Flt Permitted	0.982					0.990
Satd. Flow (perm)	1674	0	3353	0	0	3387
Link Speed (mph)	30		30			30
Link Distance (ft)	565		3420			1505
Travel Time (s)	12.8		77.7			34.2
Peak Hour Factor	0.87	0.87	0.89	0.89	0.94	0.94
Adj. Flow (vph)	64	110	542	81	149	603
Shared Lane Traffic (%)						
Lane Group Flow (vph)	174	0	623	0	0	752
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	54.4%
Analysis Period (min)	15
	ICU Level of Service A

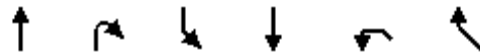
Lanes, Volumes, Timings
51: Marion Road & Swifts Beach Road

12/06/2019

	↑	↖	↙	↓	↘	↗
Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations	↑↑			↑↑	↘	
Traffic Volume (vph)	562	81	220	691	72	188
Future Volume (vph)	562	81	220	691	72	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.981				0.904	
Flt Protected				0.988	0.986	
Satd. Flow (prot)	3356	0	0	3380	1660	0
Flt Permitted				0.647	0.986	
Satd. Flow (perm)	3356	0	0	2214	1660	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	1505			1848	506	
Travel Time (s)	34.2			42.0	11.5	
Peak Hour Factor	0.92	0.90	0.89	0.89	0.69	0.74
Adj. Flow (vph)	611	90	247	776	104	254
Shared Lane Traffic (%)						
Lane Group Flow (vph)	701	0	0	1023	358	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	
Permitted Phases			6			
Detector Phase	2		6	6	4	
Switch Phase						

Lanes, Volumes, Timings
 51: Marion Road & Swifts Beach Road

12/06/2019



Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	40.0		40.0	40.0	20.0	
Total Split (%)	66.7%		66.7%	66.7%	33.3%	
Maximum Green (s)	35.5		35.5	35.5	15.5	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	4.5			4.5	4.5	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		None	None	None	
Act Effect Green (s)	35.5			35.5	14.9	
Actuated g/C Ratio	0.60			0.60	0.25	
v/c Ratio	0.35			0.77	0.86	
Control Delay	6.8			14.4	44.4	
Queue Delay	0.0			0.0	0.0	
Total Delay	6.8			14.4	44.4	
LOS	A			B	D	
Approach Delay	6.8			14.4	44.4	
Approach LOS	A			B	D	

Intersection Summary

Area Type: Other
 Cycle Length: 60
 Actuated Cycle Length: 59.4
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 17.0
 Intersection LOS: B
 Intersection Capacity Utilization 70.4%
 ICU Level of Service C
 Analysis Period (min) 15

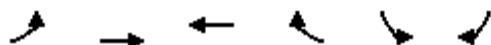
Splits and Phases: 51: Marion Road & Swifts Beach Road



Lanes, Volumes, Timings

53: Marion Road & Shaws

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	104	581	691	94	95	89
Future Volume (vph)	104	581	691	94	95	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	15	15
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.982		0.935	
Flt Protected	0.950				0.975	
Satd. Flow (prot)	1711	1801	3360	0	1868	0
Flt Permitted	0.950				0.975	
Satd. Flow (perm)	1711	1801	3360	0	1868	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			25		63	
Link Speed (mph)		30	30		30	
Link Distance (ft)		1848	285		278	
Travel Time (s)		42.0	6.5		6.3	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	113	632	794	108	103	97
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	632	902	0	200	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.88	0.88
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	
Detector Template	Left	Thru	Thru		Left	
Leading Detector (ft)	20	100	100		20	
Trailing Detector (ft)	0	0	0		0	
Detector 1 Position(ft)	0	0	0		0	
Detector 1 Size(ft)	20	6	6		20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA		Perm	
Protected Phases	7	4	8			
Permitted Phases					6	
Detector Phase	7	4	8		6	
Switch Phase						

Lanes, Volumes, Timings
53: Marion Road & Shaws

12/06/2019

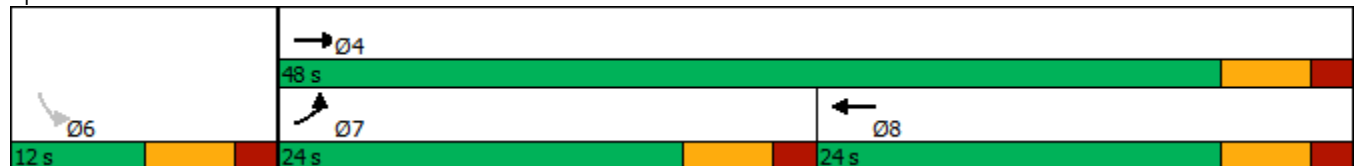


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)	11.0	5.0	5.0		5.0	
Minimum Split (s)	24.0	24.0	24.0		11.0	
Total Split (s)	24.0	48.0	24.0		12.0	
Total Split (%)	40.0%	80.0%	40.0%		20.0%	
Maximum Green (s)	18.0	42.0	18.0		6.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		Max	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effect Green (s)	11.8	31.0	17.8		18.5	
Actuated g/C Ratio	0.19	0.50	0.29		0.30	
v/c Ratio	0.35	0.70	0.91		0.33	
Control Delay	27.6	15.9	37.9		15.6	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	27.6	15.9	37.9		15.6	
LOS	C	B	D		B	
Approach Delay		17.7	37.9		15.6	
Approach LOS		B	D		B	

Intersection Summary

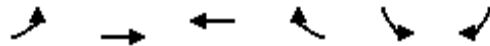
Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	61.8
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.91
Intersection Signal Delay:	27.3
Intersection LOS:	C
Intersection Capacity Utilization:	57.0%
ICU Level of Service:	B
Analysis Period (min):	15

Splits and Phases: 53: Marion Road & Shaws



Lanes, Volumes, Timings
55: Marion Road & Gibbs Avenue

12/06/2019



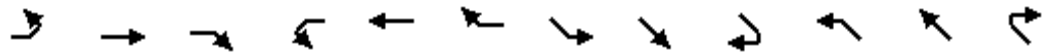
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	193	434	506	21	24	276
Future Volume (vph)	193	434	506	21	24	276
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	16	16	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.876	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1711	1801	2101	0	1625	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1711	1801	2101	0	1625	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		285	1841		501	
Travel Time (s)		6.5	41.8		11.4	
Peak Hour Factor	0.94	0.94	0.91	0.91	0.93	0.93
Adj. Flow (vph)	205	462	556	23	26	297
Shared Lane Traffic (%)						
Lane Group Flow (vph)	205	462	579	0	323	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	0.85	0.85	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	67.0%
	ICU Level of Service C
Analysis Period (min)	15

Lanes, Volumes, Timings
57: High Street & Marion Road

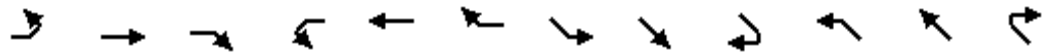
12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	33	331	130	5	394	17	23	88	35	183	65	22
Future Volume (vph)	33	331	130	5	394	17	23	88	35	183	65	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	15	15	15	12	12	12	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.964			0.994			0.967			0.989	
Flt Protected		0.997			0.999			0.992			0.967	
Satd. Flow (prot)	0	2029	0	0	2035	0	0	1787	0	0	1900	0
Flt Permitted		0.953			0.995			0.920			0.724	
Satd. Flow (perm)	0	1939	0	0	2027	0	0	1657	0	0	1423	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		43			5			29			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1841			479			513			510	
Travel Time (s)		41.8			10.9			11.7			11.6	
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	35	348	137	5	433	19	27	102	41	201	71	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	520	0	0	457	0	0	170	0	0	296	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.85	0.85	0.85	0.88	0.88	0.88	1.00	1.00	1.00	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%	
Maximum Green (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
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?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		30.0			30.0			20.0			20.0	
Actuated g/C Ratio		0.50			0.50			0.33			0.33	
v/c Ratio		0.52			0.45			0.30			0.62	
Control Delay		11.6			11.4			13.9			23.0	
Queue Delay		0.0			0.0			0.0			0.0	

Lanes, Volumes, Timings
 57: High Street & Marion Road

12/06/2019

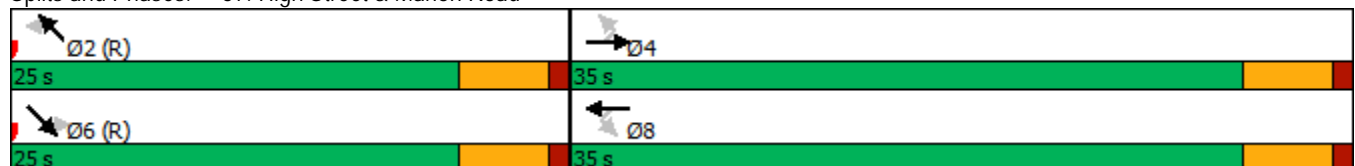


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay		11.6			11.4			13.9			23.0	
LOS		B			B			B			C	
Approach Delay		11.6			11.4			13.9			23.0	
Approach LOS		B			B			B			C	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	60
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.62
Intersection Signal Delay:	14.1
Intersection LOS:	B
Intersection Capacity Utilization	81.8%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 57: High Street & Marion Road



Lanes, Volumes, Timings
61: Fairhaven Road & River Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↔		↔↔	
Traffic Volume (vph)	38	432	540	11	22	39
Future Volume (vph)	38	432	540	11	22	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.997		0.913	
Flt Protected		0.996			0.982	
Satd. Flow (prot)	0	3408	3411	0	1670	0
Flt Permitted		0.996			0.982	
Satd. Flow (perm)	0	3408	3411	0	1670	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		494	4565		394	
Travel Time (s)		11.2	103.8		9.0	
Peak Hour Factor	0.92	0.92	0.86	0.86	0.78	0.78
Adj. Flow (vph)	41	470	628	13	28	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	511	641	0	78	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.9%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 2: Huttleston Avenue & Mill Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↔		↔↔	
Traffic Volume (vph)	17	1181	858	10	40	38
Future Volume (vph)	17	1181	858	10	40	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.998		0.934	
Flt Protected		0.999			0.975	
Satd. Flow (prot)	0	3076	3073	0	1527	0
Flt Permitted		0.999			0.975	
Satd. Flow (perm)	0	3076	3073	0	1527	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1082	1396		506	
Travel Time (s)		24.6	31.7		11.5	
Peak Hour Factor	0.96	0.96	0.83	0.83	0.52	0.52
Adj. Flow (vph)	18	1230	1034	12	77	73
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1248	1046	0	150	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.19	1.19	1.19	1.19	1.14	1.14
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	CBD
Control Type:	Unsignalized
Intersection Capacity Utilization	61.3%
Analysis Period (min)	15
	ICU Level of Service B

Lanes, Volumes, Timings
 4: Huttleston Avenue & Weeden Road

12/06/2019



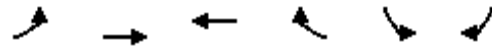
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	22	9	681	72	4	536
Future Volume (vph)	22	9	681	72	4	536
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.961		0.986			
Flt Protected	0.966					
Satd. Flow (prot)	1729	0	3373	0	0	3421
Flt Permitted	0.966					
Satd. Flow (perm)	1729	0	3373	0	0	3421
Link Speed (mph)	30		30			30
Link Distance (ft)	498		1396			2661
Travel Time (s)	11.3		31.7			60.5
Peak Hour Factor	0.57	0.57	0.87	0.87	0.88	0.88
Adj. Flow (vph)	39	16	783	83	5	609
Shared Lane Traffic (%)						
Lane Group Flow (vph)	55	0	866	0	0	614
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	31.1% ICU Level of Service A
Analysis Period (min)	15

Lanes, Volumes, Timings
6: New Boston Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↗	↘
Traffic Volume (vph)	67	708	572	45	50	73
Future Volume (vph)	67	708	572	45	50	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	12
Storage Length (ft)	0			0	0	160
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.989			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	3408	3384	0	1711	1583
Flt Permitted		0.996			0.950	
Satd. Flow (perm)	0	3408	3384	0	1711	1583
Link Speed (mph)		30	30		30	
Link Distance (ft)		2661	516		800	
Travel Time (s)		60.5	11.7		18.2	
Peak Hour Factor	0.90	0.90	0.96	0.96	0.87	0.87
Adj. Flow (vph)	74	787	596	47	57	84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	861	643	0	57	84
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	52.1%			ICU Level of Service A		
Analysis Period (min)	15					

Lanes, Volumes, Timings
8: Gелlette Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	694	40	17	562	28	20
Future Volume (vph)	694	40	17	562	28	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.992				0.943	
Flt Protected				0.999	0.972	
Satd. Flow (prot)	3394	0	0	3418	1650	0
Flt Permitted				0.999	0.972	
Satd. Flow (perm)	3394	0	0	3418	1650	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			2679	535	
Travel Time (s)	11.7			60.9	12.2	
Peak Hour Factor	0.89	0.89	0.93	0.93	0.65	0.65
Adj. Flow (vph)	780	45	18	604	43	31
Shared Lane Traffic (%)						
Lane Group Flow (vph)	825	0	0	622	74	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	37.8%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
10: Shaw Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	467	133	17	514	35	5
Future Volume (vph)	467	133	17	514	35	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	14	14
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.967			0.983		
Flt Protected				0.998	0.958	
Satd. Flow (prot)	3308	0	0	3414	1871	0
Flt Permitted				0.998	0.958	
Satd. Flow (perm)	3308	0	0	3414	1871	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2679			2104	500	
Travel Time (s)	60.9			47.8	11.4	
Peak Hour Factor	0.92	0.92	0.94	0.94	0.84	0.84
Adj. Flow (vph)	508	145	18	547	42	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	653	0	0	565	48	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	14	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.92	0.92
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	36.5%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
12: Wareham Road & Creek Road

12/06/2019



Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	51	20	455	84	6	342
Future Volume (vph)	51	20	455	84	6	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.962		0.977			
Flt Protected	0.965					0.999
Satd. Flow (prot)	1672	0	3343	0	0	3418
Flt Permitted	0.965					0.999
Satd. Flow (perm)	1672	0	3343	0	0	3418
Link Speed (mph)	30		30			30
Link Distance (ft)	882		1429			3254
Travel Time (s)	20.0		32.5			74.0
Peak Hour Factor	0.60	0.60	0.93	0.93	0.95	0.95
Adj. Flow (vph)	85	33	489	90	6	360
Shared Lane Traffic (%)						
Lane Group Flow (vph)	118	0	579	0	0	366
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	26.0%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
14: Brandt Island Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	426	44	49	503	32	33
Future Volume (vph)	426	44	49	503	32	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.986				0.931	
Flt Protected				0.996	0.976	
Satd. Flow (prot)	3373	0	0	3408	1636	0
Flt Permitted				0.996	0.976	
Satd. Flow (perm)	3373	0	0	3408	1636	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2104			2288	496	
Travel Time (s)	47.8			52.0	11.3	
Peak Hour Factor	0.90	0.90	0.94	0.94	0.66	0.66
Adj. Flow (vph)	473	49	52	535	48	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	522	0	0	587	98	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	42.3%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
16: Mattapoisett Neck Road

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	401	42	67	487	28	41
Future Volume (vph)	401	42	67	487	28	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.986			0.919		
Flt Protected				0.994	0.980	
Satd. Flow (prot)	3373	0	0	3401	1622	0
Flt Permitted				0.994	0.980	
Satd. Flow (perm)	3373	0	0	3401	1622	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	2288			494	531	
Travel Time (s)	52.0			11.2	12.1	
Peak Hour Factor	0.95	0.95	0.89	0.89	0.75	0.75
Adj. Flow (vph)	422	44	75	547	37	55
Shared Lane Traffic (%)						
Lane Group Flow (vph)	466	0	0	622	92	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.9% ICU Level of Service A
Analysis Period (min)	15

Lanes, Volumes, Timings
18: Main Street & Fairhaven Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕				↕
Traffic Volume (vph)	5	434	36	31	543	44	65	18	15	29	12	9
Future Volume (vph)	5	434	36	31	543	44	65	18	15	29	12	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	16	16	16
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.989			0.979				0.975
Flt Protected		0.999			0.997			0.968				0.972
Satd. Flow (prot)	0	3042	0	0	3036	0	0	1642	0	0	1801	0
Flt Permitted		0.946			0.903			0.798				0.835
Satd. Flow (perm)	0	2881	0	0	2750	0	0	1353	0	0	1547	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			15			16				11
Link Speed (mph)		30			30			30				30
Link Distance (ft)		4565			395			496				500
Travel Time (s)		103.8			9.0			11.3				11.4
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.80	0.80	0.80	0.85	0.85	0.85
Adj. Flow (vph)	6	482	40	33	578	47	81	23	19	34	14	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	528	0	0	658	0	0	123	0	0	59	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.10	1.10	1.10	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
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												

Lanes, Volumes, Timings
 18: Main Street & Fairhaven Road

12/06/2019

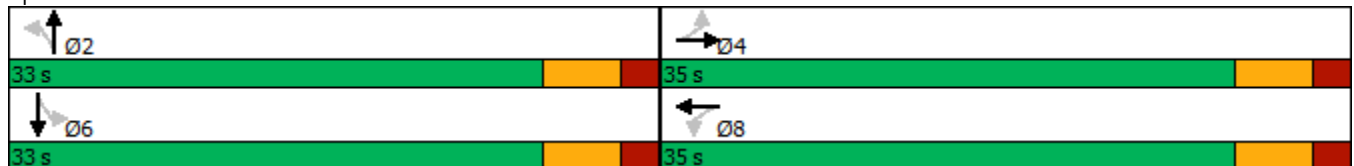


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		33.0	33.0		33.0	33.0	
Total Split (%)	51.5%	51.5%		51.5%	51.5%		48.5%	48.5%		48.5%	48.5%	
Maximum Green (s)	29.0	29.0		29.0	29.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		19.9			19.9			27.2			27.2	
Actuated g/C Ratio		0.34			0.34			0.46			0.46	
v/c Ratio		0.54			0.71			0.20			0.08	
Control Delay		17.2			20.9			11.1			9.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		17.2			20.9			11.1			9.9	
LOS		B			C			B			A	
Approach Delay		17.2			20.9			11.1			9.9	
Approach LOS		B			C			B			A	

Intersection Summary

Area Type:	CBD
Cycle Length:	68
Actuated Cycle Length:	59.2
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.71
Intersection Signal Delay:	18.1
Intersection LOS:	B
Intersection Capacity Utilization:	56.7%
ICU Level of Service:	B
Analysis Period (min):	15

Splits and Phases: 18: Main Street & Fairhaven Road



Lanes, Volumes, Timings
21: North Street

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕			↕	
Traffic Volume (vph)	187	322	16	16	360	259	11	51	16	268	52	255
Future Volume (vph)	187	322	16	16	360	259	11	51	16	268	52	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	13	13	13	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.939			0.972			0.940	
Flt Protected		0.982			0.999			0.993			0.977	
Satd. Flow (prot)	0	3343	0	0	3209	0	0	1858	0	0	1654	0
Flt Permitted		0.584			0.932			0.914			0.805	
Satd. Flow (perm)	0	1988	0	0	2994	0	0	1710	0	0	1363	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			288			19			110	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		326			3802			502			502	
Travel Time (s)		7.4			86.4			11.4			11.4	
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.84	0.84	0.84	0.85	0.85	0.85
Adj. Flow (vph)	201	346	17	18	400	288	13	61	19	315	61	300
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	564	0	0	706	0	0	93	0	0	676	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	0.96	0.96	0.96	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
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												

Lanes, Volumes, Timings

21: North Street

12/06/2019

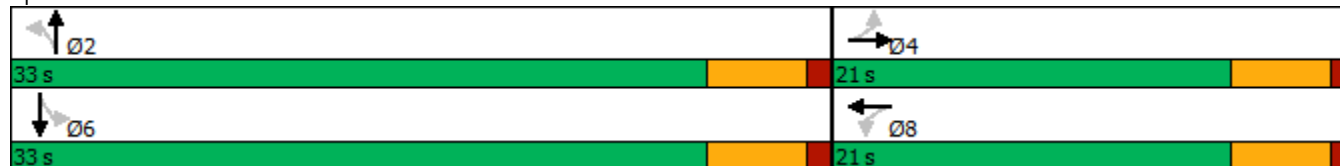


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	14.0	14.0		14.0	14.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	19.0	19.0		19.0	19.0		13.0	13.0		13.0	13.0	
Total Split (s)	21.0	21.0		21.0	21.0		33.0	33.0		33.0	33.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%		61.1%	61.1%		61.1%	61.1%	
Maximum Green (s)	16.0	16.0		16.0	16.0		28.0	28.0		28.0	28.0	
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?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		16.0			16.0			28.0			28.0	
Actuated g/C Ratio		0.30			0.30			0.52			0.52	
v/c Ratio		1.38dl			0.65			0.10			0.89	
Control Delay		49.0			12.8			5.9			27.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		49.0			12.8			5.9			27.6	
LOS		D			B			A			C	
Approach Delay		49.0			12.8			5.9			27.6	
Approach LOS		D			B			A			C	

Intersection Summary

Area Type: Other
 Cycle Length: 54
 Actuated Cycle Length: 54
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.95
 Intersection Signal Delay: 27.4
 Intersection LOS: C
 Intersection Capacity Utilization 85.9%
 ICU Level of Service E
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 21: North Street



Lanes, Volumes, Timings
 24: Prospect Road/Randall Road & Marion Road

12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕			↕	
Traffic Volume (vph)	6	381	38	33	456	6	22	0	12	5	0	4
Future Volume (vph)	6	381	38	33	456	6	22	0	12	5	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.998			0.952			0.941	
Flt Protected		0.999			0.997			0.969			0.973	
Satd. Flow (prot)	0	3373	0	0	3404	0	0	1661	0	0	1649	0
Flt Permitted		0.999			0.997			0.969			0.973	
Satd. Flow (perm)	0	3373	0	0	3404	0	0	1661	0	0	1649	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1466			15280			657			606	
Travel Time (s)		33.3			347.3			14.9			13.8	
Peak Hour Factor	0.84	0.84	0.84	0.86	0.86	0.86	0.58	0.58	0.58	0.58	0.58	0.58
Adj. Flow (vph)	7	454	45	38	530	7	38	0	21	9	0	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	506	0	0	575	0	0	59	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	39.0%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
26: Church Street Ext

12/06/2019



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	415	47	2	418	40	1
Future Volume (vph)	415	47	2	418	40	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	10	10
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.985			0.996		
Flt Protected				0.954		
Satd. Flow (prot)	3370	0	0	3421	1652	0
Flt Permitted				0.954		
Satd. Flow (perm)	3370	0	0	3421	1652	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	3802			1012	473	
Travel Time (s)	86.4			23.0	10.8	
Peak Hour Factor	0.81	0.81	0.83	0.83	0.92	0.92
Growth Factor	100%	100%	100%	100%	77%	77%
Adj. Flow (vph)	512	58	2	504	33	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	570	0	0	506	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (mph)	9		15	15		9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	23.0%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
28: Marion Road

12/06/2019













Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Volume (vph)	336	1	1	390	34	31
Future Volume (vph)	336	1	1	390	34	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.922	
Flt Protected					0.979	
Satd. Flow (prot)	3421	0	0	3421	1625	0
Flt Permitted					0.979	
Satd. Flow (perm)	3421	0	0	3421	1625	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1012			1466	421	
Travel Time (s)	23.0			33.3	9.6	
Peak Hour Factor	0.92	0.92	0.90	0.90	0.72	0.48
Adj. Flow (vph)	365	1	1	433	47	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	366	0	0	434	112	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	21.9%
Analysis Period (min)	15
	ICU Level of Service A












Lanes, Volumes, Timings
30: Marion Road & Converse Road

12/06/2019

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	54	77	354	51	92	423
Future Volume (vph)	54	77	354	51	92	423
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt		0.850	0.981			
Flt Protected	0.950					0.991
Satd. Flow (prot)	1770	1583	3356	0	0	3390
Flt Permitted	0.950					0.991
Satd. Flow (perm)	1770	1583	3356	0	0	3390
Link Speed (mph)	30		30			30
Link Distance (ft)	531		15280			1140
Travel Time (s)	12.1		347.3			25.9
Peak Hour Factor	0.81	0.81	0.91	0.91	0.87	0.87
Adj. Flow (vph)	67	95	389	56	106	486
Shared Lane Traffic (%)						
Lane Group Flow (vph)	67	95	445	0	0	592
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	39.1%			ICU Level of Service A		
Analysis Period (min)	15					

















Lanes, Volumes, Timings
32: Main Street & Mill Street

12/06/2019

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			 
Traffic Volume (vph)	38	68	394	57	74	401
Future Volume (vph)	38	68	394	57	74	401
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.913		0.981			
Flt Protected	0.982					0.992
Satd. Flow (prot)	1670	0	3356	0	0	3394
Flt Permitted	0.982					0.992
Satd. Flow (perm)	1670	0	3356	0	0	3394
Link Speed (mph)	30		30			30
Link Distance (ft)	500		1140			4673
Travel Time (s)	11.4		25.9			106.2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.88	0.88
Adj. Flow (vph)	42	75	433	63	84	456
Shared Lane Traffic (%)						
Lane Group Flow (vph)	117	0	496	0	0	540
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	42.2%			ICU Level of Service A		
Analysis Period (min)	15					

Lanes, Volumes, Timings
34: Mill Street & Spring Street

12/06/2019

												
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	48	48	22	37	251	170	523	6	29	296	5
Future Volume (vph)	7	48	48	22	37	251	170	523	6	29	296	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.937			0.891			0.999			0.998	
Flt Protected		0.997			0.996			0.988			0.996	
Satd. Flow (prot)	0	1682	0	0	1598	0	0	3377	0	0	3401	0
Flt Permitted		0.997			0.996			0.988			0.996	
Satd. Flow (perm)	0	1682	0	0	1598	0	0	3377	0	0	3401	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		499			498			4673			490	
Travel Time (s)		11.3			11.3			106.2			11.1	
Peak Hour Factor	0.89	0.89	0.89	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	8	54	54	24	40	273	185	568	7	32	325	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	0	0	337	0	0	760	0	0	362	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	63.2%						ICU Level of Service B					
Analysis Period (min)	15											

Lanes, Volumes, Timings
37: Front Street & Wareham Road

12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕↔			↕↔	
Traffic Volume (vph)	218	85	13	32	124	96	216	228	13	50	250	194
Future Volume (vph)	218	85	13	32	124	96	216	228	13	50	250	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.994			0.949			0.996			0.941	
Flt Protected		0.967			0.994			0.977			0.995	
Satd. Flow (prot)	0	1790	0	0	1757	0	0	3329	0	0	3203	0
Flt Permitted		0.669			0.928			0.630			0.862	
Satd. Flow (perm)	0	1239	0	0	1640	0	0	2147	0	0	2775	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			63			7			211	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			508			490			2182	
Travel Time (s)		11.4			11.5			11.1			49.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	237	92	14	35	135	104	235	248	14	54	272	211
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	343	0	0	274	0	0	497	0	0	537	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												

Lanes, Volumes, Timings
37: Front Street & Wareham Road

12/06/2019

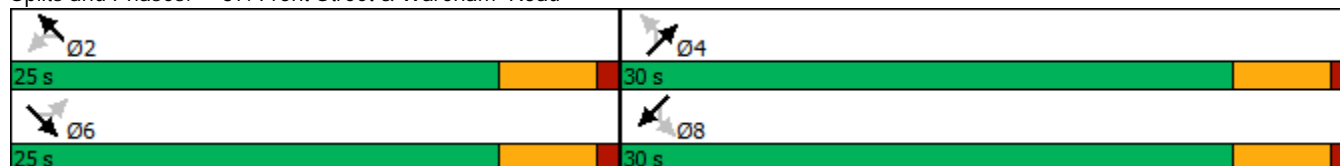


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		11.5	11.5	
Minimum Split (s)	12.0	12.0		12.0	12.0		17.0	17.0		17.0	17.0	
Total Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (%)	45.5%	45.5%		45.5%	45.5%		54.5%	54.5%		54.5%	54.5%	
Maximum Green (s)	20.0	20.0		20.0	20.0		25.0	25.0		25.0	25.0	
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?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		20.2			20.2			16.6			16.6	
Actuated g/C Ratio		0.43			0.43			0.35			0.35	
v/c Ratio		0.64			0.37			0.65			0.48	
Control Delay		20.1			9.8			16.7			8.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		20.1			9.8			16.7			8.1	
LOS		C			A			B			A	
Approach Delay		20.1			9.8			16.7			8.1	
Approach LOS		C			A			B			A	

Intersection Summary

Area Type:	Other
Cycle Length:	55
Actuated Cycle Length:	46.8
Natural Cycle:	40
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.65
Intersection Signal Delay:	13.4
Intersection LOS:	B
Intersection Capacity Utilization:	75.7%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 37: Front Street & Wareham Road



Lanes, Volumes, Timings
40: Wareham Road & Hermitage Road

12/06/2019



Lane Group	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	6	2	504	5	2	372
Future Volume (vph)	6	2	504	5	2	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.965		0.998			
Flt Protected	0.964					
Satd. Flow (prot)	1617	0	3414	0	0	3421
Flt Permitted	0.964					
Satd. Flow (perm)	1617	0	3414	0	0	3421
Link Speed (mph)	30		30			30
Link Distance (ft)	504		2182			1429
Travel Time (s)	11.5		49.6			32.5
Peak Hour Factor	0.35	0.35	0.90	0.90	0.89	0.89
Adj. Flow (vph)	17	6	560	6	2	418
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	0	566	0	0	420
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	10		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	24.1%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
42: Point Road & Wareham Road

12/06/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕↕			↕↕			↕↕			↕↕	
Traffic Volume (vph)	67	35	17	21	23	70	18	338	2	112	323	107
Future Volume (vph)	67	35	17	21	23	70	18	338	2	112	323	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.981			0.917			0.999			0.970	
Flt Protected		0.972			0.991			0.997			0.990	
Satd. Flow (prot)	0	1717	0	0	1636	0	0	3408	0	0	3285	0
Flt Permitted		0.795			0.943			0.916			0.779	
Satd. Flow (perm)	0	1404	0	0	1557	0	0	3131	0	0	2585	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			76			1			62	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		784			806			3254			5829	
Travel Time (s)		17.8			18.3			74.0			132.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	38	18	23	25	76	20	367	2	122	351	116
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	0	0	124	0	0	389	0	0	589	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Minimum Split (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	30.0	30.0		30.0	30.0		35.0	35.0		35.0	35.0	
Total Split (%)	46.2%	46.2%		46.2%	46.2%		53.8%	53.8%		53.8%	53.8%	
Maximum Green (s)	25.0	25.0		25.0	25.0		30.0	30.0		30.0	30.0	
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?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		25.0			25.0			30.0			30.0	
Actuated g/C Ratio		0.38			0.38			0.46			0.46	
v/c Ratio		0.23			0.19			0.27			0.48	
Control Delay		13.3			7.1			11.4			12.3	
Queue Delay		0.0			0.0			0.0			0.0	

Lanes, Volumes, Timings
 42: Point Road & Wareham Road

12/06/2019

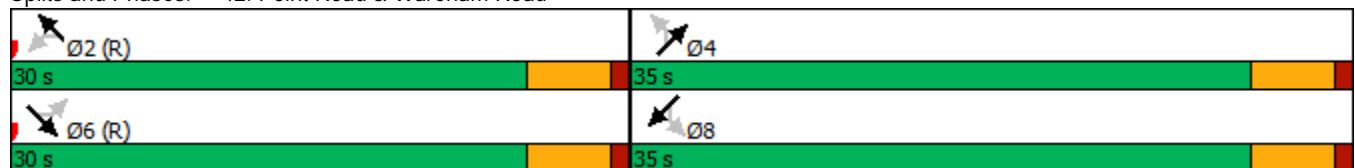


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay		13.3			7.1			11.4			12.3	
LOS		B			A			B			B	
Approach Delay		13.3			7.1			11.4			12.3	
Approach LOS		B			A			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	65
Actuated Cycle Length:	65
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	55
Control Type:	Pretimed
Maximum v/c Ratio:	0.48
Intersection Signal Delay:	11.6
Intersection LOS:	B
Intersection Capacity Utilization	51.3%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 42: Point Road & Wareham Road



Lanes, Volumes, Timings
45: Wareham Road & Hathaway Street

12/06/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	28	65	60	409	501	46
Future Volume (vph)	28	65	60	409	501	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.906				0.987	
Flt Protected	0.985			0.994		
Satd. Flow (prot)	1662	0	0	3401	3377	0
Flt Permitted	0.985			0.994		
Satd. Flow (perm)	1662	0	0	3401	3377	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	590			5829	3420	
Travel Time (s)	13.4			132.5	77.7	
Peak Hour Factor	0.83	0.83	0.94	0.94	0.96	0.96
Adj. Flow (vph)	34	78	64	435	522	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	112	0	0	499	570	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	43.9%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
 49: Cromesett Road & Marion Road

12/06/2019



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	56	96	482	72	140	567
Future Volume (vph)	56	96	482	72	140	567
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.915		0.980			
Flt Protected	0.982					0.990
Satd. Flow (prot)	1674	0	3353	0	0	3387
Flt Permitted	0.982					0.990
Satd. Flow (perm)	1674	0	3353	0	0	3387
Link Speed (mph)	30		30			30
Link Distance (ft)	565		3420			1505
Travel Time (s)	12.8		77.7			34.2
Peak Hour Factor	0.87	0.87	0.89	0.89	0.94	0.94
Adj. Flow (vph)	64	110	542	81	149	603
Shared Lane Traffic (%)						
Lane Group Flow (vph)	174	0	623	0	0	752
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	54.4%
Analysis Period (min)	15
	ICU Level of Service A

Lanes, Volumes, Timings
51: Marion Road & Swifts Beach Road

12/06/2019

	↑	↖	↙	↓	↘	↗
Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations	↑↑			↖↑	↘	
Traffic Volume (vph)	562	81	220	691	72	188
Future Volume (vph)	562	81	220	691	72	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.981				0.904	
Flt Protected				0.988	0.986	
Satd. Flow (prot)	3356	0	0	3380	1660	0
Flt Permitted				0.988	0.986	
Satd. Flow (perm)	3356	0	0	3380	1660	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1505			1848	506	
Travel Time (s)	34.2			42.0	11.5	
Peak Hour Factor	0.92	0.90	0.89	0.89	0.69	0.74
Adj. Flow (vph)	611	90	247	776	104	254
Shared Lane Traffic (%)						
Lane Group Flow (vph)	701	0	0	1023	358	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	69.2%			ICU Level of Service C		
Analysis Period (min)	15					

Lanes, Volumes, Timings
53: Marion Road & Shaws

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	104	581	691	94	95	89
Future Volume (vph)	104	581	691	94	95	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	15	15
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.982		0.935	
Flt Protected	0.950				0.975	
Satd. Flow (prot)	1711	1801	3360	0	1868	0
Flt Permitted	0.950				0.975	
Satd. Flow (perm)	1711	1801	3360	0	1868	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			26		63	
Link Speed (mph)		30	30		30	
Link Distance (ft)		1848	285		278	
Travel Time (s)		42.0	6.5		6.3	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	113	632	794	108	103	97
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	632	902	0	200	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	0.88	0.88
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	
Detector Template	Left	Thru	Thru		Left	
Leading Detector (ft)	20	100	100		20	
Trailing Detector (ft)	0	0	0		0	
Detector 1 Position(ft)	0	0	0		0	
Detector 1 Size(ft)	20	6	6		20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA		Perm	
Protected Phases	7	4	8			
Permitted Phases					6	
Detector Phase	7	4	8		6	
Switch Phase						

Lanes, Volumes, Timings

53: Marion Road & Shaws

12/06/2019

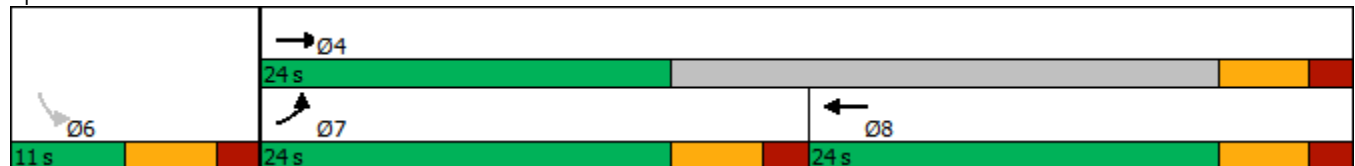


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)	11.0	5.0	5.0		5.0	
Minimum Split (s)	24.0	24.0	24.0		11.0	
Total Split (s)	24.0	24.0	24.0		11.0	
Total Split (%)	40.7%	40.7%	40.7%		18.6%	
Maximum Green (s)	18.0	18.0	18.0		5.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		Max	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effect Green (s)	11.8	30.6	17.4		18.5	
Actuated g/C Ratio	0.19	0.50	0.28		0.30	
v/c Ratio	0.34	0.70	0.93		0.33	
Control Delay	27.1	16.1	40.4		15.3	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	27.1	16.1	40.4		15.3	
LOS	C	B	D		B	
Approach Delay		17.8	40.4		15.3	
Approach LOS		B	D		B	

Intersection Summary

Area Type:	Other
Cycle Length:	59
Actuated Cycle Length:	61.4
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.93
Intersection Signal Delay:	28.6
Intersection LOS:	C
Intersection Capacity Utilization:	57.0%
ICU Level of Service:	B
Analysis Period (min):	15

Splits and Phases: 53: Marion Road & Shaws



Lanes, Volumes, Timings
55: Marion Road & Gibbs Avenue

12/06/2019



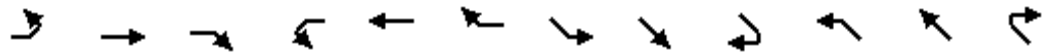
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	193	434	506	21	24	276
Future Volume (vph)	193	434	506	21	24	276
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	16	16	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.876	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1711	1801	2101	0	1625	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1711	1801	2101	0	1625	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		285	1841		501	
Travel Time (s)		6.5	41.8		11.4	
Peak Hour Factor	0.94	0.94	0.91	0.91	0.93	0.93
Adj. Flow (vph)	205	462	556	23	26	297
Shared Lane Traffic (%)						
Lane Group Flow (vph)	205	462	579	0	323	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	0.85	0.85	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	67.0%
Analysis Period (min)	15
	ICU Level of Service C

Lanes, Volumes, Timings
57: High Street & Marion Road

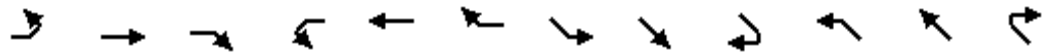
12/06/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	33	331	130	5	394	17	23	88	35	183	65	22
Future Volume (vph)	33	331	130	5	394	17	23	88	35	183	65	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	15	15	15	12	12	12	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.964			0.994			0.967			0.989	
Flt Protected		0.997			0.999			0.992			0.967	
Satd. Flow (prot)	0	2029	0	0	2035	0	0	1787	0	0	1900	0
Flt Permitted		0.953			0.995			0.920			0.724	
Satd. Flow (perm)	0	1939	0	0	2027	0	0	1657	0	0	1423	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		43			5			29			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1841			479			513			510	
Travel Time (s)		41.8			10.9			11.7			11.6	
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	35	348	137	5	433	19	27	102	41	201	71	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	520	0	0	457	0	0	170	0	0	296	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.85	0.85	0.85	0.88	0.88	0.88	1.00	1.00	1.00	0.92	0.92	0.92
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Minimum Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (s)	35.0	35.0		35.0	35.0		25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%		41.7%	41.7%		41.7%	41.7%	
Maximum Green (s)	30.0	30.0		30.0	30.0		20.0	20.0		20.0	20.0	
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?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		30.0			30.0			20.0			20.0	
Actuated g/C Ratio		0.50			0.50			0.33			0.33	
v/c Ratio		0.52			0.45			0.30			0.62	
Control Delay		11.6			11.4			13.9			23.0	
Queue Delay		0.0			0.0			0.0			0.0	

Lanes, Volumes, Timings
57: High Street & Marion Road

12/06/2019

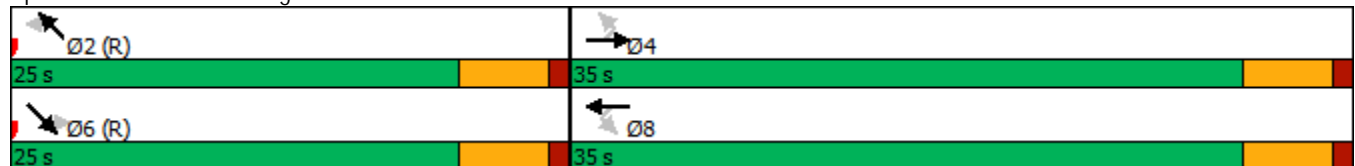


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay		11.6			11.4			13.9			23.0	
LOS		B			B			B			C	
Approach Delay		11.6			11.4			13.9			23.0	
Approach LOS		B			B			B			C	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	60
Offset:	0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.62
Intersection Signal Delay:	14.1
Intersection LOS:	B
Intersection Capacity Utilization	81.8%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 57: High Street & Marion Road



Lanes, Volumes, Timings
61: Fairhaven Road & River Road

12/06/2019



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↔		↔↔	
Traffic Volume (vph)	38	432	540	11	22	39
Future Volume (vph)	38	432	540	11	22	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.997		0.913	
Flt Protected		0.996			0.982	
Satd. Flow (prot)	0	3408	3411	0	1670	0
Flt Permitted		0.996			0.982	
Satd. Flow (perm)	0	3408	3411	0	1670	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		494	4565		394	
Travel Time (s)		11.2	103.8		9.0	
Peak Hour Factor	0.92	0.92	0.86	0.86	0.78	0.78
Adj. Flow (vph)	41	470	628	13	28	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	511	641	0	78	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.9%
Analysis Period (min)	15
	ICU Level of Service A