Draft Final
Downtown Hyannis Traffic Circulation Study

Technical Appendices

Volume II of II

Prepared for:

Town of Barnstable

December, 2001

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With assistance from:

Cape Cod Commission

Appendix A

Traffic Count Data

ATR Counts

Location : South Street East of Pearl
Location : Street
City/State: Hyannis, MA
Counter : 5853

Accurate Counts
978-664-2565

Site Code : 000015120002
Start Date: 08/23/2001
File I.D. : 12150002

Eastbound

Begin Time	Thur. 08/23 A.M.	Thur. 08/23 P.M.	Fri. 08/24 A.M.	Fri. 08/24 P.M.	Sat. 08/25 A.M.	Sat. 08/25 P.M.	Daily Avg. A.M.	Daily Avg. P.M.
12:00	42	219	48	226	90	202	60	216
12:15	44	227	55	218	74	206	58	217
12:30	35	195	48	198	67	179	50	191
12:45	62	229	60	268	84	205	69	234
01:00	72	241	68	276	85	187	75	235
01:15	36	226	33	234	90	187	53	216
01:30	16	236	19	232	32	196	22	221
01:45	14	209	6	237	19	232	13	226
02:00	19	219	13	221	24	181	19	207
02:15	12	208	12	264	15	195	13	222
02:30	10	248	10	231	8	181	9	220
02:45	5	229	5	242	11	185	7	219
03:00	5	201	1	242	12	163	6	202
03:15	8	199	2	224	15	187	8	203
03:30	1	268	5	267	10	170	5	235
03:45	7	232	6	231	11	171	8	211
04:00	5	249	9	229	9	217	8	232
04:15	5	270	4	212	4	194	4	225
04:30	8	257	8	291	8	209	8	252
04:45	16	243	19	205	13	243	16	230
05:00	17	232	13	271	13	182	14	228
05:15	11	200	18	188	17	172	15	187
05:30	16	193	22	199	16	176	18	189
05:45	31	208	36	172	18	159	28	180
06:00	41	188	37	179	27	207	35	191
06:15	70	172	67	173	55	202	64	182
06:30	107	177	101	198	70	168	93	181
06:45	145	176	144	147	83	199	124	174
07:00	110	155	103	163	65	181	93	166
07:15	122	135	118	157	81	140	107	144
07:30	153	163	171	154	93	124	139	147
07:45	199	177	185	148	99	190	161	172
08:00	171	151	167	169	109	166	149	162
08:15	187	158	184	135	117	160	163	151
08:30	231	131	212	158	122	135	188	141
08:45	231	149	199	136	175	153	202	146
09:00	180	132	185	141	151	147	172	140
09:15	170	132	178	148	151	152	166	144
09:30	239	102	186	141	139	158	188	134
09:45	198	149	200	152	156	132	185	144
10:00	193	142	221	143	168	174	194	153
10:15	192	131	215	167	188	165	198	154
10:30	221	191	233	257	187	286	214	245
10:45	188	150	227	178	185	147	200	158
11:00	236	91	225	153	189	147	217	130
11:15	236	72	228	110	77	134	180	105
11:30	224	47	264	107	32	86	173	80
11:45	237	70	243	96	215	212	232	126
Total	4778	8779	4813	9288	3679	8544	4423	8868
Combined	13557		14101		12223		13291	
Peak Hour	11:00	03:30	11:00	12:45	10:15	04:00	10:15	
Volume	933	1019	960	1010	749	863	829	
P.H.F.	.98	.94	.90	.91	.99	.88	.95	

868

ADTs

Location : South Street East of Pearl
Location : Street
City/State: Hyannis, MA
Counter : 5853

Accurate Counts
978-664-2565

Site Code : 000015120002
Start Date: 08/20/2001
File I.D. : 12150002

Eastbound

Begin Time	Mon. 08/20	Tues. 08/21	Wed. 08/22	Thur. 08/23	Fri. 08/24	Weekday Avg.	Sat. 08/25	Sun. 08/26	Week Avg.	Each * Equals 25 Vehicles
12:00 am	*	*	*	183	211	197	315	*	236	*********
01:00	*	*	*	138	126	132	226	*	163	*******
02:00	*	*	*	46	40	43	58	*	48	**
03:00	*	*	*	21	14	18	48	*	28	*
04:00	*	*	*	34	40	37	34	*	36	*
05:00	*	*	*	75	89	82	64	*	76	***
06:00	*	*	*	363	349	356	235	*	316	*************
07:00	*	*	*	584	577	580	338	*	500	********************
08:00	*	*	*	820	762	791	523	*	702	*****************************
09:00	*	*	*	787	749	768	597	*	711	*****************************
10:00	*	*	*	794	896	845	728	*	806	*********************************
11:00	*	*	*	933	960	946	513	*	802	********************************
12:00 pm	*	*	*	870	910	890	792	*	857	**********************************
01:00	*	*	*	912	979	946	802	*	898	************************************
02:00	*	*	*	904	958	931	742	*	868	**********************************
03:00	*	*	*	900	964	932	691	*	852	**********************************
04:00	*	*	*	1019	937	978	863	*	940	**************************************
05:00	*	*	*	833	830	832	689	*	784	********************************
06:00	*	*	*	713	697	705	776	*	729	******************************
07:00	*	*	*	630	622	626	635	*	629	*************************
08:00	*	*	*	589	598	594	614	*	600	************************
09:00	*	*	*	515	582	548	589	*	562	**********************
10:00	*	*	*	614	745	680	772	*	710	****************************
11:00	*	*	*	280	466	373	579	*	442	******************
Totals	0	0	0	13557	14101	13830	12223	0	13295	
% Avg. WkDa	.0%	.0%	.0%	98.0%	101.9%					
% Avg. Day	.0%	.0%	.0%	101.9%	106.0%		91.9%	.0%		
AM Peak				11:00	11:00	11:00	10:00		10:00	
Volume				933	960	946	728		806	
PM Peak				04:00	01:00	04:00	04:00		04:00	
Volume				1019	979	978	863		940	

ADTs

Location : Main Street West of
Location : Barnstable Road
City/State: Hyannis, MA
Counter : 962

Accurate Counts
978-664-2565

Site Code : 000121500001
Start Date: 08/23/2001
File I.D. : 12150001

Westbound

Begin Time	Thur. A.M.	08/23 P.M.	Fri. A.M.	08/24 P.M.	Sat. A.M.	08/25 P.M.	Daily A.M.	Avg. P.M.
12:00	82	191	97	219	121	191	100	200
12:15	73	223	94	206	103	202	90	210
12:30	60	211	52	199	97	195	70	202
12:45	38	201	43	205	94	183	58	196
01:00	53	223	47	243	93	202	64	223
01:15	33	224	44	202	60	180	46	202
01:30	25	200	26	221	37	178	29	200
01:45	11	200	19	211	43	205	24	205
02:00	21	178	10	216	25	207	19	200
02:15	16	173	14	218	18	204	16	198
02:30	21	206	12	238	18	183	17	209
02:45	8	214	10	201	14	176	11	197
03:00	8	224	8	224	17	219	11	222
03:15	13	219	3	237	15	195	10	217
03:30	5	228	2	208	8	212	5	216
03:45	5	246	8	192	9	215	7	218
04:00	9	221	10	237	8	192	9	217
04:15	6	242	8	203	5	208	6	218
04:30	7	208	10	217	10	184	9	203
04:45	18	195	21	215	17	193	19	201
05:00	12	205	6	196	8	249	9	217
05:15	17	195	10	206	17	213	15	205
05:30	16	191	23	197	15	181	18	190
05:45	21	175	25	186	22	196	23	186
06:00	34	186	33	192	30	183	32	187
06:15	44	201	32	215	27	212	34	209
06:30	61	193	60	211	45	212	55	205
06:45	74	183	100	216	49	235	74	211
07:00	92	180	94	241	70	224	85	215
07:15	102	200	94	261	65	233	87	231
07:30	140	207	140	218	73	230	118	218
07:45	171	173	137	238	96	241	135	217
08:00	166	191	151	214	114	214	144	206
08:15	158	169	151	228	110	235	140	211
08:30	179	182	158	216	140	190	159	196
08:45	168	163	177	211	167	213	171	196
09:00	190	152	177	210	143	236	170	199
09:15	180	163	198	220	140	212	173	198
09:30	201	176	189	202	161	228	184	202
09:45	201	158	215	221	155	206	190	195
10:00	192	154	226	215	174	221	197	197
10:15	203	151	201	210	141	199	182	187
10:30	225	149	234	209	162	193	207	184
10:45	193	151	189	201	130	189	171	180
11:00	196	174	200	193	95	188	164	185
11:15	206	141	199	165	199	170	201	159
11:30	212	132	231	166	175	127	206	142
11:45	219	116	203	150	178	217	200	161
Total	4385	9038	4391	10120	3713	9771	4164	9643
Combined	13423		14511		13484		13807	
Peak Hour	11:00	03:30	09:45	07:00	11:00	07:00	09:45	
Volume	833	937	876	958	647	928	776	
P.H.F.	.95	.95	.93	.91	.81	.96	.93	

786

ADTs

Location : Main Street West of
Location : Barnstable Road
City/State: Hyannis, MA
Counter : 962

Accurate Counts
978-664-2565

Site Code : 000121500001
Start Date: 08/20/2001
File I.D. : 12150001

Westbound

Begin Time	Mon. 08/20	Tues. 08/21	Wed. 08/22	Thur. 08/23	Fri. 08/24	Weekday Avg.	Sat. 08/25	Sun. 08/26	Week Avg.	Each * Equals 25 Vehicles
12:00 am	*	*	*	253	286	270	415	*	318	**********
01:00	*	*	*	122	136	129	233	*	164	*******
02:00	*	*	*	66	46	56	75	*	62	**
03:00	*	*	*	31	21	26	49	*	34	*
04:00	*	*	*	40	49	44	40	*	43	**
05:00	*	*	*	66	64	65	62	*	64	***
06:00	*	*	*	213	225	219	151	*	196	********
07:00	*	*	*	505	465	485	304	*	425	******************
08:00	*	*	*	671	637	654	531	*	613	************************
09:00	*	*	*	772	779	776	599	*	717	*****************************
10:00	*	*	*	813	850	832	607	*	757	******************************
11:00	*	*	*	833	833	833	647	*	771	*******************************
12:00 pm	*	*	*	826	829	828	771	*	809	********************************
01:00	*	*	*	847	877	862	765	*	830	*********************************
02:00	*	*	*	771	873	822	770	*	805	********************************
03:00	*	*	*	917	861	889	841	*	873	**********************************
04:00	*	*	*	866	872	869	777	*	838	*********************************
05:00	*	*	*	766	785	776	839	*	797	********************************
06:00	*	*	*	763	834	798	842	*	813	*********************************
07:00	*	*	*	760	958	859	928	*	882	**********************************
08:00	*	*	*	705	869	787	852	*	809	*********************************
09:00	*	*	*	649	853	751	882	*	795	********************************
10:00	*	*	*	605	835	720	802	*	747	******************************
11:00	*	*	*	563	674	618	702	*	646	**************************
Totals	0	0	0	13423	14511	13968	13484	0	13808	
% Avg. WkDa	.0%	.0%	.0%	96.1%	103.8%					
% Avg. Day	.0%	.0%	.0%	97.2%	105.0%		97.6%	.0%		
AM Peak				11:00	10:00	11:00	11:00		11:00	
Volume				833	850	833	647		771	
PM Peak				03:00	07:00	03:00	07:00		07:00	
Volume				917	958	889	928		882	

ADTs

Turning Movement Counts

S Street : Sea St Ext / Sea St
W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150002
Site Code : 12150002
Start Date : 08/21/2001
Page No : 1

Groups Printed- Cars - Trucks

	Sea St Ext From North				Main St From East				Sea St From South				Main St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	23	5	14	39	146	12	21	19	26	0	29	0	0	0	6	70	270	340
16:15	0	25	6	17	42	143	14	28	21	25	0	28	0	0	0	5	78	276	354
16:30	0	39	3	37	43	156	26	16	15	33	0	38	0	0	0	9	100	315	415
16:45	0	26	7	10	45	172	24	23	19	28	0	35	0	0	0	1	69	321	390
Total	0	113	21	78	169	617	76	88	74	112	0	130	0	0	0	21	317	1182	1499
17:00	0	25	8	29	45	152	18	23	29	40	0	22	0	0	0	5	79	317	396
17:15	0	27	5	36	43	142	11	16	18	31	0	18	0	0	0	3	73	277	350
17:30	0	34	7	37	48	151	19	24	18	34	0	16	0	0	0	7	84	311	395
17:45	0	23	10	8	48	141	15	19	28	36	0	35	0	0	0	0	62	301	363
Total	0	109	30	110	184	586	63	82	93	141	0	91	0	0	0	15	298	1206	1504
Grand Total	0	222	51	188	353	1203	139	170	167	253	0	221	0	0	0	36	615	2388	3003
Apprch %	0.0	81.3	18.7		20.8	71.0	8.2		39.8	60.2	0.0		0.0	0.0	0.0				
Total %	0.0	9.3	2.1		14.8	50.4	5.8		7.0	10.6	0.0		0.0	0.0	0.0		20.5	79.5	

	Sea St Ext From North				Main St From East				Sea St From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:30																
Volume	0	117	23	140	176	622	79	877	81	132	0	213	0	0	0	0	1230
Percent	0.0	83.6	16.4		20.1	70.9	9.0		38.0	62.0	0.0		0.0	0.0	0.0		
Volume	0	117	23	140	176	622	79	877	81	132	0	213	0	0	0	0	1230
Volume	0	26	7	33	45	172	24	241	19	28	0	47	0	0	0	0	321
Peak Factor																	0.958
High Int.	16:30				16:45				17:00				3:45:00 PM				
Volume	0	39	3	42	45	172	24	241	29	40	0	69					
Peak Factor				0.833				0.910				0.772					
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:30				16:15				17:00				16:00				
Volume	0	117	23	140	175	623	82	880	93	141	0	234	0	0	0	0	
Percent	0.0	83.6	16.4		19.9	70.8	9.3		39.7	60.3	0.0		-	-	-		
High Int.	16:30				16:45				17:00				-				
Volume	0	39	3	42	45	172	24	241	29	40	0	69	-	-	-	-	
Peak Factor				0.833				0.913				0.848				-	

N/S Street : Sea St Ext / Sea St
E/W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150002
Site Code : 12150002
Start Date : 08/21/2001
Page No : 1

Groups Printed- Cars

	Sea St Ext From North				Main St From East				Sea St From South				Main St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	23	5	14	39	145	12	21	19	26	0	29	0	0	0	6	70	269	339
16:15	0	24	6	17	40	142	13	28	21	25	0	28	0	0	0	5	78	271	349
16:30	0	39	3	37	42	153	25	16	14	32	0	38	0	0	0	9	100	308	408
16:45	0	26	7	10	45	172	24	23	19	28	0	35	0	0	0	1	69	321	390
Total	0	112	21	78	166	612	74	88	73	111	0	130	0	0	0	21	317	1169	1486
17:00	0	25	8	29	44	150	18	23	29	40	0	22	0	0	0	5	79	314	393
17:15	0	27	5	36	42	140	11	16	18	30	0	18	0	0	0	3	73	273	346
17:30	0	34	7	37	48	147	19	24	18	34	0	16	0	0	0	7	84	307	391
17:45	0	23	10	8	48	137	14	19	28	36	0	35	0	0	0	0	62	296	358
Total	0	109	30	110	182	574	62	82	93	140	0	91	0	0	0	15	298	1190	1488
Grand Total	0	221	51	188	348	1186	136	170	166	251	0	221	0	0	0	36	615	2359	2974
Apprch %	0.0	81.3	18.8		20.8	71.0	8.1		39.8	60.2	0.0		0.0	0.0	0.0				
Total %	0.0	9.4	2.2		14.8	50.3	5.8		7.0	10.6	0.0		0.0	0.0	0.0		20.7	79.3	

	Sea St Ext From North				Main St From East				Sea St From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:30																
Volume	0	117	23	140	173	615	78	866	80	130	0	210	0	0	0	0	1216
Percent	0.0	83.6	16.4		20.0	71.0	9.0		38.1	61.9	0.0		0.0	0.0	0.0		
Volume	0	117	23	140	173	615	78	866	80	130	0	210	0	0	0	0	1216
Volume	0	26	7	33	45	172	24	241	19	28	0	47	0	0	0	0	321
Peak Factor																	0.947
High Int.	16:30				16:45				17:00				3:45:00 PM				
Volume	0	39	3	42	45	172	24	241	29	40	0	69					
Peak Factor				0.833				0.898				0.761					
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:30				16:15				17:00				16:00				
Volume	0	117	23	140	171	617	80	868	93	140	0	233	0	0	0	0	
Percent	0.0	83.6	16.4		19.7	71.1	9.2		39.9	60.1	0.0		-	-	-		
High Int.	16:30				16:45				17:00				-				
Volume	0	39	3	42	45	172	24	241	29	40	0	69	-	-	-	-	
Peak Factor				0.833				0.900				0.844				-	

N/S Street : Sea St Ext / Sea St
E/W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150002
Site Code : 12150002
Start Date : 08/21/2001
Page No : 1

Groups Printed- Trucks

	Sea St Ext From North				Main St From East				Sea St From South				Main St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
16:15	0	1	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	5	5
16:30	0	0	0	0	1	3	1	0	1	1	0	0	0	0	0	0	0	7	7
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	3	5	2	0	1	1	0	0	0	0	0	0	0	13	13
17:00	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3	3
17:15	0	0	0	0	1	2	0	0	0	1	0	0	0	0	0	0	0	4	4
17:30	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	4
17:45	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	5	5
Total	0	0	0	0	2	12	1	0	0	1	0	0	0	0	0	0	0	16	16
Grand Total	0	1	0	0	5	17	3	0	1	2	0	0	0	0	0	0	0	29	29
Apprch %	0.0	100.0	0.0		20.0	68.0	12.0		33.3	66.7	0.0		0.0	0.0	0.0				
Total %	0.0	3.4	0.0		17.2	58.6	10.3		3.4	6.9	0.0		0.0	0.0	0.0		0.0	100.0	

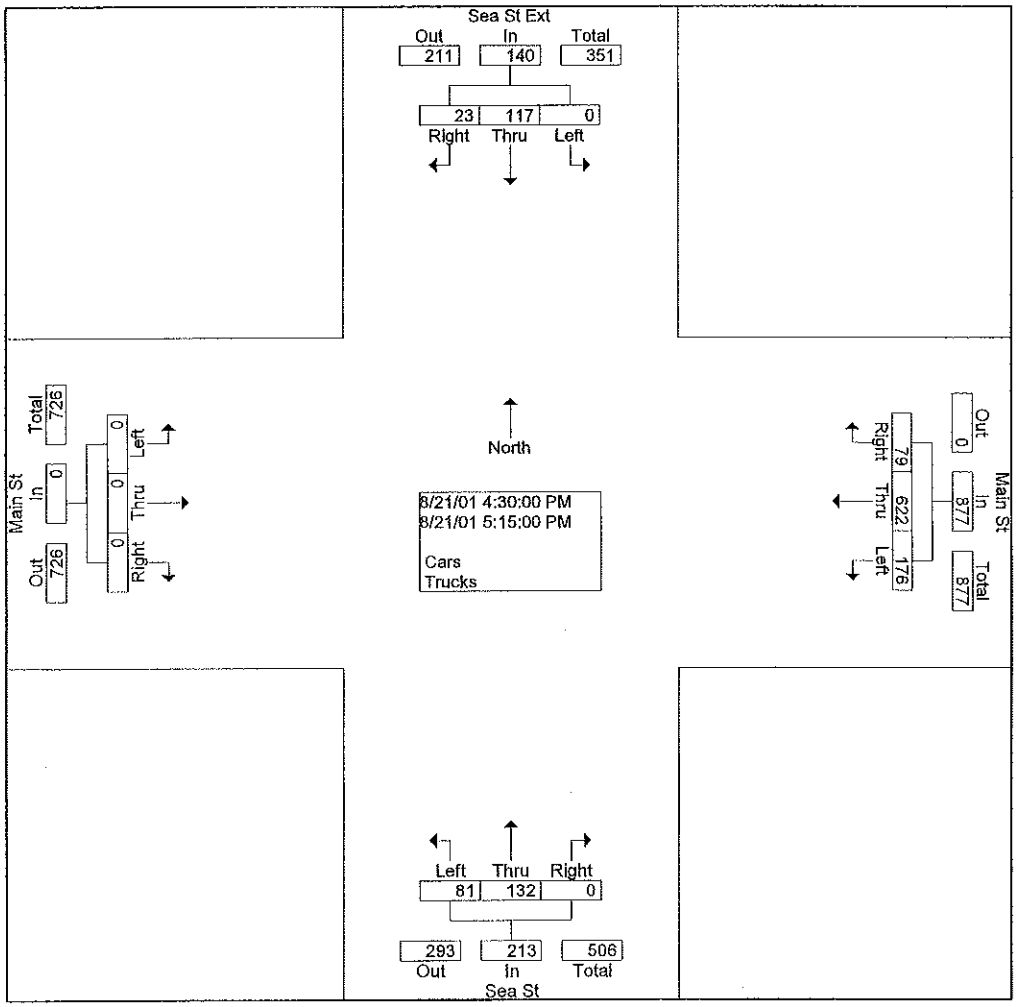
	Sea St Ext From North				Main St From East				Sea St From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	17:00																
Volume	0	0	0	0	2	12	1	15	0	1	0	1	0	0	0	0	16
Percent	0.0	0.0	0.0		13.3	80.0	6.7		0.0	100.0	0.0		0.0	0.0	0.0		
Volume	0	0	0	0	2	12	1	15	0	1	0	1	0	0	0	0	16
Volume	0	0	0	0	0	4	1	5	0	0	0	0	0	0	0	0	5
Peak Factor																	0.800
High Int.	3:45:00 PM				17:45				17:15				3:45:00 PM				
Volume	0	0	0	0	0	4	1	5	0	1	0	1					
Peak Factor								0.750				0.250					
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:00				17:00				16:30				16:00				
Volume	0	1	0	1	2	12	1	15	1	2	0	3	0	0	0	0	
Percent	0.0	100.0	0.0		13.3	80.0	6.7		33.3	66.7	0.0		-	-	-		
High Int.	16:15				17:45				16:30				-				
Volume	0	1	0	1	0	4	1	5	1	1	0	2	-	-	-	-	
Peak Factor				0.250				0.750				0.375				-	

N/S Street : Sea St Ext / Sea St
E/W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150002
Site Code : 12150002
Start Date : 08/21/2001
Page No : 1

	Sea St Ext From North				Main St From East				Sea St From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:30																
Volume	0	117	23	140	176	622	79	877	81	132	0	213	0	0	0	0	1230
Percent	0.0	83.6	16.4		20.1	70.9	9.0		38.0	62.0	0.0		0.0	0.0	0.0		
Volume	0	117	23	140	176	622	79	877	81	132	0	213	0	0	0	0	1230
Volume	0	26	7	33	45	172	24	241	19	28	0	47	0	0	0	0	321
Peak Factor																	0.958
High Int.	16:30				16:45				17:00				3:45:00 PM				
Volume	0	39	3	42	45	172	24	241	29	40	0	69					
Peak Factor				0.833				0.910				0.772					

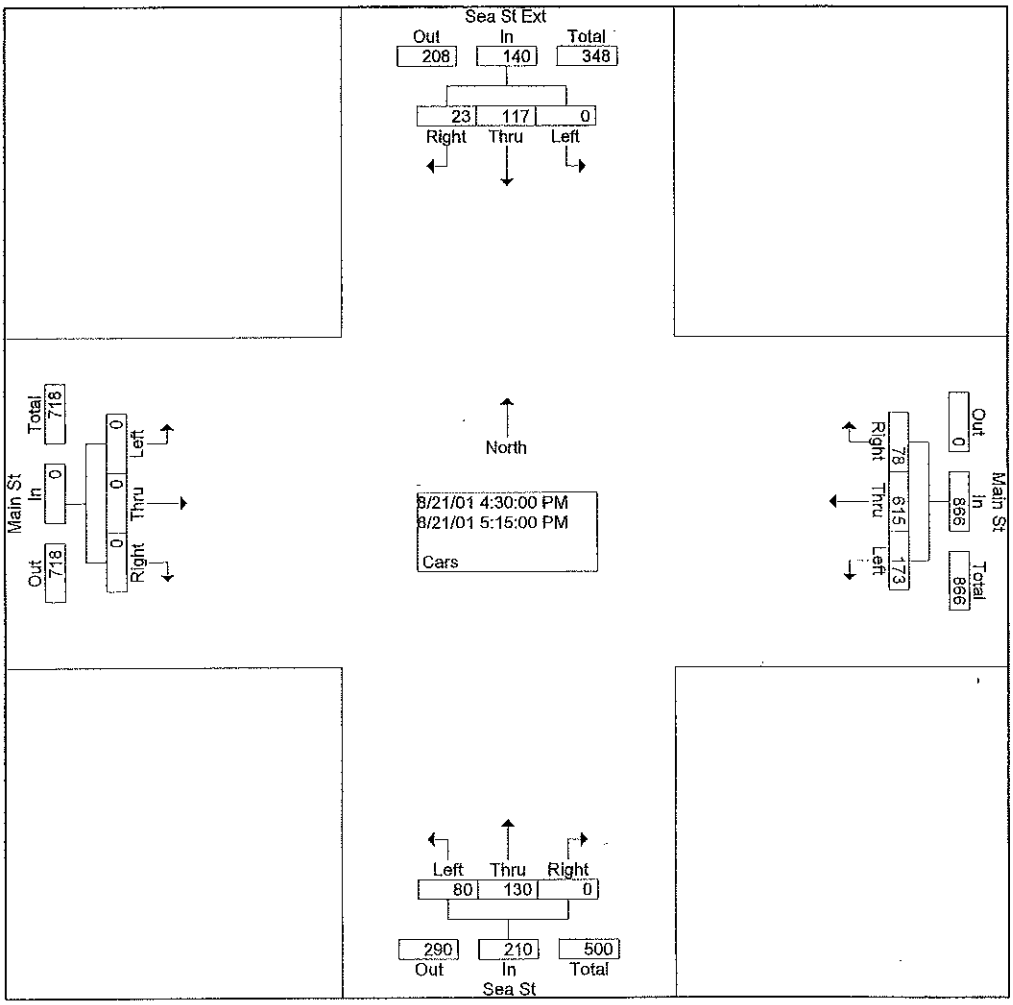


/S Street : Sea St Ext / Sea St
W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150002
Site Code : 12150002
Start Date : 08/21/2001
Page No : 1

	Sea St Ext From North				Main St From East				Sea St From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:30																
Volume	0	117	23	140	173	615	78	866	80	130	0	210	0	0	0	0	1216
Percent	0.0	83.6	16.4		20.0	71.0	9.0		38.1	61.9	0.0		0.0	0.0	0.0		
Volume	0	117	23	140	173	615	78	866	80	130	0	210	0	0	0	0	1216
Volume	0	26	7	33	45	172	24	241	19	28	0	47	0	0	0	0	321
Peak Factor																	0.947
High Int.	16:30				16:45				17:00				3:45:00 PM				
Volume	0	39	3	42	45	172	24	241	29	40	0	69					
Peak Factor				0.833				0.898				0.761					

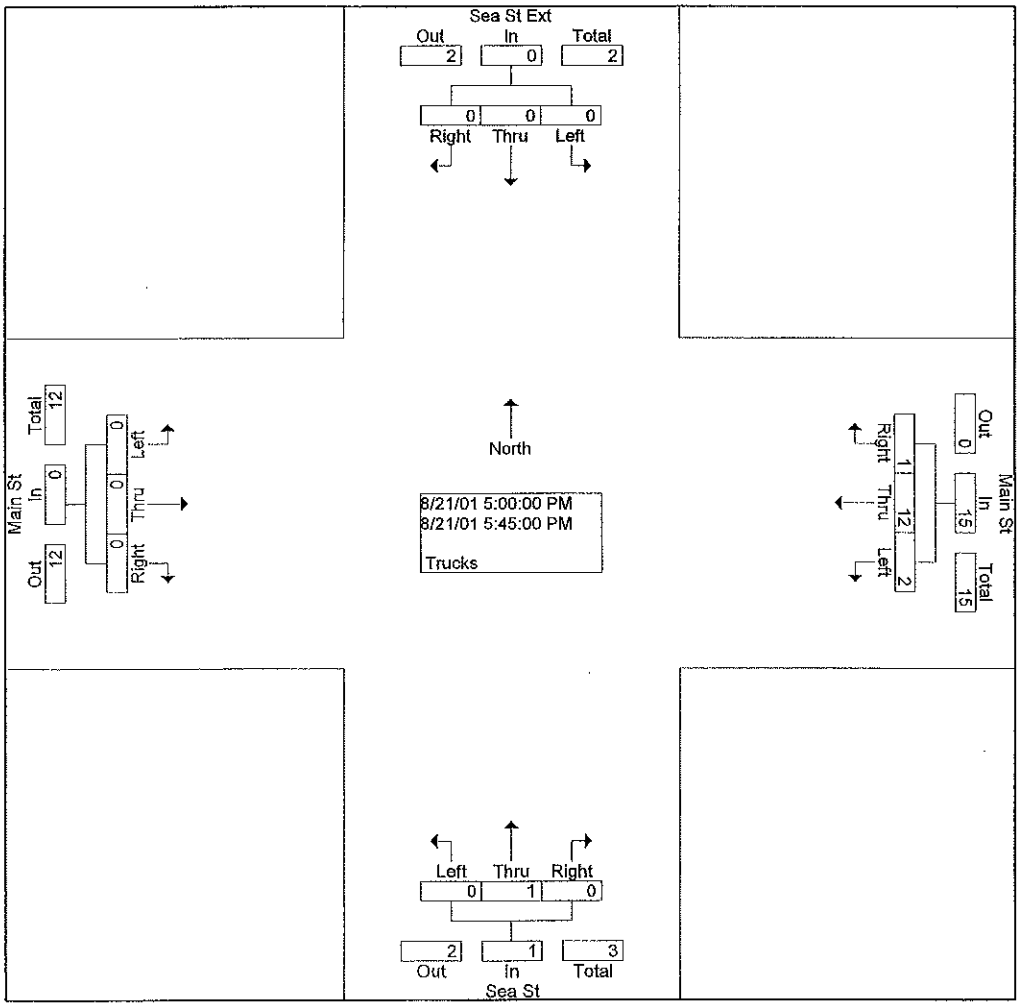


N/S Street : Sea St Ext / Sea St
E/W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150002
Site Code : 12150002
Start Date : 08/21/2001
Page No : 1

	Sea St Ext From North				Main St From East				Sea St From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	17:00																
Volume	0	0	0	0	2	12	1	15	0	1	0	1	0	0	0	0	16
Percent	0.0	0.0	0.0		13.3	80.0	6.7		0.0	100.0	0.0		0.0	0.0	0.0		
Volume	0	0	0	0	2	12	1	15	0	1	0	1	0	0	0	0	16
Volume	0	0	0	0	0	4	1	5	0	0	0	0	0	0	0	0	5
Peak Factor																	0.800
High Int.	3:45:00 PM				17:45				17:15				3:45:00 PM				
Volume	0	0	0	0	0	4	1	5	0	1	0	1					
Peak Factor								0.750				0.250					



S Street : Sea Street
W Street : South Street
City/State : Hyannis, MA
Weather : Clear

Accurate Counts
978-664-2565

File Name : 12150005
Site Code : 12150005
Start Date : 08/21/2001
Page No : 1

Groups Printed- Cars - Trucks

	Sea St From North				South St From East				Sea St From South				South St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	21	35	0	0	0	0	0	6	0	31	12	0	10	139	12	3	9	260	269
16:15	25	38	0	0	0	0	0	7	0	35	19	0	11	147	21	5	12	296	308
16:30	26	51	0	0	0	0	0	5	0	32	12	0	15	135	21	1	6	292	298
16:45	25	53	0	0	0	0	0	6	0	37	19	1	11	132	25	1	8	302	310
Total	97	177	0	0	0	0	0	24	0	135	62	1	47	553	79	10	35	1150	1185
17:00	24	48	0	0	0	0	0	4	0	55	25	0	16	142	22	0	4	332	336
17:15	27	44	0	7	0	0	0	0	0	33	23	0	13	146	17	3	10	303	313
17:30	28	54	0	0	0	0	0	6	0	40	25	0	9	170	24	3	9	350	359
17:45	35	35	0	2	0	0	0	6	0	51	20	4	15	163	20	5	17	339	356
Total	114	181	0	9	0	0	0	16	0	179	93	4	53	621	83	11	40	1324	1364
Grand Total	211	358	0	9	0	0	0	40	0	314	155	5	100	1174	162	21	75	2474	2549
Apprch %	37.1	62.9	0.0		0.0	0.0	0.0		0.0	67.0	33.0		7.0	81.8	11.3				
Total %	8.5	14.5	0.0		0.0	0.0	0.0		0.0	12.7	6.3		4.0	47.5	6.5		2.9	97.1	

	Sea St From North				South St From East				Sea St From South				South St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	17:00																
Volume	114	181	0	295	0	0	0	0	0	179	93	272	53	621	83	757	1324
Percent	38.6	61.4	0.0		0.0	0.0	0.0		0.0	65.8	34.2		7.0	82.0	11.0		
Volume	114	181	0	295	0	0	0	0	0	179	93	272	53	621	83	757	1324
Volume	28	54	0	82	0	0	0	0	0	40	25	65	9	170	24	203	350
Peak Factor																	0.946
High Int.	17:30				3:45:00 PM				17:00				17:30				
Volume	28	54	0	82	0	0	0	0	0	55	25	80	9	170	24	203	
Peak Factor				0.899								0.850				0.932	
ak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:45				16:00				17:00				17:00				
Volume	104	199	0	303	0	0	0	0	0	179	93	272	53	621	83	757	
Percent	34.3	65.7	0.0		-	-	-		0.0	65.8	34.2		7.0	82.0	11.0		
High Int.	17:30				-				17:00				17:30				
Volume	28	54	0	82	-	-	-	-	0	55	25	80	9	170	24	203	
Peak Factor				0.924				-				0.850				0.932	

N/S Street : Sea Street
E/W Street : South Street
City/State : Hyannis, MA
Weather : Clear

Accurate Counts
978-664-2565

File Name : 12150005
Site Code : 12150005
Start Date : 08/21/2001
Page No : 1

Groups Printed- Cars

	Sea St From North				South St From East				Sea St From South				South St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	21	35	0	0	0	0	0	6	0	31	12	0	10	139	12	3	9	260	269
16:15	23	38	0	0	0	0	0	7	0	35	17	0	11	142	20	5	12	286	298
16:30	25	50	0	0	0	0	0	5	0	30	11	0	15	130	21	1	6	282	288
16:45	25	53	0	0	0	0	0	6	0	37	18	1	11	130	25	1	8	299	307
Total	94	176	0	0	0	0	0	24	0	133	58	1	47	541	78	10	35	1127	1162
17:00	23	46	0	0	0	0	0	4	0	55	25	0	16	139	22	0	4	326	330
17:15	27	43	0	7	0	0	0	0	0	32	23	0	13	142	17	3	10	297	307
17:30	28	53	0	0	0	0	0	6	0	40	25	0	9	167	24	3	9	346	355
17:45	35	35	0	2	0	0	0	6	0	50	20	4	15	163	19	5	17	337	354
Total	113	177	0	9	0	0	0	16	0	177	93	4	53	611	82	11	40	1306	1346
Grand Total	207	353	0	9	0	0	0	40	0	310	151	5	100	1152	160	21	75	2433	2508
Apprch %	37.0	63.0	0.0		0.0	0.0	0.0		0.0	67.2	32.8		7.1	81.6	11.3				
Total %	8.5	14.5	0.0		0.0	0.0	0.0		0.0	12.7	6.2		4.1	47.3	6.6		3.0	97.0	

	Sea St From North				South St From East				Sea St From South				South St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	17:00																
Volume	113	177	0	290	0	0	0	0	0	177	93	270	53	611	82	746	1306
Percent	39.0	61.0	0.0		0.0	0.0	0.0		0.0	65.6	34.4		7.1	81.9	11.0		
Volume	113	177	0	290	0	0	0	0	0	177	93	270	53	611	82	746	1306
Volume	28	53	0	81	0	0	0	0	0	40	25	65	9	167	24	200	346
Peak Factor																	0.944
High Int.	17:30				3:45:00 PM				17:00				17:30				
Volume	28	53	0	81	0	0	0	0	0	55	25	80	9	167	24	200	
Peak Factor				0.895								0.844				0.933	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:45				16:00				17:00				17:00				
Volume	103	195	0	298	0	0	0	0	0	177	93	270	53	611	82	746	
Percent	34.6	65.4	0.0		-	-	-		0.0	65.6	34.4		7.1	81.9	11.0		
High Int.	17:30				-				17:00				17:30				
Volume	28	53	0	81	-	-	-	-	0	55	25	80	9	167	24	200	
Peak Factor				0.920				-				0.844				0.933	

S Street : Sea Street
W Street : South Street
City/State : Hyannis, MA
Weather : Clear

Accurate Counts
978-664-2565

File Name : 12150005
Site Code : 12150005
Start Date : 08/21/2001
Page No : 1

Groups Printed- Trucks

	Sea St From North				South St From East				Sea St From South				South St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	2	0	0	0	0	0	0	0	0	0	2	0	0	5	1	0	0	10	10
16:30	1	1	0	0	0	0	0	0	0	2	1	0	0	5	0	0	0	10	10
16:45	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	3	3
Total	3	1	0	0	0	0	0	0	0	2	4	0	0	12	1	0	0	23	23
17:00	1	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	6	6
17:15	0	1	0	0	0	0	0	0	0	1	0	0	0	4	0	0	0	6	6
17:30	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	4
17:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	2
Total	1	4	0	0	0	0	0	0	0	2	0	0	0	10	1	0	0	18	18
Grand Total	4	5	0	0	0	0	0	0	0	4	4	0	0	22	2	0	0	41	41
Apprch %	44.4	55.6	0.0		0.0	0.0	0.0		0.0	50.0	50.0		0.0	91.7	8.3				
Total %	9.8	12.2	0.0		0.0	0.0	0.0		0.0	9.8	9.8		0.0	53.7	4.9		0.0	100.0	

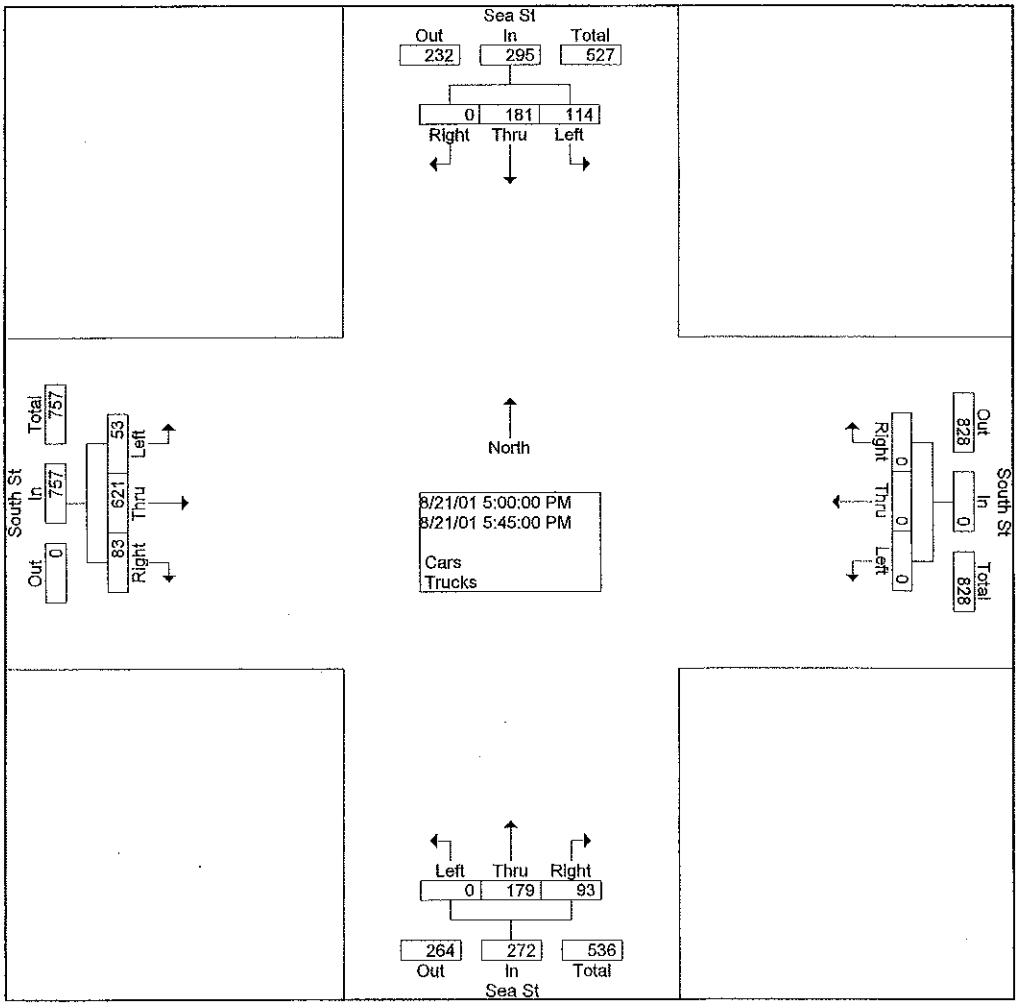
	Sea St From North				South St From East				Sea St From South				South St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:15																
Volume	4	3	0	7	0	0	0	0	0	2	4	6	0	15	1	16	29
Percent	57.1	42.9	0.0		0.0	0.0	0.0		0.0	33.3	66.7		0.0	93.8	6.3		
Volume	4	3	0	7	0	0	0	0	0	2	4	6	0	15	1	16	29
Volume	1	1	0	2	0	0	0	0	0	2	1	3	0	5	0	5	10
Peak Factor																	0.725
High Int.	17:00				3:45:00 PM				16:30				16:15				
Volume	1	2	0	3	0	0	0	0	0	2	1	3	0	5	1	6	
Peak Factor				0.583								0.500				0.667	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:15				16:00				16:00				16:15				
Volume	4	3	0	7	0	0	0	0	0	2	4	6	0	15	1	16	
Percent	57.1	42.9	0.0		-	-	-		0.0	33.3	66.7		0.0	93.8	6.3		
High Int.	17:00				-				16:30				16:15				
Volume	1	2	0	3	-	-	-	-	0	2	1	3	0	5	1	6	
Peak Factor				0.583				-				0.500				0.667	

N/S Street : Sea Street
E/W Street : South Street
City/State : Hyannis, MA
Weather : Clear

Accurate Counts
978-664-2565

File Name : 12150005
Site Code : 12150005
Start Date : 08/21/2001
Page No : 1

	Sea St From North				South St From East				Sea St From South				South St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection 17:00																	
Volume	114	181	0	295	0	0	0	0	0	179	93	272	53	621	83	757	1324
Percent	38.6	61.4	0.0		0.0	0.0	0.0		0.0	65.8	34.2		7.0	82.0	11.0		
Volume	114	181	0	295	0	0	0	0	0	179	93	272	53	621	83	757	1324
Volume	28	54	0	82	0	0	0	0	0	40	25	65	9	170	24	203	350
Peak Factor																	0.946
High Int.	17:30				3:45:00 PM				17:00				17:30				
Volume	28	54	0	82	0	0	0	0	0	55	25	80	9	170	24	203	
Peak Factor				0.899								0.850				0.932	

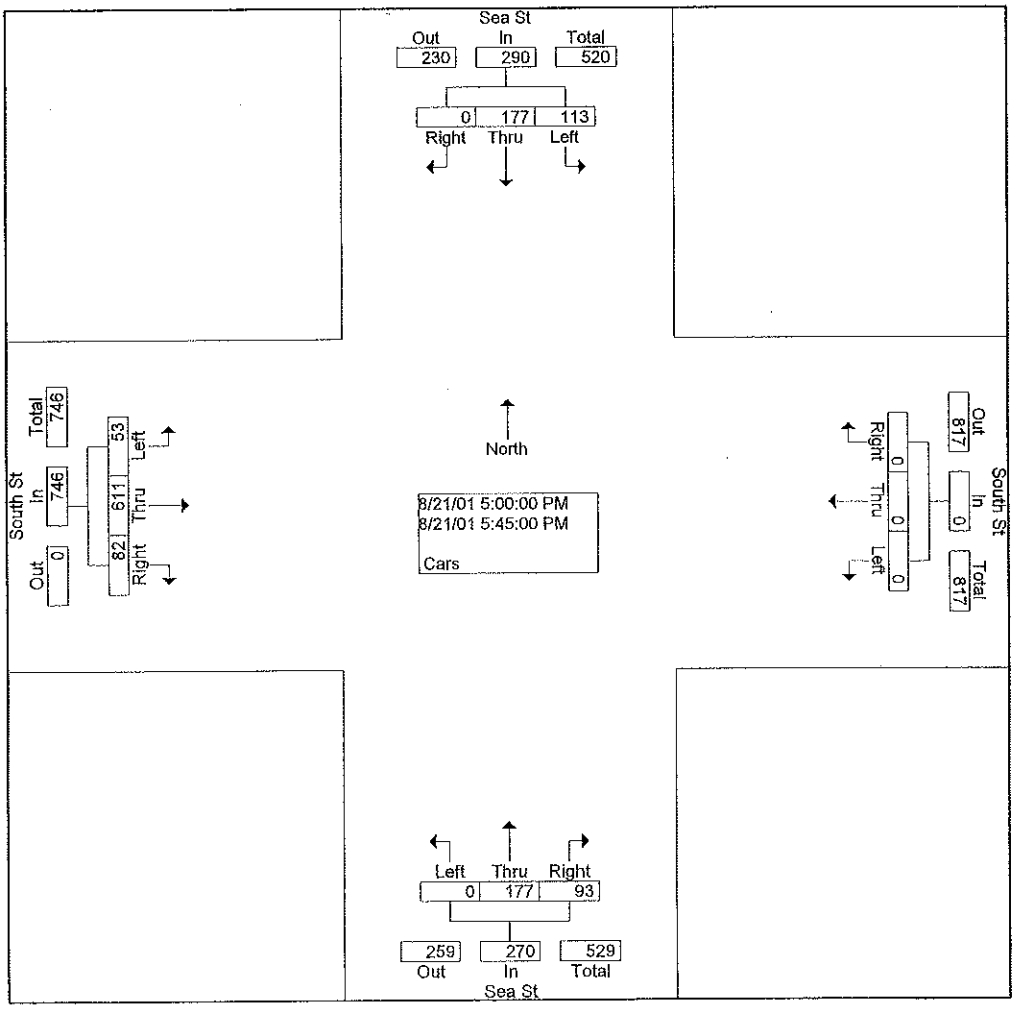


S Street : Sea Street
W Street : South Street
City/State : Hyannis, MA
Weather : Clear

Accurate Counts
978-664-2565

File Name : 12150005
Site Code : 12150005
Start Date : 08/21/2001
Page No : 1

	Sea St From North				South St From East				Sea St From South				South St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection 17:00																	
Volume	113	177	0	290	0	0	0	0	0	177	93	270	53	611	82	746	1306
Percent	39.0	61.0	0.0		0.0	0.0	0.0		0.0	65.6	34.4		7.1	81.9	11.0		
Volume	113	177	0	290	0	0	0	0	0	177	93	270	53	611	82	746	1306
Volume	28	53	0	81	0	0	0	0	0	40	25	65	9	167	24	200	346
Peak Factor																	0.944
High Int.	17:30				3:45:00 PM				17:00				17:30				
Volume	28	53	0	81	0	0	0	0	0	55	25	80	9	167	24	200	
Peak Factor				0.895								0.844				0.933	

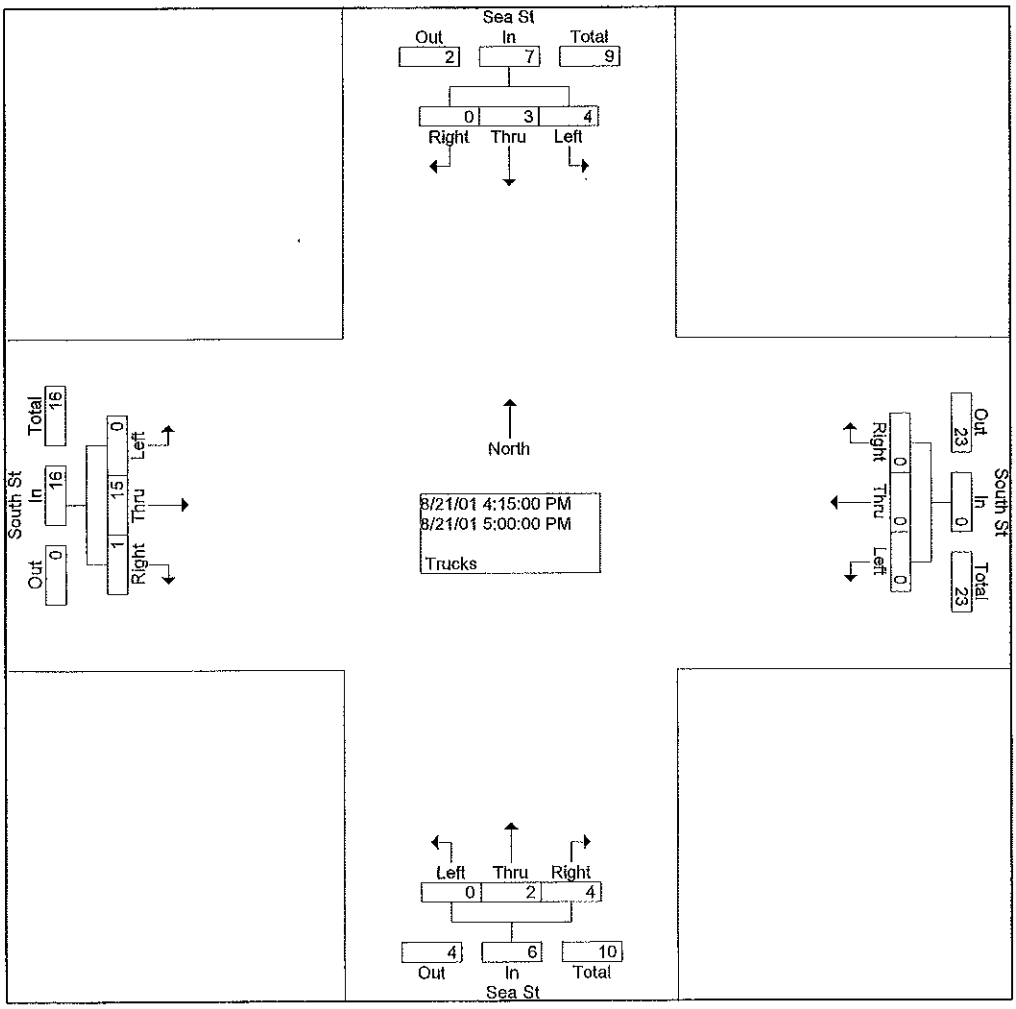


N/S Street : Sea Street
E/W Street : South Street
City/State : Hyannis, MA
Weather : Clear

Accurate Counts
978-664-2565

File Name : 12150005
Site Code : 12150005
Start Date : 08/21/2001
Page No : 1

	Sea St From North				South St From East				Sea St From South				South St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:15																
Volume	4	3	0	7	0	0	0	0	0	2	4	6	0	15	1	16	29
Percent	57.1	42.9	0.0		0.0	0.0	0.0		0.0	33.3	66.7		0.0	93.8	6.3		
Volume	4	3	0	7	0	0	0	0	0	2	4	6	0	15	1	16	29
Volume	1	1	0	2	0	0	0	0	0	2	1	3	0	5	0	5	10
Peak Factor																	0.725
High Int.	17:00				3:45:00 PM				16:30				16:15				
Volume	1	2	0	3	0	0	0	0	0	2	1	3	0	5	1	6	
Peak Factor				0.583								0.500				0.667	



S Street : Stevens St / Potter Ave
W Street : Main St / South St
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150001
Site Code : 12150001
Start Date : 08/21/2001
Page No : 1

Groups Printed- Cars - Trucks

	Stevens St From North				Main St/South St From East				Potter Ave From South				Main St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	2	1	6	2	3	151	5	10	2	0	1	3	5	164	3	0	15	343	358
16:15	2	1	9	4	4	160	8	11	3	0	3	5	6	178	5	0	20	379	399
16:30	3	3	6	3	11	158	10	13	1	1	1	8	6	151	2	0	24	353	377
16:45	7	1	7	11	9	182	11	13	1	1	0	4	3	164	2	0	28	388	416
Total	14	6	28	20	27	651	34	47	7	2	5	20	20	657	12	0	87	1463	1550
17:00	8	1	9	6	8	185	8	12	3	1	1	5	3	160	4	1	24	391	415
17:15	4	3	7	11	7	131	5	7	3	1	0	4	6	138	1	4	26	306	332
17:30	5	1	4	6	7	165	10	7	0	2	4	7	6	169	3	0	20	376	396
17:45	1	1	2	5	21	143	6	13	3	1	1	3	4	195	1	1	22	379	401
Total	18	6	22	28	43	624	29	39	9	5	6	19	19	662	9	6	92	1452	1544
Grand Total	32	12	50	48	70	1275	63	86	16	7	11	39	39	1319	21	6	179	2915	3094
Apprch %	34.0	12.8	53.2		5.0	90.6	4.5		47.1	20.6	32.4		2.8	95.6	1.5				
Total %	1.1	0.4	1.7		2.4	43.7	2.2		0.5	0.2	0.4		1.3	45.2	0.7		5.8	94.2	

	Stevens St From North				Main St/South St From East				Potter Ave From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:15																
Volume	20	6	31	57	32	685	37	754	8	3	5	16	18	653	13	684	1511
Percent	35.1	10.5	54.4		4.2	90.8	4.9		50.0	18.8	31.3		2.6	95.5	1.9		
Volume	20	6	31	57	32	685	37	754	8	3	5	16	18	653	13	684	1511
Volume	8	1	9	18	8	185	8	201	3	1	1	5	3	160	4	167	391
Peak Factor																	0.966
High Int.	17:00				16:45				16:15				16:15				
Volume	8	1	9	18	9	182	11	202	3	0	3	6	6	178	5	189	
Peak Factor				0.792				0.933				0.667				0.905	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:30				16:15				17:00				17:00				
Volume	22	8	29	59	32	685	37	754	9	5	6	20	19	662	9	690	
Percent	37.3	13.6	49.2		4.2	90.8	4.9		45.0	25.0	30.0		2.8	95.9	1.3		
High Int.	17:00				16:45				17:30				17:45				
Volume	8	1	9	18	9	182	11	202	0	2	4	6	4	195	1	200	
Peak Factor				0.819				0.933				0.833				0.863	

N/S Street : Stevens St / Potter Ave
E/W Street : Main St / South St
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150001
Site Code : 12150001
Start Date : 08/21/2001
Page No : 1

Groups Printed- Trucks

	Stevens St From North				Main St/South St From East				Potter Ave From South				Main St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	1	0	0	6	0	0	0	0	0	0	0	3	0	0	0	10	10
16:30	0	0	0	0	1	2	1	0	0	0	0	0	0	5	0	0	0	9	9
16:45	0	0	1	0	0	2	0	0	0	0	0	0	0	3	0	0	0	6	6
Total	0	0	2	0	1	10	1	0	0	0	0	0	0	11	0	0	0	25	25
17:00	0	0	0	0	1	3	0	0	0	0	0	0	1	4	0	0	0	9	9
17:15	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	5	5
17:30	0	0	0	0	0	2	1	0	0	0	0	0	1	1	0	0	0	5	5
17:45	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5	5
Total	0	0	0	0	1	12	1	0	0	0	0	0	2	8	0	0	0	24	24
Grand Total	0	0	2	0	2	22	2	0	0	0	0	0	2	19	0	0	0	49	49
Apprch %	0.0	0.0	100.0		7.7	84.6	7.7		0.0	0.0	0.0		9.5	90.5	0.0				
Total %	0.0	0.0	4.1		4.1	44.9	4.1		0.0	0.0	0.0		4.1	38.8	0.0		0.0	100.0	

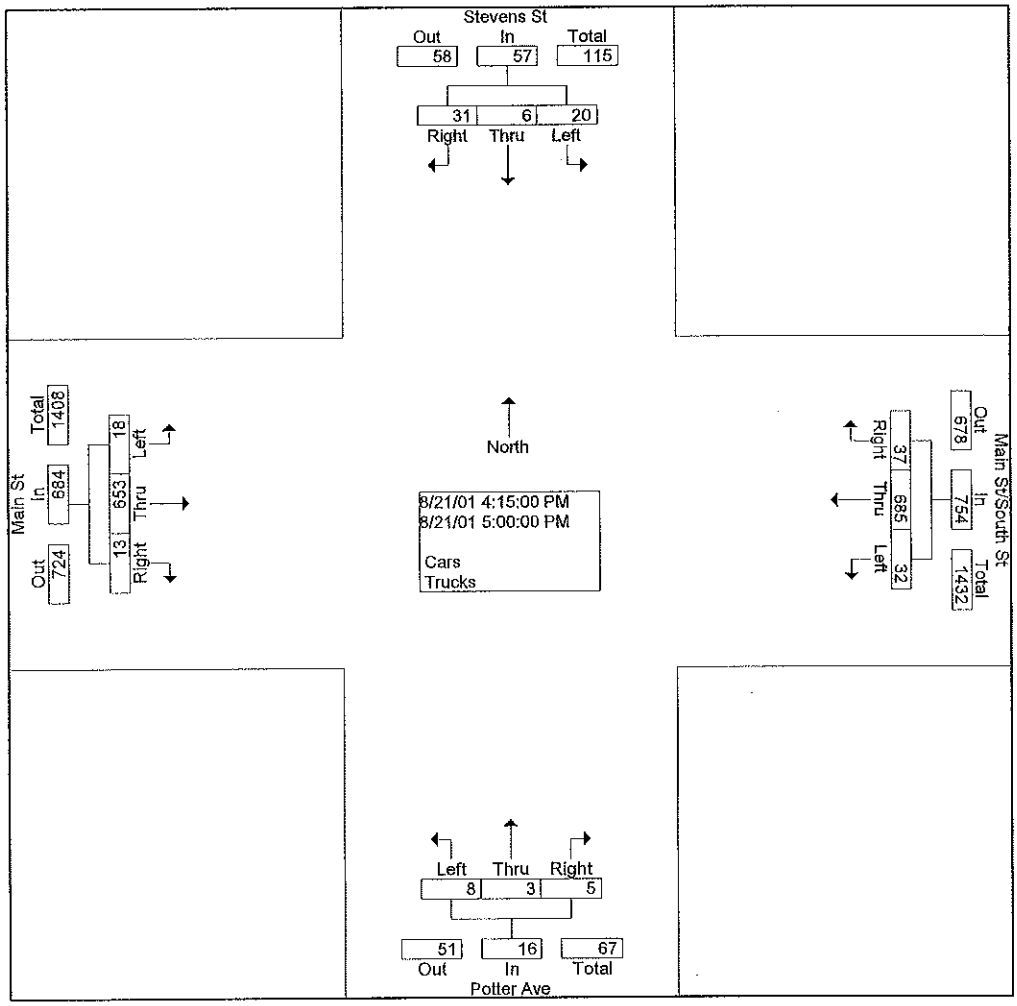
	Stevens St From North				Main St/South St From East				Potter Ave From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:15																
Volume	0	0	2	2	2	13	1	16	0	0	0	0	1	15	0	16	34
Percent	0.0	0.0	100.0		12.5	81.3	6.3		0.0	0.0	0.0		6.3	93.8	0.0		
Volume	0	0	2	2	2	13	1	16	0	0	0	0	1	15	0	16	34
Volume	0	0	1	1	0	6	0	6	0	0	0	0	0	3	0	3	10
Peak Factor																	0.850
High Int.	16:15				16:15				3:45:00 PM				16:30				
Volume	0	0	1	1	0	6	0	6	0	0	0	0	0	5	0	5	
Peak Factor				0.500				0.667								0.800	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:00				16:15				16:00				16:15				
Volume	0	0	2	2	2	13	1	16	0	0	0	0	1	15	0	16	
Percent	0.0	0.0	100.0		12.5	81.3	6.3		-	-	-		6.3	93.8	0.0		
High Int.	16:15				16:15				-				16:30				
Volume	0	0	1	1	0	6	0	6	-	-	-	-	0	5	0	5	
Peak Factor				0.500				0.667				-				0.800	

S Street : Stevens St / Potter Ave
W Street : Main St / South St
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150001
Site Code : 12150001
Start Date : 08/21/2001
Page No : 1

	Stevens St From North				Main St/South St From East				Potter Ave From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:15																
Volume	20	6	31	57	32	685	37	754	8	3	5	16	18	653	13	684	1511
Percent	35.1	10.5	54.4		4.2	90.8	4.9		50.0	18.8	31.3		2.6	95.5	1.9		
Volume	20	6	31	57	32	685	37	754	8	3	5	16	18	653	13	684	1511
Volume	8	1	9	18	8	185	8	201	3	1	1	5	3	160	4	167	391
Peak Factor																	0.966
High Int.	17:00				16:45				16:15				16:15				
Volume	8	1	9	18	9	182	11	202	3	0	3	6	6	178	5	189	
Peak Factor				0.792				0.933				0.667				0.905	

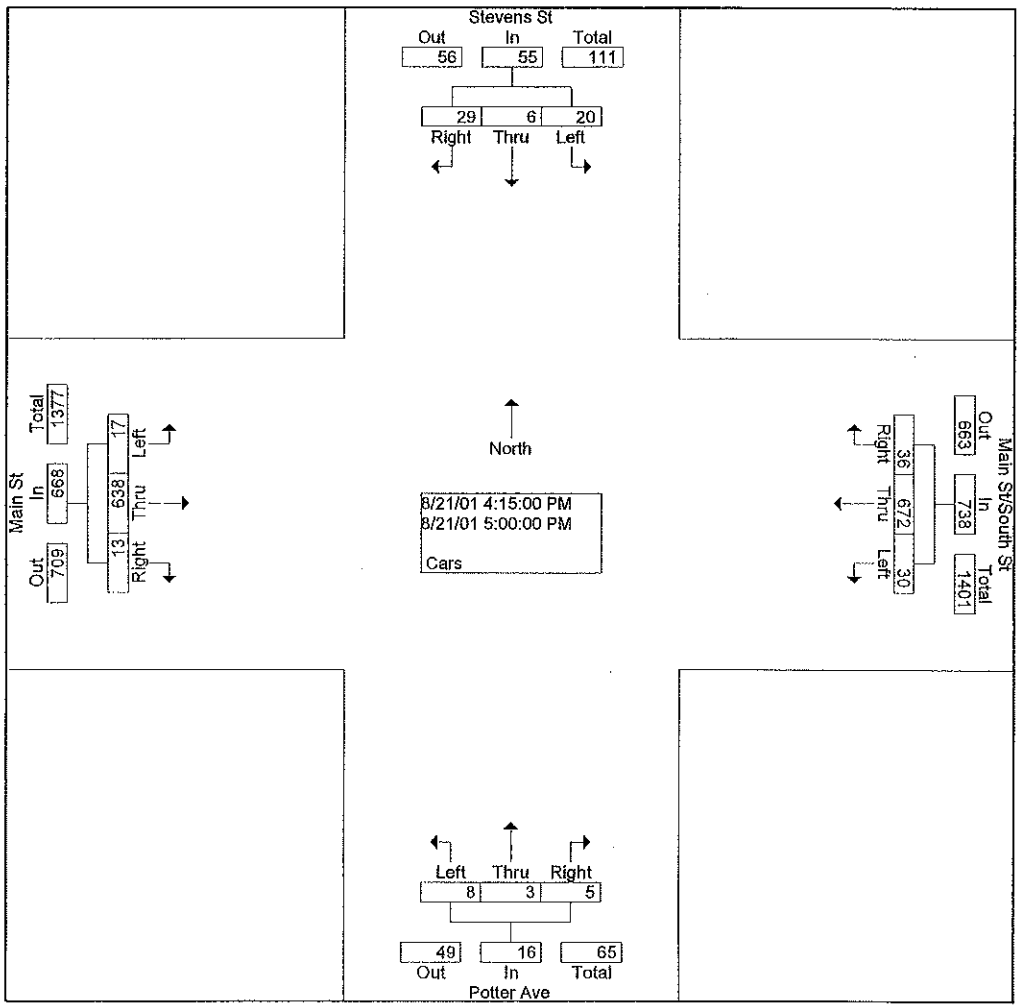


N/S Street : Stevens St / Potter Ave
E/W Street : Main St / South St
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150001
Site Code : 12150001
Start Date : 08/21/2001
Page No : 1

	Stevens St From North				Main St/South St From East				Potter Ave From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:15																
Volume	20	6	29	55	30	672	36	738	8	3	5	16	17	638	13	668	1477
Percent	36.4	10.9	52.7		4.1	91.1	4.9		50.0	18.8	31.3		2.5	95.5	1.9		
Volume	20	6	29	55	30	672	36	738	8	3	5	16	17	638	13	668	1477
Volume	8	1	9	18	7	182	8	197	3	1	1	5	2	156	4	162	382
Peak Factor																	0.967
High Int.	17:00				16:45				16:15				16:15				
Volume	8	1	9	18	9	180	11	200	3	0	3	6	6	175	5	186	
Peak Factor				0.764				0.923				0.667				0.898	

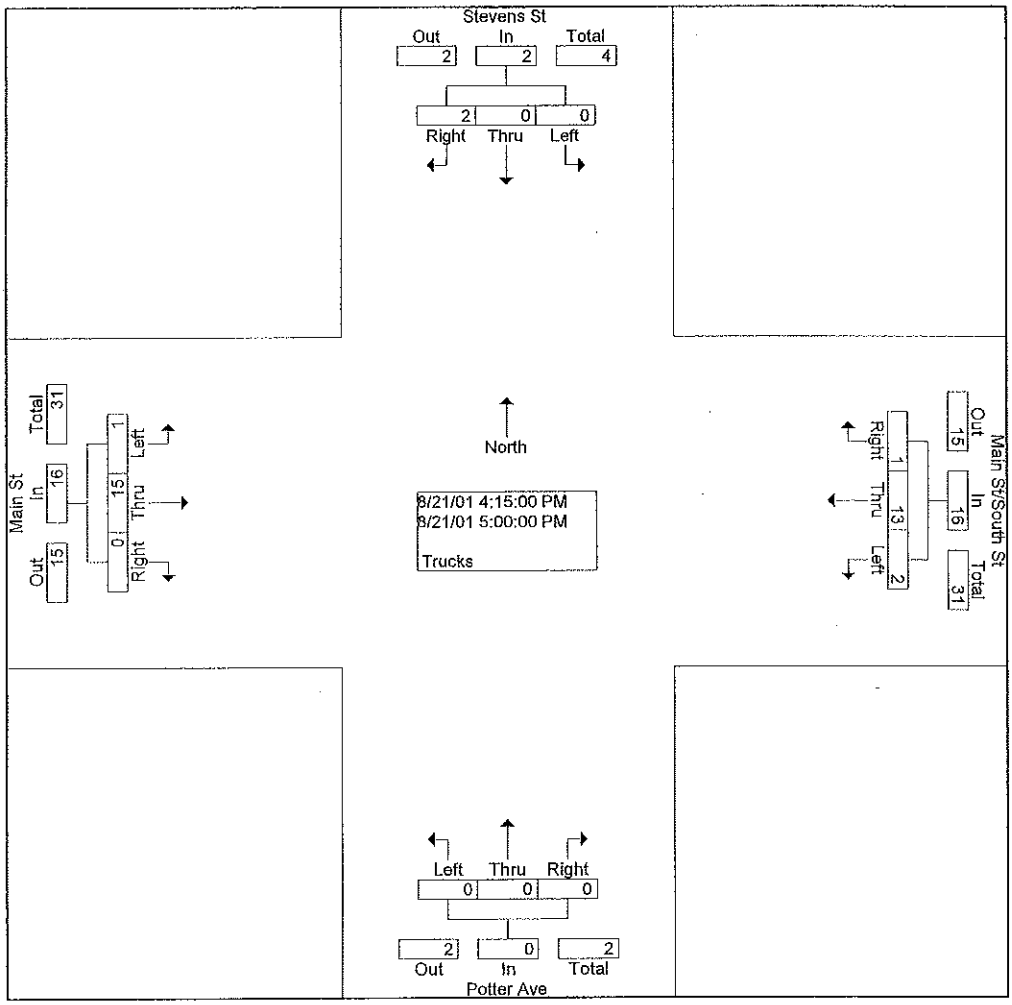


'S Street : Stevens St / Potter Ave
W Street : Main St / South St
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150001
Site Code : 12150001
Start Date : 08/21/2001
Page No : 1

	Stevens St From North				Main St/South St From East				Potter Ave From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:15																
Volume	0	0	2	2	2	13	1	16	0	0	0	0	1	15	0	16	34
Percent	0.0	0.0	100.0		12.5	81.3	6.3		0.0	0.0	0.0		6.3	93.8	0.0		
Volume	0	0	2	2	2	13	1	16	0	0	0	0	1	15	0	16	34
Volume	0	0	1	1	0	6	0	6	0	0	0	0	0	3	0	3	10
Peak Factor																	0.850
High Int.	16:15				16:15				3:45:00 PM				16:30				
Volume	0	0	1	1	0	6	0	6	0	0	0	0	0	5	0	5	
Peak Factor				0.500				0.667								0.800	



S Street : High School Road
W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150003
Site Code : 12150003
Start Date : 08/21/2001
Page No : 1

Groups Printed- Cars - Trucks

	High School Rd From North				Main St From East				High School Rd From South				Main St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	31	14	113	10	187	30	21	8	10	0	81	0	0	0	23	238	290	528
16:15	0	38	18	119	15	183	31	23	13	15	0	80	0	0	0	20	242	313	555
16:30	0	24	10	146	13	201	32	27	9	13	0	74	0	0	0	22	269	302	571
16:45	0	40	17	109	7	196	27	52	10	18	0	110	0	0	0	25	296	315	611
Total	0	133	59	487	45	767	120	123	40	56	0	345	0	0	0	90	1045	1220	2265
17:00	0	25	15	102	13	172	34	29	14	10	0	64	0	0	0	25	220	283	503
17:15	0	39	7	92	15	173	29	29	10	13	0	66	0	0	0	20	207	286	493
17:30	0	47	7	62	17	190	22	31	16	26	0	50	0	0	0	31	174	325	499
17:45	0	41	15	105	10	184	29	23	13	25	0	50	0	0	0	33	211	317	528
Total	0	152	44	361	55	719	114	112	53	74	0	230	0	0	0	109	812	1211	2023
Grand Total	0	285	103	848	100	1486	234	235	93	130	0	575	0	0	0	199	1857	2431	4288
Apprch %	0.0	73.5	26.5		5.5	81.6	12.9		41.7	58.3	0.0		0.0	0.0	0.0				
Total %	0.0	11.7	4.2		4.1	61.1	9.6		3.8	5.3	0.0		0.0	0.0	0.0		43.3	56.7	

	High School Rd From North				Main St From East				High School Rd From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:00																
Volume	0	133	59	192	45	767	120	932	40	56	0	96	0	0	0	0	1220
Percent	0.0	69.3	30.7		4.8	82.3	12.9		41.7	58.3	0.0		0.0	0.0	0.0		
Volume	0	133	59	192	45	767	120	932	40	56	0	96	0	0	0	0	1220
Volume	0	40	17	57	7	196	27	230	10	18	0	28	0	0	0	0	315
Peak Factor																	0.968
High Int.	16:45				16:30				16:15				3:45:00 PM				
Volume	0	40	17	57	13	201	32	246	13	15	0	28					
Peak Factor				0.842				0.947				0.857					
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:45				16:00				17:00				16:00				
Volume	0	151	46	197	45	767	120	932	53	74	0	127	0	0	0	0	
Percent	0.0	76.6	23.4		4.8	82.3	12.9		41.7	58.3	0.0		-	-	-		
High Int.	16:45				16:30				17:30				-				
Volume	0	40	17	57	13	201	32	246	16	26	0	42	-	-	-	-	
Peak Factor				0.864				0.947				0.756				-	

N/S Street : High School Road
E/W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150003
Site Code : 12150003
Start Date : 08/21/2001
Page No : 1

Groups Printed- Cars

	High School Rd From North				Main St From East				High School Rd From South				Main St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	31	14	113	10	187	30	21	8	10	0	81	0	0	0	23	238	290	528
16:15	0	35	17	119	15	181	31	23	13	14	0	80	0	0	0	20	242	306	548
16:30	0	24	10	146	13	196	32	27	9	13	0	74	0	0	0	22	269	297	566
16:45	0	39	17	109	7	196	27	52	10	18	0	110	0	0	0	25	296	314	610
Total	0	129	58	487	45	760	120	123	40	55	0	345	0	0	0	90	1045	1207	2252
17:00	0	25	14	102	13	169	34	29	13	10	0	64	0	0	0	25	220	278	498
17:15	0	38	7	92	15	170	29	29	10	13	0	66	0	0	0	20	207	282	489
17:30	0	47	7	62	17	187	22	31	16	26	0	50	0	0	0	31	174	322	496
17:45	0	40	15	105	10	180	29	23	12	24	0	50	0	0	0	33	211	310	521
Total	0	150	43	361	55	706	114	112	51	73	0	230	0	0	0	109	812	1192	2004
Grand Total	0	279	101	848	100	1466	234	235	91	128	0	575	0	0	0	199	1857	2399	4256
Apprch %	0.0	73.4	26.6		5.6	81.4	13.0		41.6	58.4	0.0		0.0	0.0	0.0				
Total %	0.0	11.6	4.2		4.2	61.1	9.8		3.8	5.3	0.0		0.0	0.0	0.0		43.6	56.4	

	High School Rd From North				Main St From East				High School Rd From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:00																
Volume	0	129	58	187	45	760	120	925	40	55	0	95	0	0	0	0	1207
Percent	0.0	69.0	31.0		4.9	82.2	13.0		42.1	57.9	0.0		0.0	0.0	0.0		
Volume	0	129	58	187	45	760	120	925	40	55	0	95	0	0	0	0	1207
Volume	0	39	17	56	7	196	27	230	10	18	0	28	0	0	0	0	314
Peak Factor																	0.961
High Int.	16:45				16:30				16:45				3:45:00 PM				
Volume	0	39	17	56	13	196	32	241	10	18	0	28					
Peak Factor				0.835				0.960				0.848					
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:45				16:00				17:00				16:00				
Volume	0	149	45	194	45	760	120	925	51	73	0	124	0	0	0	0	
Percent	0.0	76.8	23.2		4.9	82.2	13.0		41.1	58.9	0.0		-	-	-		
High Int.	16:45				16:30				17:30				-				
Volume	0	39	17	56	13	196	32	241	16	26	0	42	-	-	-	-	
Peak Factor				0.866				0.960				0.738				-	

S Street : High School Road
W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150003
Site Code : 12150003
Start Date : 08/21/2001
Page No : 1

Groups Printed- Trucks

	High School Rd From North				Main St From East				High School Rd From South				Main St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	3	1	0	0	2	0	0	0	1	0	0	0	0	0	0	0	7	7
16:30	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5	5
16:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	4	1	0	0	7	0	0	0	1	0	0	0	0	0	0	0	13	13
17:00	0	0	1	0	0	3	0	0	1	0	0	0	0	0	0	0	0	5	5
17:15	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	4
17:30	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	3
17:45	0	1	0	0	0	4	0	0	1	1	0	0	0	0	0	0	0	7	7
Total	0	2	1	0	0	13	0	0	2	1	0	0	0	0	0	0	0	19	19
Grand Total	0	6	2	0	0	20	0	0	2	2	0	0	0	0	0	0	0	32	32
Apprch %	0.0	75.0	25.0		0.0	100.0	0.0		50.0	50.0	0.0		0.0	0.0	0.0				
Total %	0.0	18.8	6.3		0.0	62.5	0.0		6.3	6.3	0.0		0.0	0.0	0.0		0.0	100.0	

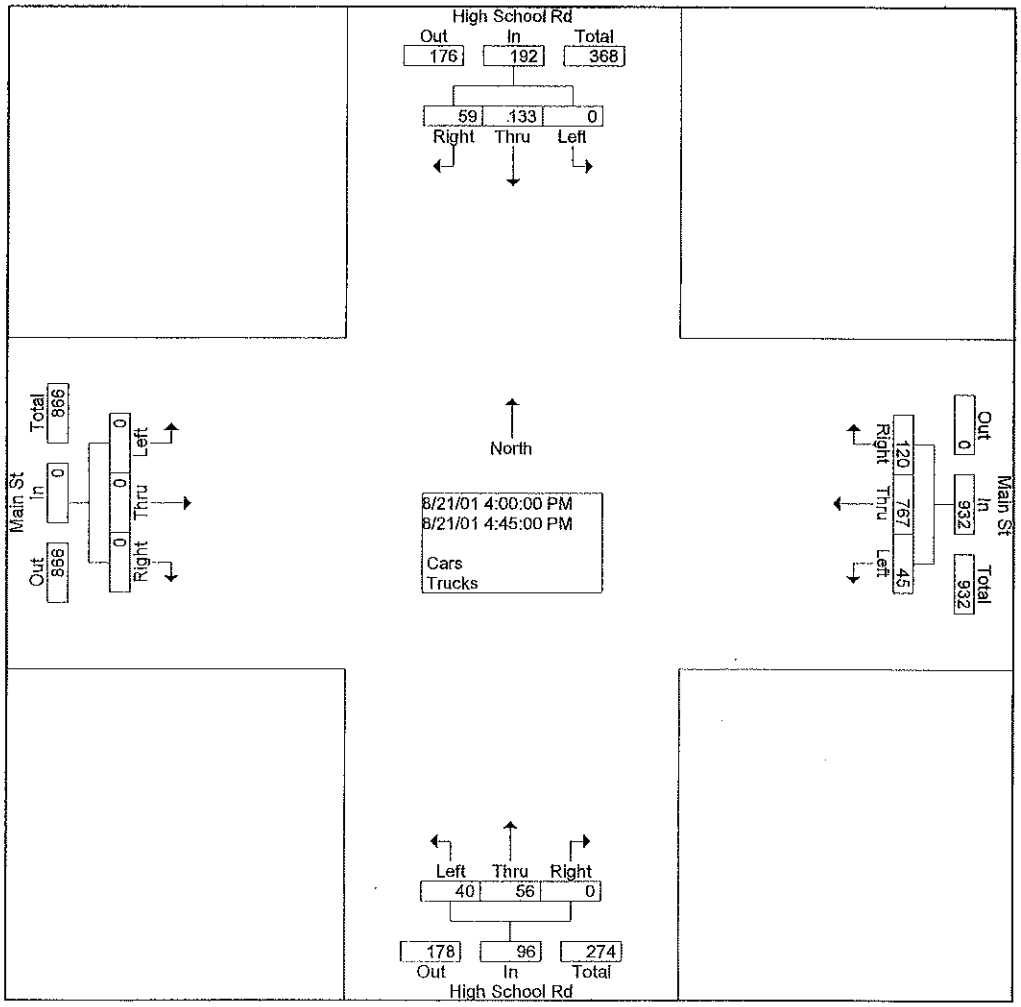
	High School Rd From North				Main St From East				High School Rd From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	17:00																
Volume	0	2	1	3	0	13	0	13	2	1	0	3	0	0	0	0	19
Percent	0.0	66.7	33.3		0.0	100.0	0.0		66.7	33.3	0.0		0.0	0.0	0.0		
Volume	0	2	1	3	0	13	0	13	2	1	0	3	0	0	0	0	19
Volume	0	1	0	1	0	4	0	4	1	1	0	2	0	0	0	0	7
Peak Factor																	0.679
High Int.	17:00				17:45				17:45				3:45:00 PM				
Volume	0	0	1	1	0	4	0	4	1	1	0	2					
Peak Factor				0.750				0.813				0.375					
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:15				17:00				17:00				16:00				
Volume	0	4	2	6	0	13	0	13	2	1	0	3	0	0	0	0	
Percent	0.0	66.7	33.3		0.0	100.0	0.0		66.7	33.3	0.0		-	-	-		
High Int.	16:15				17:45				17:45				-				
Volume	0	3	1	4	0	4	0	4	1	1	0	2	-	-	-	-	
Peak Factor				0.375				0.813				0.375				-	

N/S Street : High School Road
E/W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150003
Site Code : 12150003
Start Date : 08/21/2001
Page No : 1

	High School Rd From North				Main St From East				High School Rd From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection 16:00																	
Volume	0	133	59	192	45	767	120	932	40	56	0	96	0	0	0	0	1220
Percent	0.0	69.3	30.7		4.8	82.3	12.9		41.7	58.3	0.0		0.0	0.0	0.0		
Volume	0	133	59	192	45	767	120	932	40	56	0	96	0	0	0	0	1220
Volume	0	40	17	57	7	196	27	230	10	18	0	28	0	0	0	0	315
Peak Factor																	0.968
High Int.	16:45				16:30				16:15				3:45:00 PM				
Volume	0	40	17	57	13	201	32	246	13	15	0	28					
Peak Factor				0.842				0.947				0.857					

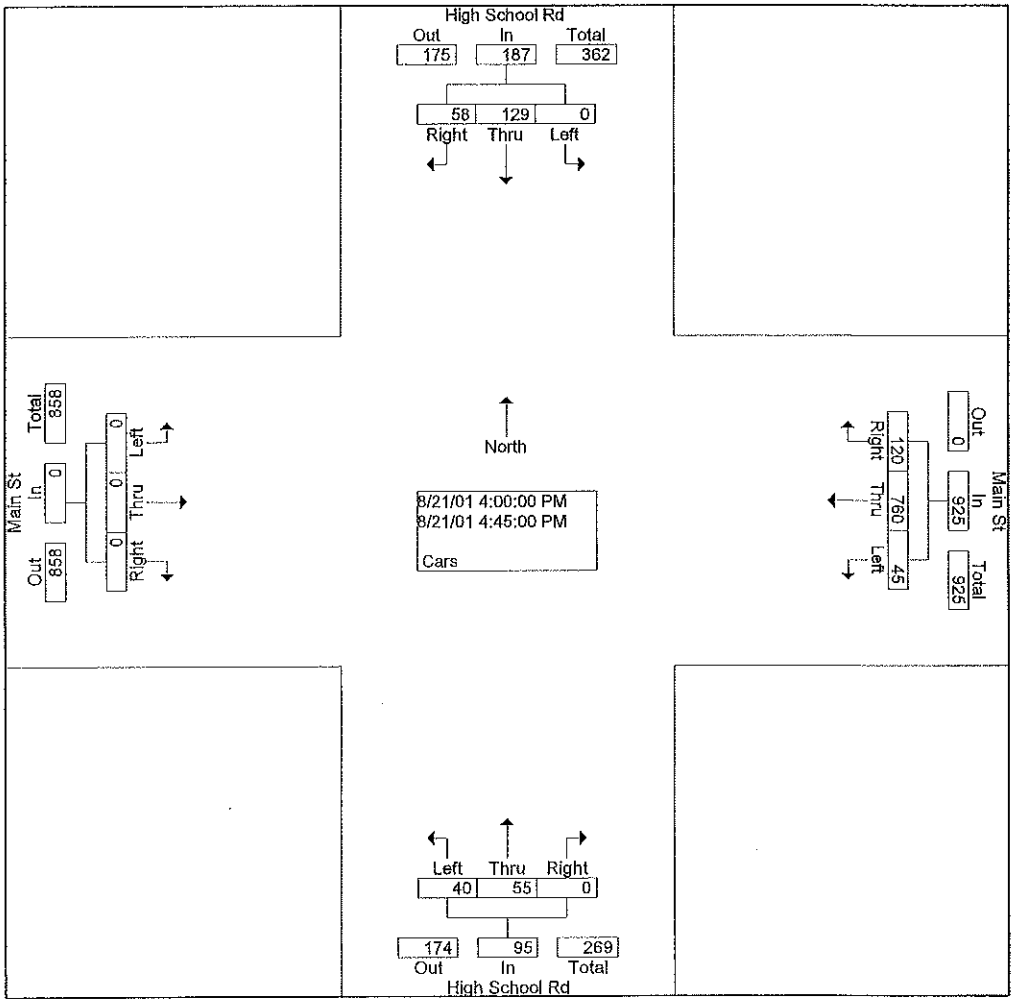


/S Street : High School Road
/W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150003
Site Code : 12150003
Start Date : 08/21/2001
Page No : 1

	High School Rd From North				Main St From East				High School Rd From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:00																
Volume	0	129	58	187	45	760	120	925	40	55	0	95	0	0	0	0	1207
Percent	0.0	69.0	31.0		4.9	82.2	13.0		42.1	57.9	0.0		0.0	0.0	0.0		
Volume	0	129	58	187	45	760	120	925	40	55	0	95	0	0	0	0	1207
Volume	0	39	17	56	7	196	27	230	10	18	0	28	0	0	0	0	314
Peak Factor																	0.961
High Int.	16:45				16:30				16:45				3:45:00 PM				
Volume	0	39	17	56	13	196	32	241	10	18	0	28					
Peak Factor				0.835				0.960				0.848					



N/S Street : High School Road
E/W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150003
Site Code : 12150003
Start Date : 08/21/2001
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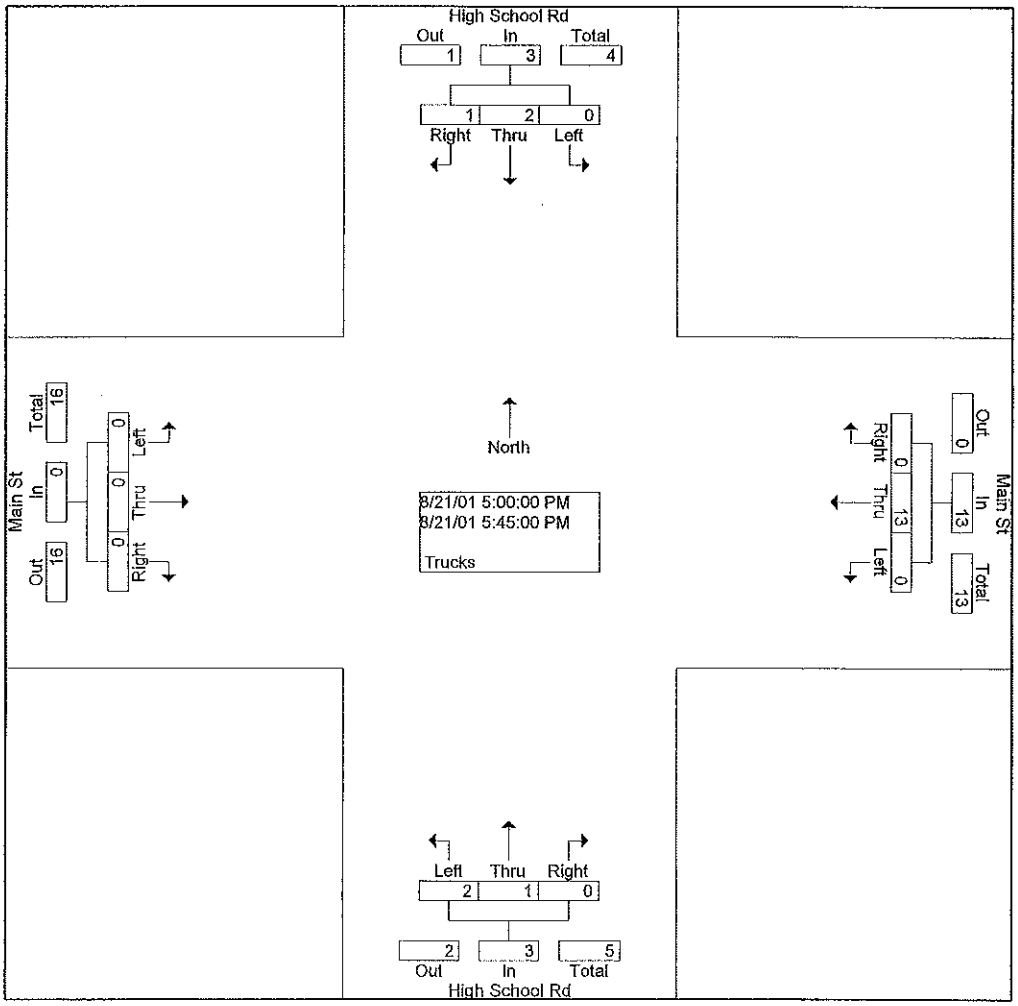
	High School Rd From North				Main St From East				High School Rd From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	17:00																
Volume	0	2	1	3	0	13	0	13	2	1	0	3	0	0	0	0	19
Percent	0.0	66.7	33.3		0.0	100.0	0.0		66.7	33.3	0.0		0.0	0.0	0.0		
Volume	0	2	1	3	0	13	0	13	2	1	0	3	0	0	0	0	19
Volume	0	1	0	1	0	4	0	4	1	1	0	2	0	0	0	0	7
Peak Factor																	0.679
High Int.	17:00				17:45				17:45				3:45:00 PM				
Volume	0	0	1	1	0	4	0	4	1	1	0	2					
Peak Factor				0.750				0.813				0.375					



/S Street : Barnstable Rd / Ocean St
W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150004
Site Code : 12150004
Start Date : 08/21/2001
Page No : 1

Groups Printed- Cars - Trucks

	Barnstable Rd From North				Main St From East				Ocean St From South				Main St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	73	38	53	34	179	37	13	0	0	0	46	0	0	0	25	137	361	498
16:15	0	80	51	57	45	179	23	2	0	0	0	24	0	0	0	13	96	378	474
16:30	0	84	55	32	50	201	29	4	0	0	0	48	0	0	0	17	101	419	520
16:45	0	85	52	69	56	174	39	4	0	0	0	29	0	0	0	30	132	406	538
Total	0	322	196	211	185	733	128	23	0	0	0	147	0	0	0	85	466	1564	2030
17:00	0	78	58	49	59	157	38	6	0	0	0	43	0	0	0	19	117	390	507
17:15	0	81	56	43	68	169	32	6	0	0	0	36	0	0	0	21	106	406	512
17:30	0	101	52	54	78	191	41	27	0	0	0	31	0	0	0	17	129	463	592
17:45	0	71	59	53	54	172	25	4	0	0	0	24	0	0	0	20	101	381	482
Total	0	331	225	199	259	689	136	43	0	0	0	134	0	0	0	77	453	1640	2093
Grand Total	0	653	421	410	444	1422	264	66	0	0	0	281	0	0	0	162	919	3204	4123
Apprch %	0.0	60.8	39.2		20.8	66.8	12.4		0.0	0.0	0.0		0.0	0.0	0.0				
Total %	0.0	20.4	13.1		13.9	44.4	8.2		0.0	0.0	0.0		0.0	0.0	0.0		22.3	77.7	

	Barnstable Rd From North				Main St From East				Ocean St From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
ak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:45																
Volume	0	345	218	563	261	691	150	1102	0	0	0	0	0	0	0	0	1665
Percent	0.0	61.3	38.7		23.7	62.7	13.6		0.0	0.0	0.0		0.0	0.0	0.0		
Volume	0	345	218	563	261	691	150	1102	0	0	0	0	0	0	0	0	1665
Volume	0	101	52	153	78	191	41	310	0	0	0	0	0	0	0	0	463
Peak Factor																	0.899
High Int.	17:30				17:30				3:45:00 PM				3:45:00 PM				
Volume	0	101	52	153	78	191	41	310									
Peak Factor				0.920				0.889									
ak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:45				16:45				16:00				16:00				
Volume	0	345	218	563	261	691	150	1102	0	0	0	0	0	0	0	0	
Percent	0.0	61.3	38.7		23.7	62.7	13.6		-	-	-		-	-	-		
High Int.	17:30				17:30				-				-				
Volume	0	101	52	153	78	191	41	310	-	-	-	-	-	-	-	-	
Peak Factor				0.920				0.889				-				-	

N/S Street : Barnstable Rd / Ocean St
E/W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150004
Site Code : 12150004
Start Date : 08/21/2001
Page No : 1

Groups Printed- Cars

	Barnstable Rd From North				Main St From East				Ocean St From South				Main St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	71	37	53	32	173	34	13	0	0	0	46	0	0	0	25	137	347	484
16:15	0	80	51	57	45	177	21	2	0	0	0	24	0	0	0	13	96	374	470
16:30	0	82	55	32	48	195	27	4	0	0	0	48	0	0	0	17	101	407	508
16:45	0	83	51	69	54	170	37	4	0	0	0	29	0	0	0	30	132	395	527
Total	0	316	194	211	179	715	119	23	0	0	0	147	0	0	0	85	466	1523	1989
17:00	0	76	57	49	57	155	35	6	0	0	0	43	0	0	0	19	117	380	497
17:15	0	81	56	43	68	169	32	6	0	0	0	36	0	0	0	21	106	406	512
17:30	0	98	51	54	76	185	38	27	0	0	0	31	0	0	0	17	129	448	577
17:45	0	71	58	53	54	164	23	4	0	0	0	24	0	0	0	20	101	370	471
Total	0	326	222	199	255	673	128	43	0	0	0	134	0	0	0	77	453	1604	2057
Grand Total	0	642	416	410	434	1388	247	66	0	0	0	281	0	0	0	162	919	3127	4046
Apprch %	0.0	60.7	39.3		21.0	67.1	11.9		0.0	0.0	0.0		0.0	0.0	0.0				
Total %	0.0	20.5	13.3		13.9	44.4	7.9		0.0	0.0	0.0		0.0	0.0	0.0		22.7	77.3	

	Barnstable Rd From North				Main St From East				Ocean St From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:45																
Volume	0	338	215	553	255	679	142	1076	0	0	0	0	0	0	0	0	1629
Percent	0.0	61.1	38.9		23.7	63.1	13.2		0.0	0.0	0.0		0.0	0.0	0.0		
Volume	0	338	215	553	255	679	142	1076	0	0	0	0	0	0	0	0	1629
Volume	0	98	51	149	76	185	38	299	0	0	0	0	0	0	0	0	448
Peak Factor																	0.909
High Int.	17:30				17:30				3:45:00 PM				3:45:00 PM				
Volume	0	98	51	149	76	185	38	299									
Peak Factor				0.928				0.900									
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:45				16:45				16:00				16:00				
Volume	0	338	215	553	255	679	142	1076	0	0	0	0	0	0	0	0	
Percent	0.0	61.1	38.9		23.7	63.1	13.2		-	-	-		-	-	-		
High Int.	17:30				17:30				-				-				
Volume	0	98	51	149	76	185	38	299	-	-	-	-	-	-	-	-	
Peak Factor				0.928				0.900				-				-	

N/S Street : Barnstable Rd / Ocean St
E/W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150004
Site Code : 12150004
Start Date : 08/21/2001
Page No : 1

Groups Printed- Trucks

	Barnstable Rd From North				Main St From East				Ocean St From South				Main St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	2	1	0	2	6	3	0	0	0	0	0	0	0	0	0	0	14	14
16:15	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4	4
16:30	0	2	0	0	2	6	2	0	0	0	0	0	0	0	0	0	0	12	12
16:45	0	2	1	0	2	4	2	0	0	0	0	0	0	0	0	0	0	11	11
Total	0	6	2	0	6	18	9	0	0	0	0	0	0	0	0	0	0	41	41
17:00	0	2	1	0	2	2	3	0	0	0	0	0	0	0	0	0	0	10	10
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	3	1	0	2	6	3	0	0	0	0	0	0	0	0	0	0	15	15
17:45	0	0	1	0	0	8	2	0	0	0	0	0	0	0	0	0	0	11	11
Total	0	5	3	0	4	16	8	0	0	0	0	0	0	0	0	0	0	36	36
Grand Total	0	11	5	0	10	34	17	0	0	0	0	0	0	0	0	0	0	77	77
Apprch %	0.0	68.8	31.3		16.4	55.7	27.9		0.0	0.0	0.0		0.0	0.0	0.0				
Total %	0.0	14.3	6.5		13.0	44.2	22.1		0.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	

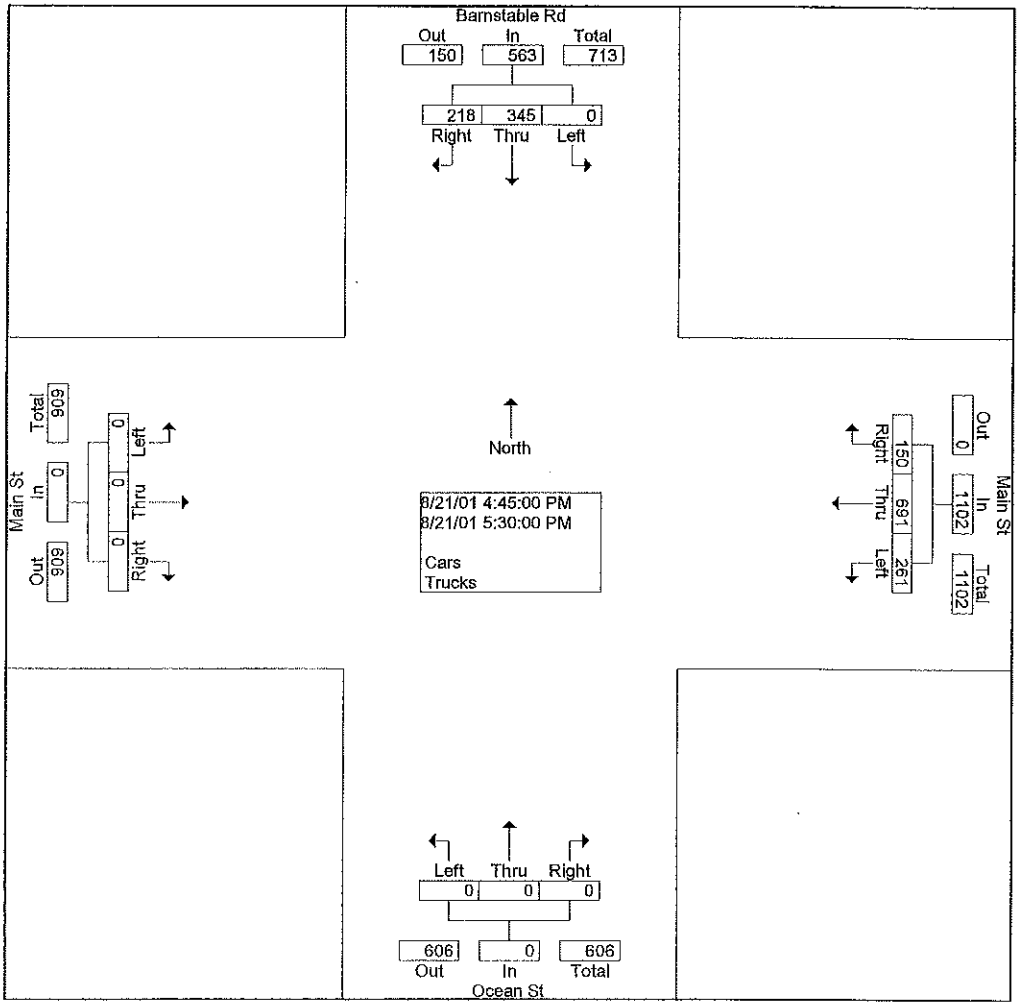
	Barnstable Rd From North				Main St From East				Ocean St From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:00																
Volume	0	6	2	8	6	18	9	33	0	0	0	0	0	0	0	0	41
Percent	0.0	75.0	25.0		18.2	54.5	27.3		0.0	0.0	0.0		0.0	0.0	0.0		
Volume	0	6	2	8	6	18	9	33	0	0	0	0	0	0	0	0	41
Volume	0	2	1	3	2	6	3	11	0	0	0	0	0	0	0	0	14
Peak Factor																	0.732
High Int.	16:00				16:00				3:45:00 PM				3:45:00 PM				
Volume	0	2	1	3	2	6	3	11									
Peak Factor				0.667				0.750									
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:45				16:00				16:00				16:00				
Volume	0	7	3	10	6	18	9	33	0	0	0	0	0	0	0	0	
Percent	0.0	70.0	30.0		18.2	54.5	27.3		-	-	-		-	-	-		
High Int.	17:30				16:00				-				-				
Volume	0	3	1	4	2	6	3	11	-	-	-	-	-	-	-	-	
Peak Factor				0.625				0.750				-				-	

N/S Street : Barnstable Rd / Ocean St
E/W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150004
Site Code : 12150004
Start Date : 08/21/2001
Page No : 1

	Barnstable Rd From North				Main St From East				Ocean St From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:45																
Volume	0	345	218	563	261	691	150	1102	0	0	0	0	0	0	0	0	1665
Percent	0.0	61.3	38.7		23.7	62.7	13.6		0.0	0.0	0.0		0.0	0.0	0.0		
Volume	0	345	218	563	261	691	150	1102	0	0	0	0	0	0	0	0	1665
Volume	0	101	52	153	78	191	41	310	0	0	0	0	0	0	0	0	463
Peak Factor																	0.899
High Int.	17:30				17:30				3:45:00 PM				3:45:00 PM				
Volume	0	101	52	153	78	191	41	310									
Peak Factor				0.920				0.889									

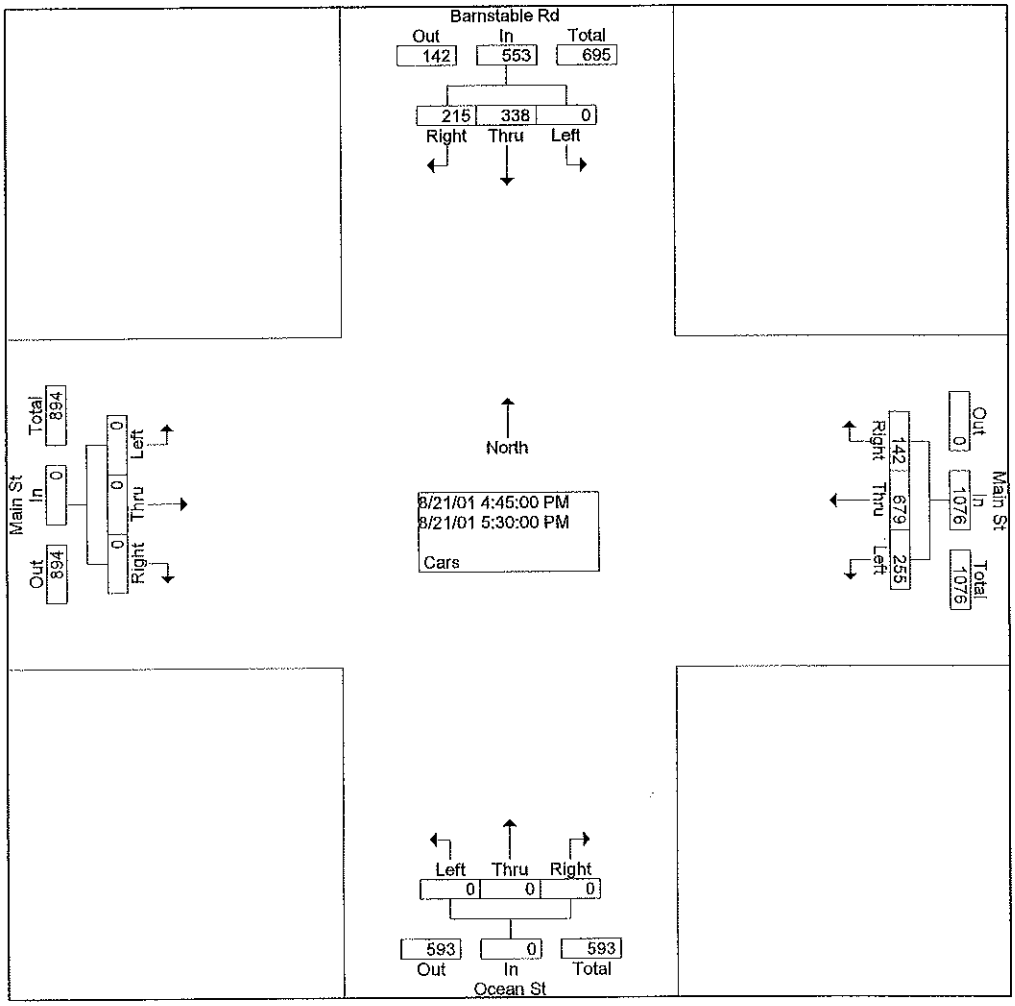


S Street : Barnstable Rd / Ocean St
W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150004
Site Code : 12150004
Start Date : 08/21/2001
Page No : 1

	Barnstable Rd From North				Main St From East				Ocean St From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:45																
Volume	0	338	215	553	255	679	142	1076	0	0	0	0	0	0	0	0	1629
Percent	0.0	61.1	38.9		23.7	63.1	13.2		0.0	0.0	0.0		0.0	0.0	0.0		
Volume	0	338	215	553	255	679	142	1076	0	0	0	0	0	0	0	0	1629
Volume	0	98	51	149	76	185	38	299	0	0	0	0	0	0	0	0	448
Peak Factor																	0.909
High Int.	17:30				17:30				3:45:00 PM				3:45:00 PM				
Volume	0	98	51	149	76	185	38	299									
Peak Factor				0.928				0.900									



N/S Street : Barnstable Rd / Ocean St
E/W Street : Main Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150004
Site Code : 12150004
Start Date : 08/21/2001
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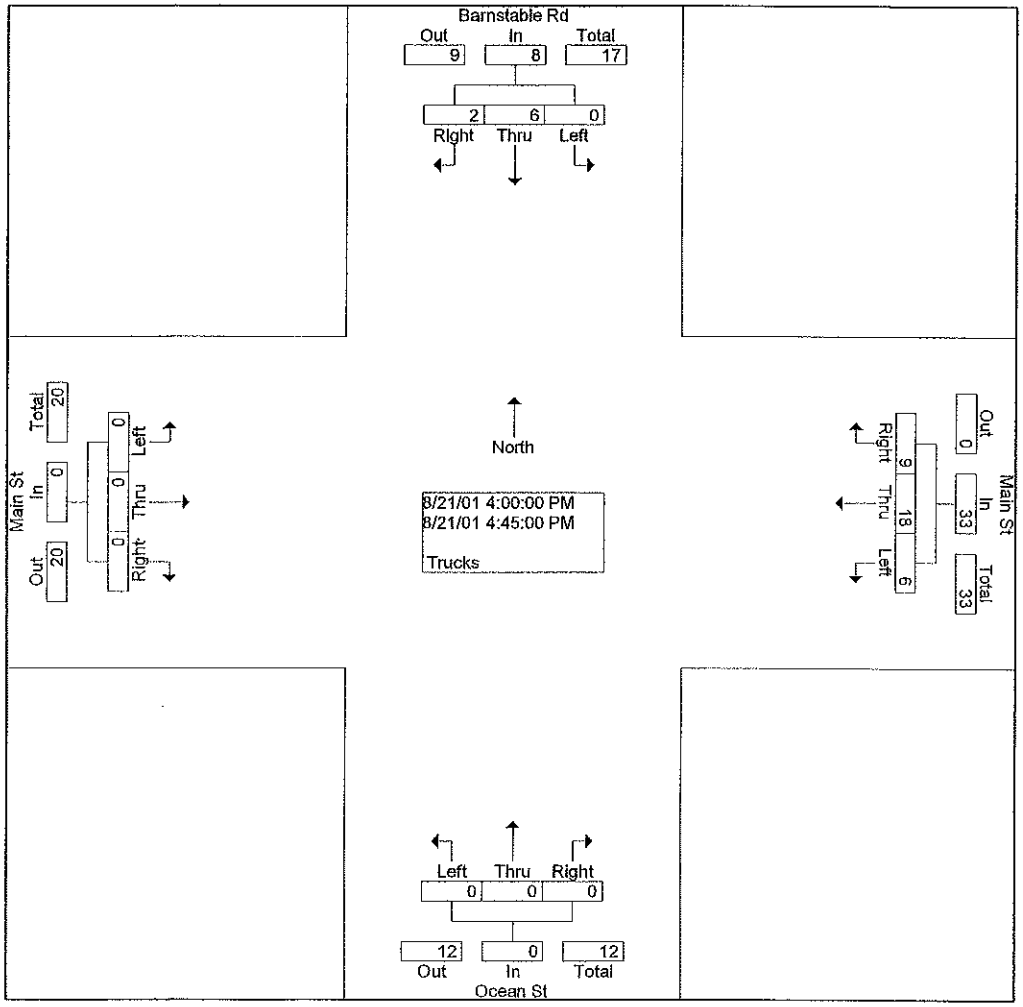
	Barnstable Rd From North				Main St From East				Ocean St From South				Main St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection 16:00																	
Volume	0	6	2	8	6	18	9	33	0	0	0	0	0	0	0	0	41
Percent	0.0	75.0	25.0		18.2	54.5	27.3		0.0	0.0	0.0		0.0	0.0	0.0		
Volume	0	6	2	8	6	18	9	33	0	0	0	0	0	0	0	0	41
Volume	0	2	1	3	2	6	3	11	0	0	0	0	0	0	0	0	14
Peak Factor																	0.732
High Int.	16:00				16:00				3:45:00 PM				3:45:00 PM				
Volume	0	2	1	3	2	6	3	11									
Peak Factor				0.667				0.750									



S Street : High School Road
W Street : South Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150006
Site Code : 12150006
Start Date : 08/21/2001
Page No : 1

Groups Printed- Cars - Trucks

	High School Rd From North				South St From East				High School Rd From South				South St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	41	3	0	2	0	0	0	2	0	5	3	1	12	139	3	0	5	206	211
16:15	41	4	0	0	0	0	0	3	0	9	3	0	15	141	2	0	3	215	218
16:30	42	3	0	3	0	0	0	3	0	4	5	3	24	205	4	4	13	287	300
16:45	35	4	0	3	0	0	0	2	0	4	1	1	21	134	3	1	7	202	209
Total	159	14	0	8	0	0	0	10	0	22	12	5	72	619	12	5	28	910	938
17:00	37	3	0	1	0	0	0	0	0	5	7	1	15	176	10	0	2	253	255
17:15	42	11	0	2	0	0	0	1	0	3	7	2	18	165	11	0	5	257	262
17:30	27	28	0	2	0	0	0	3	0	12	2	0	14	154	33	0	5	270	275
17:45	31	28	0	3	0	0	0	0	0	27	2	2	17	171	25	2	7	301	308
Total	137	70	0	8	0	0	0	4	0	47	18	5	64	666	79	2	19	1081	1100
Grand Total	296	84	0	16	0	0	0	14	0	69	30	10	136	1285	91	7	47	1991	2038
Apprch %	77.9	22.1	0.0		0.0	0.0	0.0		0.0	69.7	30.3		9.0	85.0	6.0				
Total %	14.9	4.2	0.0		0.0	0.0	0.0		0.0	3.5	1.5		6.8	64.5	4.6		2.3	97.7	

	High School Rd From North				South St From East				High School Rd From South				South St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	17:00																
Volume	137	70	0	207	0	0	0	0	0	47	18	65	64	666	79	809	1081
Percent	66.2	33.8	0.0		0.0	0.0	0.0		0.0	72.3	27.7		7.9	82.3	9.8		
Volume	137	70	0	207	0	0	0	0	0	47	18	65	64	666	79	809	1081
Volume	31	28	0	59	0	0	0	0	0	27	2	29	17	171	25	213	301
Peak Factor																	0.898
High Int.	17:45				3:45:00 PM				17:45				17:45				
Volume	31	28	0	59	0	0	0	0	0	27	2	29	17	171	25	213	
Peak Factor				0.877								0.560				0.950	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	17:00				16:00				17:00				17:00				
Volume	137	70	0	207	0	0	0	0	0	47	18	65	64	666	79	809	
Percent	66.2	33.8	0.0		-	-	-		0.0	72.3	27.7		7.9	82.3	9.8		
High Int.	17:45				-				17:45				17:45				
Volume	31	28	0	59	-	-	-	-	0	27	2	29	17	171	25	213	
Peak Factor				0.877				-				0.560				0.950	

N/S Street : High School Road
E/W Street : South Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150006
Site Code : 12150006
Start Date : 08/21/2001
Page No : 1

Groups Printed- Cars

	High School Rd From North				South St From East				High School Rd From South				South St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	41	3	0	2	0	0	0	2	0	5	3	1	12	139	3	0	5	206	211
16:15	39	4	0	0	0	0	0	3	0	9	3	0	15	137	2	0	3	209	212
16:30	41	3	0	3	0	0	0	3	0	4	5	3	23	198	4	4	13	278	291
16:45	35	4	0	3	0	0	0	2	0	4	1	1	21	128	3	1	7	196	203
Total	156	14	0	8	0	0	0	10	0	22	12	5	71	602	12	5	28	889	917
17:00	36	3	0	1	0	0	0	0	0	5	7	1	15	172	10	0	2	248	250
17:15	41	11	0	2	0	0	0	1	0	3	7	2	17	161	11	0	5	251	256
17:30	27	28	0	2	0	0	0	3	0	12	2	0	14	152	33	0	5	268	273
17:45	30	28	0	3	0	0	0	0	0	27	2	2	17	170	25	2	7	299	306
Total	134	70	0	8	0	0	0	4	0	47	18	5	63	655	79	2	19	1066	1085
Grand Total	290	84	0	16	0	0	0	14	0	69	30	10	134	1257	91	7	47	1955	2002
Apprch %	77.5	22.5	0.0		0.0	0.0	0.0		0.0	69.7	30.3		9.0	84.8	6.1				
Total %	14.8	4.3	0.0		0.0	0.0	0.0		0.0	3.5	1.5		6.9	64.3	4.7		2.3	97.7	

	High School Rd From North				South St From East				High School Rd From South				South St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	17:00																
Volume	134	70	0	204	0	0	0	0	0	47	18	65	63	655	79	797	1066
Percent	65.7	34.3	0.0		0.0	0.0	0.0		0.0	72.3	27.7		7.9	82.2	9.9		
Volume	134	70	0	204	0	0	0	0	0	47	18	65	63	655	79	797	1066
Volume	30	28	0	58	0	0	0	0	0	27	2	29	17	170	25	212	299
Peak Factor																	0.891
High Int.	17:45				3:45:00 PM				17:45				17:45				
Volume	30	28	0	58	0	0	0	0	0	27	2	29	17	170	25	212	
Peak Factor				0.879								0.560				0.940	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	17:00				16:00				17:00				17:00				
Volume	134	70	0	204	0	0	0	0	0	47	18	65	63	655	79	797	
Percent	65.7	34.3	0.0		-	-	-		0.0	72.3	27.7		7.9	82.2	9.9		
High Int.	17:45				-				17:45				17:45				
Volume	30	28	0	58	-	-	-	-	0	27	2	29	17	170	25	212	
Peak Factor				0.879				-				0.560				0.940	

S Street : High School Road
W Street : South Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150006
Site Code : 12150006
Start Date : 08/21/2001
Page No : 1

Groups Printed- Trucks

	High School Rd From North				South St From East				High School Rd From South				South St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	6	6
16:30	1	0	0	0	0	0	0	0	0	0	0	0	1	7	0	0	0	9	9
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	6
Total	3	0	0	0	0	0	0	0	0	0	0	0	1	17	0	0	0	21	21
17:00	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	5	5
17:15	1	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	6	6
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
17:45	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	2
Total	3	0	0	0	0	0	0	0	0	0	0	0	1	11	0	0	0	15	15
Grand Total	6	0	0	0	0	0	0	0	0	0	0	0	2	28	0	0	0	36	36
Apprch %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		6.7	93.3	0.0				
Total %	16.7	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		5.6	77.8	0.0		0.0	100.0	

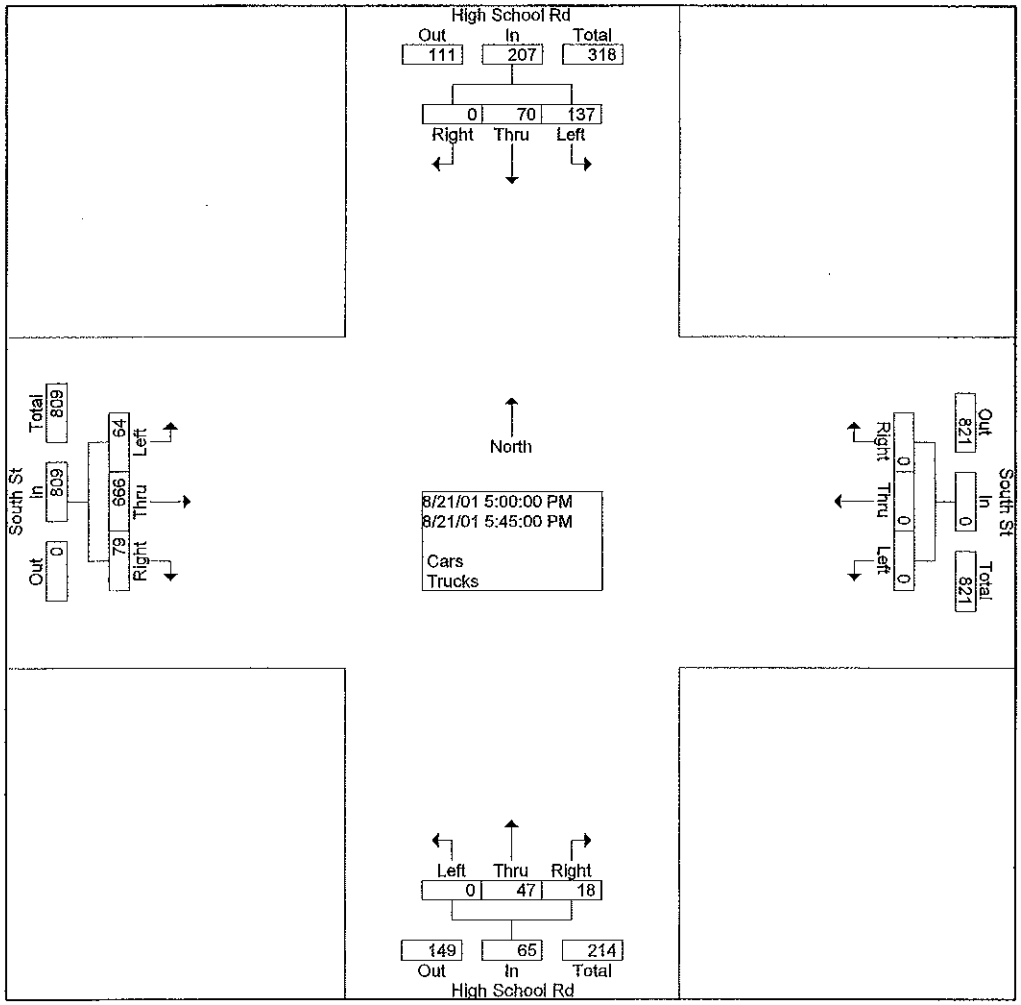
	High School Rd From North				South St From East				High School Rd From South				South St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:15																
Volume	4	0	0	4	0	0	0	0	0	0	0	0	1	21	0	22	26
Percent	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		4.5	95.5	0.0		
Volume	4	0	0	4	0	0	0	0	0	0	0	0	1	21	0	22	26
Volume	1	0	0	1	0	0	0	0	0	0	0	0	1	7	0	8	9
Peak Factor																	0.722
High Int.	16:15				3:45:00 PM				3:45:00 PM				16:30				
Volume	2	0	0	2	0	0	0	0	0	0	0	0	1	7	0	8	
Peak Factor				0.500												0.688	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
By Approach	16:15				16:00				16:00				16:30				
Volume	4	0	0	4	0	0	0	0	0	0	0	0	2	21	0	23	
Percent	100.0	0.0	0.0		-	-	-		-	-	-		8.7	91.3	0.0		
High Int.	16:15				-				-				16:30				
Volume	2	0	0	2	-	-	-	-	-	-	-	-	1	7	0	8	
Peak Factor				0.500				-				-				0.719	

N/S Street : High School Road
E/W Street : South Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150006
Site Code : 12150006
Start Date : 08/21/2001
Page No : 1

	High School Rd From North				South St From East				High School Rd From South				South St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	17:00																
Volume	137	70	0	207	0	0	0	0	0	47	18	65	64	666	79	809	1081
Percent	66.2	33.8	0.0		0.0	0.0	0.0		0.0	72.3	27.7		7.9	82.3	9.8		
Volume	137	70	0	207	0	0	0	0	0	47	18	65	64	666	79	809	1081
Volume	31	28	0	59	0	0	0	0	0	27	2	29	17	171	25	213	301
Peak Factor																	0.898
High Int.	17:45				3:45:00 PM				17:45				17:45				
Volume	31	28	0	59	0	0	0	0	0	27	2	29	17	171	25	213	
Peak Factor				0.877								0.560				0.950	

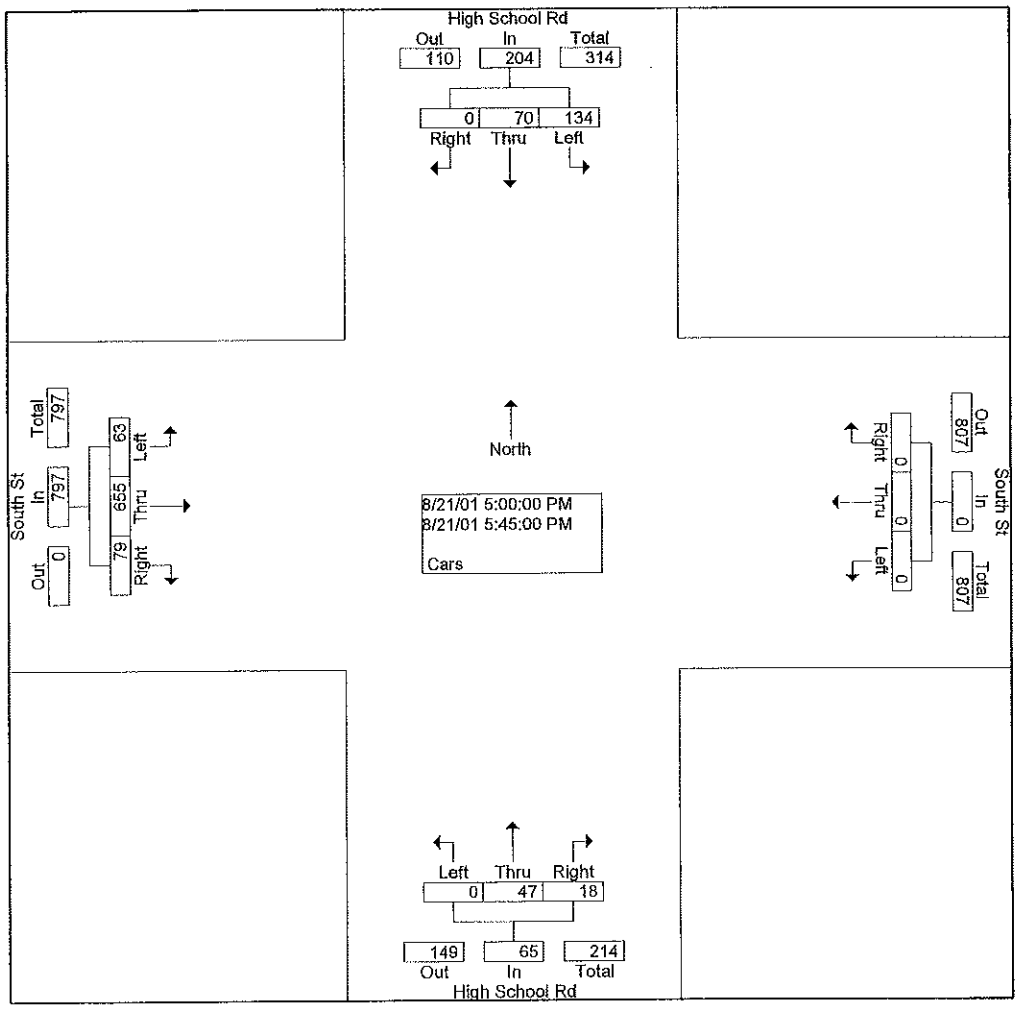


S Street : High School Road
W Street : South Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150006
Site Code : 12150006
Start Date : 08/21/2001
Page No : 1

	High School Rd From North				South St From East				High School Rd From South				South St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	17:00																
Volume	134	70	0	204	0	0	0	0	0	47	18	65	63	655	79	797	1066
Percent	65.7	34.3	0.0		0.0	0.0	0.0		0.0	72.3	27.7		7.9	82.2	9.9		
Volume	134	70	0	204	0	0	0	0	0	47	18	65	63	655	79	797	1066
Volume	30	28	0	58	0	0	0	0	0	27	2	29	17	170	25	212	299
Peak Factor																	0.891
High Int.	17:45				3:45:00 PM				17:45				17:45				
Volume	30	28	0	58	0	0	0	0	0	27	2	29	17	170	25	212	
Peak Factor				0.879								0.560				0.940	



N/S Street : High School Road
E/W Street : South Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150006
Site Code : 12150006
Start Date : 08/21/2001
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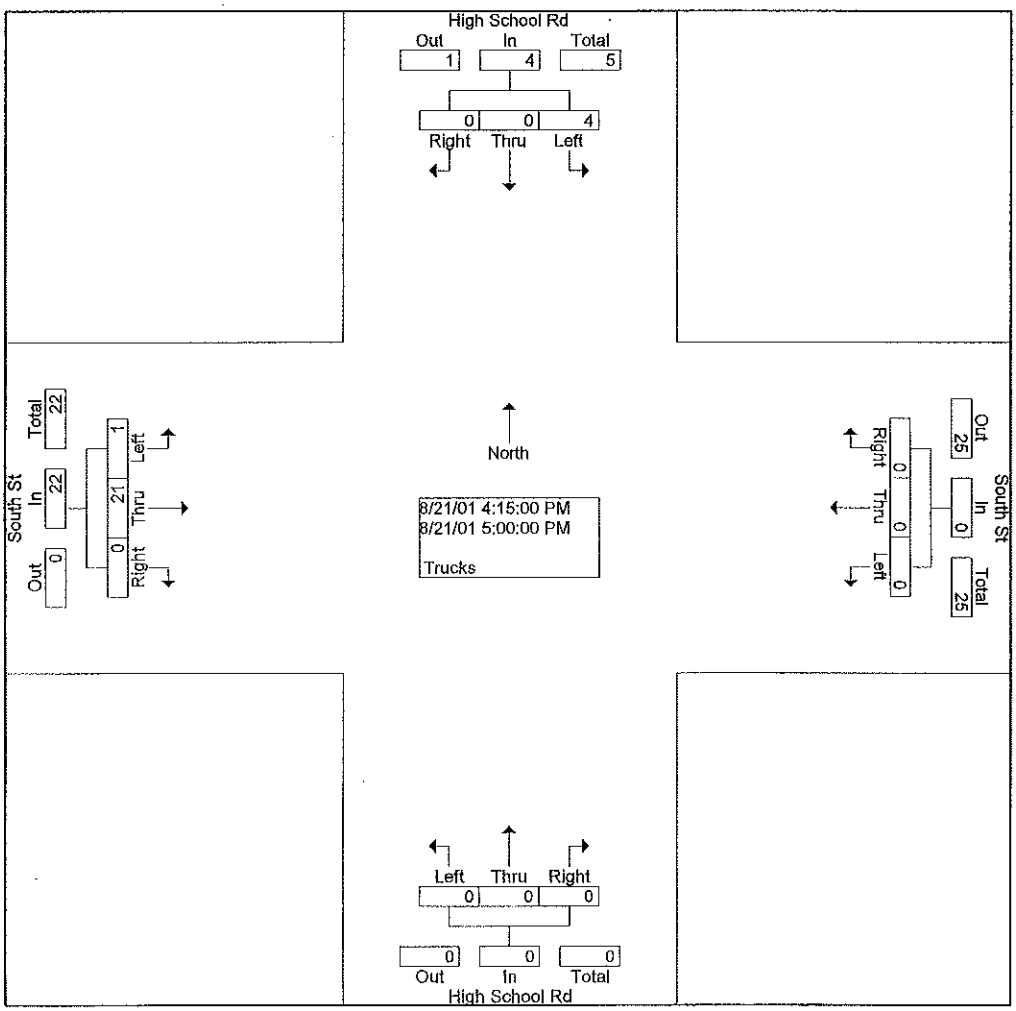
	High School Rd From North				South St From East				High School Rd From South				South St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection	16:15																
Volume	4	0	0	4	0	0	0	0	0	0	0	0	1	21	0	22	26
Percent	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		4.5	95.5	0.0		
Volume	4	0	0	4	0	0	0	0	0	0	0	0	1	21	0	22	26
Volume	1	0	0	1	0	0	0	0	0	0	0	0	1	7	0	8	9
Peak Factor																	0.722
High Int.	16:15				3:45:00 PM				3:45:00 PM				16:30				
Volume	2	0	0	2	0	0	0	0	0	0	0	0	1	7	0	8	
Peak Factor				0.500												0.688	



N/S Street : Ocean St / Old Colony Rd
E/W Street : South Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150007
Site Code : 12150007
Start Date : 08/21/2001
Page No : 1

Groups Printed- Cars - Trucks

	Ocean St From North					Old Colony Rd From Northeast					South St From East					Ocean St From South					Old Colony Rd From Southwest					South St From West					
Start Time	Hard Left	Left	Thru	Bear Right	Right	Hard Left	Bear Left	Thru	Bear Right	Hard Right	Left	Bear Left	Thru	Right	Hard Right	Hard Left	Left	Thru	Bear Right	Right	Hard Left	Bear Left	Thru	Bear Right	Hard Right	Left	Bear Left	Thru	Right	Hard Right	Int. Total
16:00	10	31	51	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	14	0	0	3	6	0	0	91	91	21	1	372
16:15	18	22	61	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	12	0	0	4	7	0	0	98	99	21	2	406
16:30	12	29	62	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	21	0	0	7	6	0	0	99	99	23	1	443
16:45	14	29	66	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57	19	0	0	9	5	0	0	93	89	21	4	433
Total	54	111	240	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200	66	0	0	23	24	0	0	381	378	86	8	1654
17:00	16	28	71	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	16	0	0	9	9	0	0	98	98	25	2	488
17:15	9	32	70	29	0	0	0	0	0	0	0	0	0	0	1	0	0	0	49	16	0	0	17	3	1	0	80	100	28	1	436
17:30	13	33	73	31	0	0	0	0	0	0	0	0	0	0	0	4	0	0	52	19	0	0	11	6	0	0	51	85	27	0	405
17:45	16	25	62	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	22	0	0	25	4	0	0	66	97	21	0	467
Total	54	118	276	124	0	0	0	0	0	0	0	0	0	0	1	4	0	0	282	73	0	0	62	22	1	0	295	380	101	3	1796
Grand Total	108	229	516	207	0	0	0	0	0	0	0	0	0	0	1	4	0	0	482	139	0	0	85	46	1	0	676	758	187	11	3450
Apprch %	10.2	21.6	48.7	19.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.6	0.0	0.0	77.1	22.2	0.0	0.0	64.4	34.8	0.8	0.0	41.4	46.4	11.5	0.7	
Total %	3.1	6.6	15.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	14.0	4.0	0.0	0.0	2.5	1.3	0.0	0.0	19.6	22.0	5.4	0.3	

	Ocean St From North						Old Colony Rd From Northeast						South St From East						Ocean St From South						Old Colony Rd From Southwest						South St From West						
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																																					
Intersection	16:30																																				
Volume	51	118	269	116	0	554	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	246	72	318	0	0	42	23	1	66	0	370	386	97	8	861	1800
Percent	9.2	21.3	48.6	20.9	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	77.4	22.6		0.0	0.0	63.6	34.8	1.5		0.0	43.0	44.8	11.3	0.9		
Volume	51	118	269	116	0	554	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	246	72	318	0	0	42	23	1	66	0	370	386	97	8	861	1800
Volume Peak Factor	16	28	71	35	0	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	16	97	0	0	9	9	0	18	0	98	98	25	2	223	488 0.922
High Int.	17:00						3:45:00 PM						17:15						17:00						17:15						17:00						
Volume	16	28	71	35	0	150	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	81	16	97	0	0	17	3	1	21	0	98	98	25	2	223	
Peak Factor						0.923											0.250							0.820						0.786						0.965	

Accurate Counts
978-664-2565

File Name : 12150007
Site Code : 12150007
Start Date : 08/21/2001
Page No : 2

	Ocean St From North						Old Colony Rd From Northeast						South St From East						Ocean St From South						Old Colony Rd From Southwest						South St From West						
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																																					
By Approach	16:45						16:00						16:30						17:00						17:00						16:15						
Volume	52	122	280	122	0	576	0	0	0	0	0	0	0	0	0	0	1	1	4	0	0	282	73	359	0	0	62	22	1	85	0	388	385	90	9	872	
Percent	9.0	21.2	48.6	21.2	0.0		-	-	-	-	-		0.0	0.0	0.0	0.0	100.0		1.1	0.0	0.0	78.6	20.3		0.0	0.0	72.9	25.9	1.2		0.0	44.5	44.2	10.3	1.0		
High Int.	17:00						-						17:15						17:45						17:45						17:00						
Volume	16	28	71	35	0	150	-	-	-	-	-	-	0	0	0	0	1	1	0	0	0	100	22	122	0	0	25	4	0	29	0	98	98	25	2	223	
Peak Factor						0.960						-						0.250						0.736						0.733						0.978	

N/S Street : Ocean St / Old Colony Rd
E/W Street : South Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150007
Site Code : 12150007
Start Date : 08/21/2001
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Groups Printed- Cars

	Ocean St From North					Old Colony Rd From Northeast					South St From East					Ocean St From South					Old Colony Rd From Southwest					South St From West					
Start Time	Hard Left	Left	Thru	Bear Right	Right	Hard Left	Bear Left	Thru	Bear Right	Hard Right	Left	Bear Left	Thru	Right	Hard Right	Hard Left	Left	Thru	Bear Right	Right	Hard Left	Bear Left	Thru	Bear Right	Hard Right	Left	Bear Left	Thru	Right	Hard Right	Int. Total
16:00	10	31	51	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	14	0	0	3	6	0	0	91	91	21	1	372
16:15	18	21	61	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	12	0	0	4	7	0	0	96	96	21	2	399
16:30	12	29	60	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	21	0	0	7	6	0	0	98	96	23	1	436
16:45	13	29	64	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	19	0	0	9	5	0	0	93	88	20	1	424
Total	53	110	236	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	197	66	0	0	23	24	0	0	378	371	85	5	1631
17:00	15	27	71	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	16	0	0	9	9	0	0	98	96	25	2	482
17:15	8	29	68	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	16	0	0	17	3	1	0	79	98	28	1	426
17:30	13	33	73	31	0	0	0	0	0	0	0	0	0	0	0	4	0	0	51	19	0	0	11	6	0	0	51	85	27	0	404
17:45	16	25	61	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	22	0	0	25	4	0	0	66	97	21	0	463
Total	52	114	273	124	0	0	0	0	0	0	0	0	0	0	0	4	0	0	276	73	0	0	62	22	1	0	294	376	101	3	1775
Grand Total	105	224	509	207	0	0	0	0	0	0	0	0	0	0	0	4	0	0	473	139	0	0	85	46	1	0	672	747	186	8	3406
Apprch %	10.0	21.4	48.7	19.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	76.8	22.6	0.0	0.0	64.4	34.8	0.8	0.0	41.7	46.3	11.5	0.5	
Total %	3.1	6.6	14.9	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	13.9	4.1	0.0	0.0	2.5	1.4	0.0	0.0	19.7	21.9	5.5	0.2	

	Ocean St From North						Old Colony Rd From Northeast						South St From East						Ocean St From South						Old Colony Rd From Southwest						South St From West						
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																																					
Intersection	17:00																																				
Volume	52	114	273	124	0	563	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	276	73	353	0	0	62	22	1	85	0	294	376	101	3	774	1775
Percent	9.2	20.2	48.5	22.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		1.1	0.0	0.0	78.2	20.7		0.0	0.0	72.9	25.9	1.2		0.0	38.0	48.6	13.0	0.4		
Volume	52	114	273	124	0	563	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	276	73	353	0	0	62	22	1	85	0	294	376	101	3	774	1775
Volume Peak Factor	15	27	71	35	0	148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	16	95	0	0	9	9	0	18	0	98	96	25	2	221	482 0.921
High Int.	17:30						3:45:00 PM						3:45:00 PM						17:45						17:45						17:00						
Volume Peak Factor	13	33	73	31	0	150 0.938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	22	119 0.742	0	0	25	4	0	29 0.733	0	98	96	25	2	221 0.876	

Accurate Counts
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Site Code : 12150007
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	Ocean St From North						Old Colony Rd From Northeast						South St From East						Ocean St From South						Old Colony Rd From Southwest						South St From West						
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																																					
By Approach	16:45						16:00						16:00						17:00						17:00						16:15						
Volume	49	118	276	122	0	565	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	276	73	353	0	0	62	22	1	85	0	385	376	89	6	856	
Percent	8.7	20.9	48.8	21.6	0.0		-	-	-	-	-		-	-	-	-	-		1.1	0.0	0.0	78.2	20.7		0.0	0.0	72.9	25.9	1.2		0.0	45.0	43.9	10.4	0.7		
High Int.	17:30						-						-						17:45						17:45						17:00						
Volume Peak Factor	13	33	73	31	0	150 0.9 42	-	-	-	-	-	- -	-	-	-	-	-	- -	0	0	0	97	22	119 0.7 42	0	0	25	4	0	29 0.7 33	0	98	96	25	2	221 0.9 68	

N/S Street : Ocean St / Old Colony Rd
E/W Street : South Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150007
Site Code : 12150007
Start Date : 08/21/2001
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Groups Printed- Trucks

	Ocean St From North					Old Colony Rd From Northeast					South St From East					Ocean St From South					Old Colony Rd From Southwest					South St From West				
Start Time	Hard Left	Left	Thru	Bear Right	Right	Hard Left	Bear Left	Thru	Bear Right	Hard Right	Left	Bear Left	Thru	Right	Hard Right	Hard Left	Left	Thru	Bear Right	Right	Hard Left	Bear Left	Thru	Bear Right	Hard Right	Left	Bear Left	Thru	Right	Hard Right	Int. Total
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	3	0	0	7
16:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	3	0	0	7
16:45	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	3	9
Total	1	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	7	1	3	23
17:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	6
17:15	1	3	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	10
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
17:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4
Total	2	4	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	6	0	0	0	0	0	0	0	1	4	0	0	21
Grand Total	3	5	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	9	0	0	0	0	0	0	0	4	11	1	3	44
Apprch %	20.0	33.3	46.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1	57.9	5.3	15.8	
Total %	6.8	11.4	15.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	25.0	2.3	6.8	

	Ocean St From North						Old Colony Rd From Northeast						South St From East						Ocean St From South						Old Colony Rd From Southwest						South St From West					
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																																				
Intersection	16:30																																			
Volume	3	4	6	0	0	13	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	4	0	4	0	0	0	0	0	0	0	2	8	1	3	14	32
Percent	23.1	30.8	46.2	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	14.3	57.1	7.1	21.4		
Volume	3	4	6	0	0	13	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	4	0	4	0	0	0	0	0	0	0	2	8	1	3	14	32
Volume Peak Factor	1	3	2	0	0	6	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	10
																																				0.800
High Int.	17:15						3:45:00 PM						17:15						17:00						3:45:00 PM						16:45					
Volume Peak Factor	1	3	2	0	0	6	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	2	0	0	0	0	0	0	0	0	1	1	3	5	
						0.542												0.250						0.500												0.700	

Accurate Counts
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Site Code : 12150007
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	Ocean St From North						Old Colony Rd From Northeast						South St From East						Ocean St From South						Old Colony Rd From Southwest						South St From West						
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																																					
By Approach	16:30						16:00						16:30						17:00						16:00						16:15						
Volume	3	4	6	0	0	13	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	6	0	6	0	0	0	0	0	0	0	3	9	1	3	16	
Percent	23.1	30.8	46.2	0.0	0.0		-	-	-	-	-		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	100.0	0.0		-	-	-	-	-		0.0	18.8	56.3	6.3	18.8		
High Int.	17:15						-						17:15						17:45						-						16:15						
Volume	1	3	2	0	0	6	-	-	-	-	-	-	0	0	0	0	1	1	0	0	0	3	0	3	-	-	-	-	-	-	0	2	3	0	0	5	
Peak Factor						0.5						-						0.2						0.5						-						0.8	
						42												50						00												00	

N/S Street : Ocean St / Old Colony Rd
E/W Street : South Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
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File Name : 12150007
Site Code : 12150007
Start Date : 08/21/2001
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	Ocean St From North						Old Colony Rd From Northeast						South St From East						Ocean St From South						Old Colony Rd From Southwest						South St From West						
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																																					
Intersection	16:30																																				
Volume	51	118	269	116	0	554	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	246	72	318	0	0	42	23	1	66	0	370	386	97	8	861	1800
Percent	9.2	21.3	48.6	20.9	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	77.4	22.6		0.0	0.0	63.6	34.8	1.5		0.0	43.0	44.8	11.3	0.9		
Volume	51	118	269	116	0	554	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	246	72	318	0	0	42	23	1	66	0	370	386	97	8	861	1800
Volume Peak Factor	16	28	71	35	0	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	16	97	0	0	9	9	0	18	0	98	98	25	2	223	488 0.922
High Int.	17:00						3:45:00 PM						17:15						17:00						17:15						17:00						
Volume Peak Factor	16	28	71	35	0	150 0.923	0	0	0	0	0	0	0	0	0	0	1	1 0.250	0	0	0	81	16	97 0.820	0	0	17	3	1	21 0.786	0	98	98	25	2	223 0.965	

Accurate Counts
978-664-2565

File Name : 12150007
Site Code : 12150007
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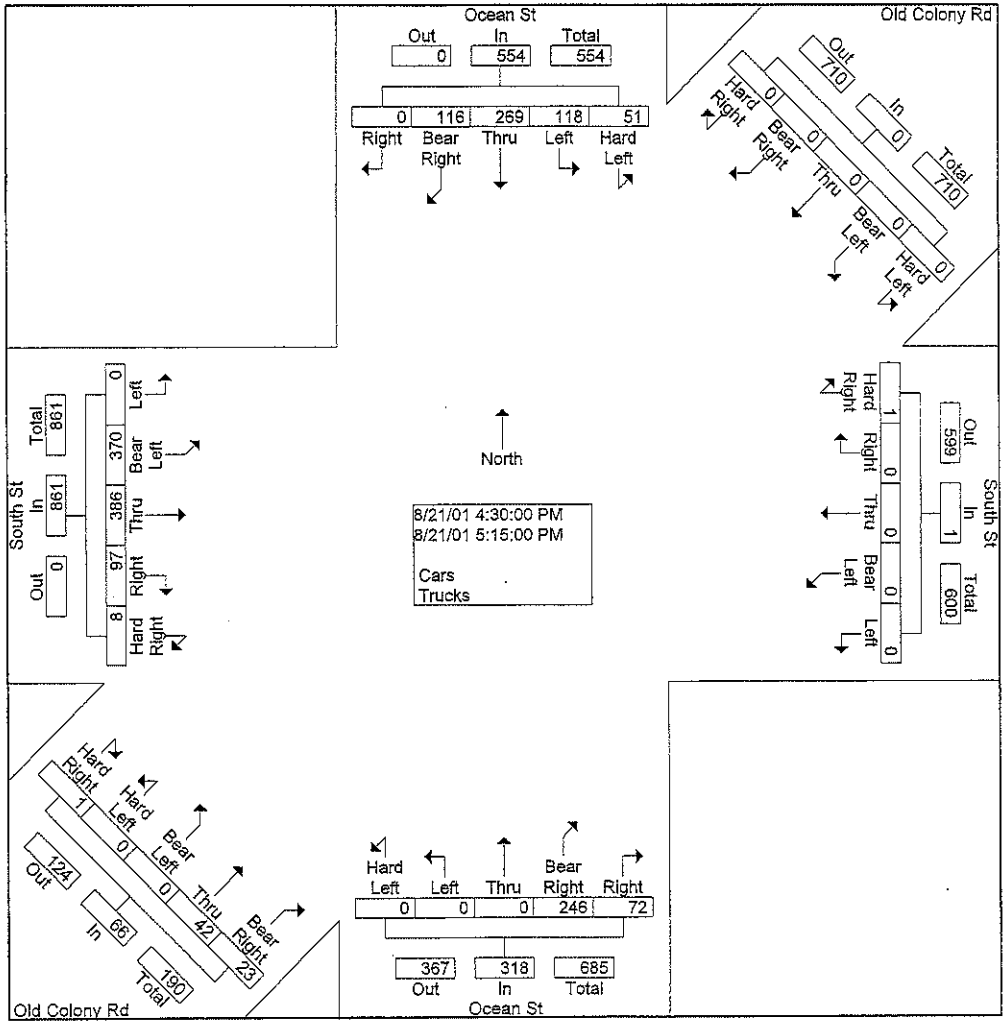

N/S Street : Ocean St / Old Colony Rd
E/W Street : South Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150007
Site Code : 12150007
Start Date : 08/21/2001
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	Ocean St From North						Old Colony Rd From Northeast						South St From East						Ocean St From South						Old Colony Rd From Southwest						South St From West						
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																																					
Intersection	17:00																																				
Volume	52	114	273	124	0	563	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	276	73	353	0	0	62	22	1	85	0	294	376	101	3	774	1775
Percent	9.2	20.2	48.5	22.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		1.1	0.0	0.0	78.2	20.7		0.0	0.0	72.9	25.9	1.2		0.0	38.0	48.6	13.0	0.4		
Volume	52	114	273	124	0	563	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	276	73	353	0	0	62	22	1	85	0	294	376	101	3	774	1775
Volume Peak Factor	15	27	71	35	0	148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	16	95	0	0	9	9	0	18	0	98	96	25	2	221	482 0.921
High Int.	17:30						3:45:00 PM						3:45:00 PM						17:45						17:45						17:00						
Volume Peak Factor	13	33	73	31	0	150 0.938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	22	119 0.742	0	0	25	4	0	29 0.733	0	98	96	25	2	221 0.876	

Accurate Counts
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File Name : 12150007
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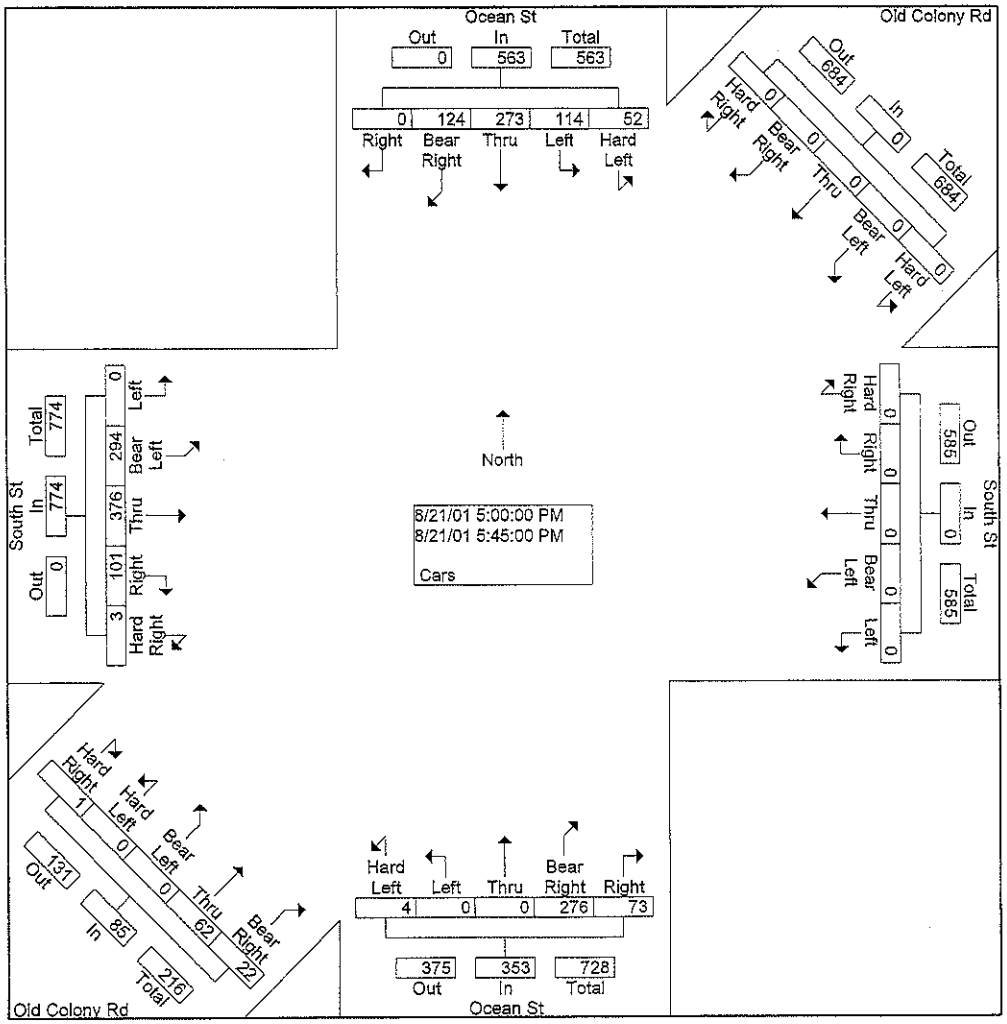

N/S Street : Ocean St / Old Colony Rd
E/W Street : South Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 12150007
Site Code : 12150007
Start Date : 08/21/2001
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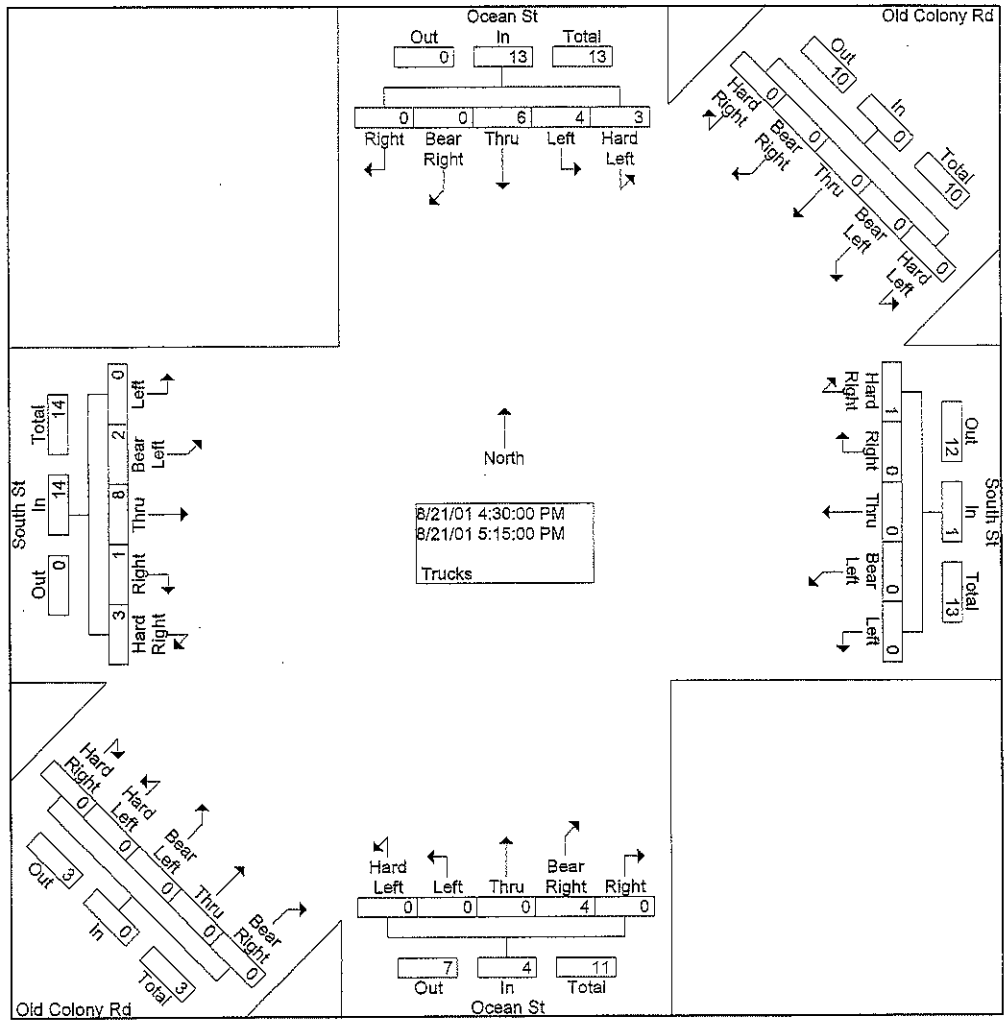
	Ocean St From North						Old Colony Rd From Northeast						South St From East						Ocean St From South						Old Colony Rd From Southwest						South St From West						
Start Time	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Hard Left	Left	Thru	Bear Right	Right	App. Total	Hard Left	Bear Left	Thru	Bear Right	Hard Right	App. Total	Left	Bear Left	Thru	Right	Hard Right	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																																				
Intersection	16:30																																			
Volume	3	4	6	0	0	13	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	4	0	4	0	0	0	0	0	0	0	2	8	1	3	14	32
Percent	23.1	30.8	46.2	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	14.3	57.1	7.1	21.4		
Volume	3	4	6	0	0	13	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	4	0	4	0	0	0	0	0	0	0	2	8	1	3	14	32
Volume	1	3	2	0	0	6	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	10
Peak Factor																																					0.800
High Int.	17:15						3:45:00 PM						17:15						17:00						3:45:00 PM						16:45						
Volume	1	3	2	0	0	6	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	2	0	0	0	0	0	0	0	0	1	1	3	5	
Peak Factor						0.5042												0.2500						0.5000												0.7000	

Accurate Counts
978-664-2565

File Name : 12150007
Site Code : 12150007
Start Date : 08/21/2001
Page No : 2



N/S Street : Ocean St / Old Colony Rd
E/W Street : South Street
City/State : Hyannis, MA
Weather : Cloudy

Accurate Counts
978-664-2565

File Name : 1215007P
Site Code : 12150007
Start Date : 08/21/2001
Page No : 1

Groups Printed- Pedestrians

	Ocean St From North					Old Colony Rd From Northeast					South St From East					Ocean St From South					Old Colony Rd From Southwest					South St From West					
Start Time	Left	Thru	Bear Right	Right	Peds	Bear Left	Thru	Bear Right	Hard Right	Peds	Left	Bear Left	Thru	Right	Peds	Hard Left	Left	Thru	Right	Peds	Bear Left	Thru	Bear Right	Hard Right	Peds	Left	Thru	Right	Hard Right	Peds	Int. Total
16:00	0	0	0	0	10	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	18
16:15	0	0	0	0	15	0	0	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	28
16:30	0	0	0	0	28	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	0	0	0	0	4	0	0	0	0	4	42
16:45	0	0	0	0	12	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	24	0	0	0	0	1	50
Total	0	0	0	0	65	0	0	0	0	3	0	0	0	0	20	0	0	0	0	2	0	0	0	0	40	0	0	0	0	8	138
17:00	0	0	0	0	16	0	0	0	0	1	0	0	0	0	15	0	0	0	0	0	0	0	0	0	11	0	0	0	0	2	45
17:15	0	0	0	0	12	0	0	0	0	1	0	0	0	0	15	0	0	0	0	0	0	0	0	0	7	0	0	0	0	1	36
17:30	0	0	0	0	7	0	0	0	0	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	17	0	0	0	0	1	31
17:45	0	0	0	0	18	0	0	0	0	1	0	0	0	0	17	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	53
Total	0	0	0	0	53	0	0	0	0	5	0	0	0	0	51	0	0	0	0	0	0	0	0	0	52	0	0	0	0	4	165
Grand Total	0	0	0	0	118	0	0	0	0	8	0	0	0	0	71	0	0	0	0	2	0	0	0	0	92	0	0	0	0	12	303
Apprch %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	
Total %	0.0	0.0	0.0	0.0	38.9	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	23.4	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	30.4	0.0	0.0	0.0	0.0	4.0	

	Ocean St From North						Old Colony Rd From Northeast						South St From East						Ocean St From South						Old Colony Rd From Southwest						South St From West						
Start Time	Left	Thru	Bear Right	Right	Peds	App. Total	Bear Left	Thru	Bear Right	Hard Right	Peds	App. Total	Left	Bear Left	Thru	Right	Peds	App. Total	Hard Left	Left	Thru	Right	Peds	App. Total	Bear Left	Thru	Bear Right	Hard Right	Peds	App. Total	Left	Thru	Right	Hard Right	Peds	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																																					
Intersection	16:30																																				
Volume	0	0	0	0	68	68	0	0	0	0	2	2	0	0	0	0	47	47	0	0	0	0	2	2	0	0	0	0	46	46	0	0	0	0	8	8	173
Percent	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	100.0		
Volume	0	0	0	0	68	68	0	0	0	0	2	2	0	0	0	0	47	47	0	0	0	0	2	2	0	0	0	0	46	46	0	0	0	0	8	8	173
Volume	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	24	24	0	0	0	0	1	1	50
Peak Factor																																					0.865
High Int.	16:30						17:00						17:00						16:30						16:45						16:30						
Volume	0	0	0	0	28	28	0	0	0	0	1	1	0	0	0	0	15	15	0	0	0	0	2	2	0	0	0	0	24	24	0	0	0	0	4	4	
Peak Factor						0.607						0.500						0.783						0.250						0.479						0.500	

	Ocean St From North						Old Colony Rd From Northeast						South St From East						Ocean St From South						Old Colony Rd From Southwest						South St From West						
Start Time	Left	Thru	Bear Right	Right	Peds	App. Total	Bear Left	Thru	Bear Right	Hard Right	Peds	App. Total	Left	Bear Left	Thru	Right	Peds	App. Total	Hard Left	Left	Thru	Right	Peds	App. Total	Bear Left	Thru	Bear Right	Hard Right	Peds	App. Total	Left	Thru	Right	Hard Right	Peds	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																																					
By Approach	16:15						17:00						17:00						16:00						16:45						16:00						
Volume	0	0	0	0	71	71	0	0	0	0	5	5	0	0	0	0	51	51	0	0	0	0	2	2	0	0	0	0	59	59	0	0	0	0	8	8	
Percent	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	100.0		
High Int.	16:30						17:30						17:45						16:30						16:45						16:30						
Volume	0	0	0	0	28	28	0	0	0	0	2	2	0	0	0	0	17	17	0	0	0	0	2	2	0	0	0	0	24	24	0	0	0	0	4	4	
Peak Factor						0.634						0.625						0.750						0.250						0.615						0.500	

Appendix B

Accident Data

MassHighway Data

Accident Summary
Downtown Hyannis Traffic Study
MassHighway Accident Data

Location	1997 Total	1998 Total	MHD Data 1999 Total	2000 Total	Grand Total
Main Street*	25	25	15	8	73
Main St and Old Colony Rd	1	0	2	0	3
Main St and Barnstable Rd/Ocean St	3	4	2	3	12
Main St and High School Road	1	2	2	2	7
Main St and Pine Ave	2	0	0	1	3
Main St and Bassett Ln	1	1	0	1	3
Main St and Sea St	1	1	1	3	6
Main St and South St	2	2	2	1	7
Total, Main Street	36	35	24	19	114
South Street	6	7	6	6	25
South St and Old Colony Rd/Ocean St	3	9	3	1	16
South St and Pearl St	1	0	0	2	3
South St and High School Road	2	6	4	4	16
South St and Pine Ave	0	0	1	0	1
South St and Sea St	0	2	0	3	5
Total, South Street	12	24	14	16	66
Old Colony Road	1	1	2	0	4
Ocean Street	1	0	0	4	5
Barnstable Road	0	2	3	14	19
Pearl Street	0	0	2	0	2
High School Road	0	0	1	2	3
Pine Avenue	0	2	0	0	2
Bassett Lane	1	0	0	0	1
Sea Street	4	0	1	1	6
Stevens Street	2	0	0	3	5
Total, cross streets	9	5	9	24	47
Grand Total	57	64	47	59	168

Notes:
1) Main Street accidents may include accidents from other villages of Barnstable.

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: South Street @ Pearl Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Friday	July	25	12:00 PM	Rearend	Injury	Wet	Daylight	Rain
1	2000	Friday	February	25	6:00 PM	Angle	Angle	Wet	Dark (Road Unlit)	Foggy
2	2000	Thursday	July	20	3:00 PM	Angle	Angle	Dry	Daylight	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: South Street @ Pine Ave
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1999	Saturday	December	11	1:00 AM	Unknown	PDO	Wet	Dark (Road Lit)	Cloudy

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ Pine Ave
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Sunday	October	12	1:00 PM	Rearend	Injury	Dry	Daylight	Clear
2	1997	Sunday	October	19	2:00 AM	Angle	PDO	Dry	Dark (Road Lit)	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Bassett Lane @ Main Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Friday	May	28	1:00 PM	Angle	PDO	Dry	Dark (Road Lit)	Clear
1	1998	Friday	November	19	7:00 PM	Parked Vehicle	Injury	Dry	Daylight	Clear
1	2000	Saturday	May	20	10:00 PM	Rearend	PDO	Dry	Dark (Road Lit)	Unknown

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Bassett Lane
PROJECT #: 2001-215-00

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Tuesday	May	6	2:00 PM	Rearend	Injury	Wet	Daylight	Rain

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: South Street @ Old Colony Road
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Wednesday	January	8	11:00 PM	Headon	Injury	Icy	Dark(Road Lit)	Clear
2	1997	Tuesday	January	21	12:00 PM	Angle	PDO	Dry	Dark(Road Lit)	Clear
3	1997	Monday	May	26	2:00 PM	Angle	Injury	Dry	Daylight	Clear
1	1998	Friday	January	16	8:00 AM	Unknown	PDO	Wet	Daylight	Rain
2	1998	Monday	January	26	12:00 PM	Rearend	PDO	Unknown	Daylight	Clear
3	1998	Wednesday	February	25	11:00 AM	Rearend	Injury	Wet	Daylight	Rain
4	1998	Saturday	June	20	10:00 AM	Rearend	Injury	Dry	Daylight	Clear
5	1998	Sunday	June	21	2:00 PM	Angle	PDO	Dry	Daylight	Clear
6	1998	Saturday	August	22	11:00 PM	Angle	PDO	Dry	Dark(Road Lit)	Clear
7	1998	Thursday	October	22	8:00 PM	Angle	PDO	Dry	Dark(Road Lit)	Clear
8	1998	Wednesday	November	11	7:00 PM	Parked Vehicle	PDO	Wet	Dark(Road Lit)	Cloudy
9	1998	Tuesday	December	1	2:00 PM	Angle	Injury	Unknown	Daylight	Unknown
1	1999	Wednesday	April	14	5:00 PM	Rearend	PDO	Dry	Daylight	Clear
2	1999	Thursday	July	8	2:00 PM	Rearend	PDO	Dry	Daylight	Clear
3	1999	Sunday	July	18	5:00 PM	Angle	PDO	Dry	Daylight	Clear
1	2000	Wednesday	March	22	11:00 AM	Unknown	Injury	Dry	Daylight	Clear

South Street @ Old Colony

Sum of Value	Year				
Day	1997	1998	1999	2000	Grand Total
Sunday		1	1		2
Monday	1	1			2
Tuesday	1	1			2
Wednesday	1	2	1	1	5
Thursday		1	1		2
Friday		1			1
Saturday		2			2
Grand Total	3	9	3	1	16

Sum of Value	Year				
Month	1997	1998	1999	2000	Grand Total
January	2	2			4
February		1			1
March				1	1
April			1		1
May	1				1
June		2			2
July			2		2
August		1			1
October		1			1
November		1			1
December		1			1
Grand Total	3	9	3	1	16

Sum of Value	Year				
Time	1997	1998	1999	2000	Grand Total
8:00 AM		1			1
10:00 AM		1			1
11:00 AM		1		1	2
12:00 PM	1	1			2
2:00 PM	1	2	1		4
5:00 PM			2		2
7:00 PM		1			1
8:00 PM		1			1
11:00 PM	1	1			2
Grand Total	3	9	3	1	16

Sum of Value	Year				
Severity	1997	1998	1999	2000	Grand Total
Injury	2	3		1	6
PDO	1	6	3		10
Grand Total	3	9	3	1	16

Sum of Value	Year				
Severity	1997	1998	1999	2000	Grand Total
Injury	2	3		1	6
PDO	1	6	3		10
Grand Total	3	9	3	1	16

Sum of Value	Year				
Light	1997	1998	1999	2000	Grand Total
Dark(Road Lit	2	3			5
Daylight	1	6	3	1	11
Grand Total	3	9	3	1	16

Sum of Value	Year				
Weather	1997	1998	1999	2000	Grand Total
Clear	3	5	3	1	12
Cloudy		1			1
Rain		2			2
Unknown		1			1
Grand Total	3	9	3	1	16

Sum of Value	Year				
Pavement	1997	1998	1999	2000	Grand Total
Dry	2	4	3	1	10
Icy	1				1
Unknown		2			2
Wet		3			3
Grand Total	3	9	3	1	16

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: South Street @ High School Road
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Friday	April	25	7:00 PM	Angle	PDO	Dry	Daylight	Clear
2	1997	Tuesday	November	4	11:00 AM	Angle	Injury	Dry	Daylight	Cloudy
1	1998	Tuesday	January	27	3:00 PM	Angle	PDO	Dry	Daylight	Clear
2	1998	Tuesday	March	3	12:00 PM	Angle	PDO	Dry	Dark(Road UnLit)	Unknown
3	1998	Saturday	March	14	4:00 PM	Angle	PDO	Dry	Daylight	Clear
4	1998	Wednesday	May	20	5:00 PM	Unknown	Injury	Dry	Daylight	Clear
5	1998	Thursday	June	18	1:00 PM	Angle	Injury	Dry	Daylight	Clear
6	1998	Sunday	July	5	9:00 AM	Angle	Injury	Wet	Daylight	Rain
1	1999	Saturday	March	20	8:00 PM	Angle	PDO	Dry	Dark(Road Lit)	Clear
2	1999	Monday	April	12	10:00 PM	Unknown	PDO	Dry	Dark(Road Lit)	Clear
3	1999	Thursday	May	20	8:00 AM	Rearend	PDO	Wet	Daylight	Rain
4	1999	Wednesday	June	16	2:00 PM	Rearend	Injury	Dry	Daylight	Clear
1	2000	Wednesday	February	16	5:00 AM	Headon	Injury	Dry	Dark(Road Lit)	Clear
2	2000	Monday	March	13	2:00 PM	Angle	PDO	Dry	Daylight	Clear
3	2000	Friday	September	22	11:00 AM	Angle	PDO	Dry	Daylight	Cloudy
4	2000	Sunday	December	17	8:00 AM	Angle	PDO	Dry	Daylight	Clear

South Street @ High School Road

Sum of Value	Year				
Day	1997	1998	1999	2000	Grand Total
Sunday		1		1	2
Monday			1	1	2
Tuesday	1	2			3
Wednesday		1	1	1	3
Thursday		1	1		2
Friday	1			1	2
Saturday		1	1		2
Grand Total	2	6	4	4	16

Sum of Value	Year				
Month	1997	1998	1999	2000	Grand Total
January		1			1
February				1	1
March		2	1	1	4
April	1		1		2
May		1	1		2
June		1	1		2
July		1			1
September				1	1
November	1				1
December				1	1
Grand Total	2	6	4	4	16

Sum of Value	Year				
Time	1997	1998	1999	2000	Grand Total
5:00 AM				1	1
8:00 AM			1	1	2
9:00 AM		1			1
11:00 AM	1			1	2
12:00 PM		1			1
1:00 PM		1			1
2:00 PM			1	1	2
3:00 PM		1			1
4:00 PM		1			1
5:00 PM		1			1
7:00 PM	1				1
8:00 PM			1		1
10:00 PM			1		1
Grand Total	2	6	4	4	16

Sum of Value	Year				
Type	1997	1998	1999	2000	Grand Total
Angle	2	5	1	3	11
Headon				1	1
Rearend			2		2
Unknown		1	1		2
Grand Total	2	6	4	4	16

Sum of Value	Year				
Severity	1997	1998	1999	2000	Grand Total
Injury	1	3	1	1	6
PDO	1	3	3	3	10
Grand Total	2	6	4	4	16

Sum of Value	Year				
Light	1997	1998	1999	2000	Grand Total
Dark(Road Lit)			2	1	3
Dark(Road UnLit)		1			1
Daylight	2	5	2	3	12
Grand Total	2	6	4	4	16

Sum of Value	Year				
Weather	1997	1998	1999	2000	Grand Total
Clear	1	4	3	3	11
Cloudy	1			1	2
Rain		1	1		2
Unknown		1			1
Grand Total	2	6	4	4	16

Sum of Value	Year				
Pavement	1997	1998	1999	2000	Grand Total
Dry	2	5	3	4	14
Wet		1	1		2
Grand Total	2	6	4	4	16

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: South Street @ Sea Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1998	Friday	February	4	12:00 PM	Bicycle	Injury	Wet	Dark(Road UnLit)	Foggy
2	1998	Tuesday	June	22	12:00 PM	Unknown	Injury	Unknown	Unknown	Unknown
1	2000	Friday	March	24	5:00 PM	Rearend	PDO	Dry	Daylight	Cloudy
2	2000	Thursday	June	15	2:00 PM	Rearend	PDO	Dry	Daylight	Clear
3	2000	Sunday	July	23	10:00 AM	Angle	PDO	Dry	Daylight	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ South Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Tuesday	July	15	12:00 PM	Rearend	PDO	Dry	Daylight	Clear
2	1997	Thursday	August	14	7:00 AM	Angle	Injury	Dry	Daylight	Clear
1	1998	Saturday	January	3	9:00 PM	Angle	Injury	Wet	Dark (Road Lit)	Cloudy
2	1998	Friday	November	20	1:00 PM	Rearend	Injury	Wet	Daylight	Rain
1	1999	Sunday	April	4	12:00 PM	Angle	Injury	Dry	Daylight	Clear
2	1999	Saturday	November	13	3:00 PM	Angle	PDO	Dry	Daylight	Clear
1	2000	Friday	April	28	10:00 PM	Angle	PDO	Dry	Dark (Road Lit)	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ Sea Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Sunday	August	17	6:00 PM	Angle	PDO	Dry	Daylight	Clear
1	1998	Saturday	April	11	1:00 PM	Angle	PDO	Dry	Daylight	Clear
1	1999	Tuesday	October	26	6:00 PM	Angle	Injury	Dry	Dark(Road Lit)	Clear
1	2000	Sunday	January	16	11:00 AM	Rearend	Pdo	Wet	Daylight	Clear
2	2000	Friday	September	29	11:00 PM	Angle	Injury	Dry	Dark(Road Lit)	Clear
3	2000	Friday	November	3	2:00 PM	Unknown	Injury	Dry	Daylight	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ High School Road
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Tuesday	August	19	9:00 AM	Rearend	PDO	Dry	Daylight	Clear
1	1998	Thursday	July	23	5:00 PM	Rearend	PDO	Dry	Daylight	Clear
2	1998	Monday	August	31	12:00 AM	Parked Vehicle	PDO	Dry	Dark(Road Lit)	Clear
1	1999	Sunday	January	2	12:00 PM	Rearend	Injury	Dry	Dark(Road Lit)	Clear
2	1999	Friday	June	4	10:00 PM	Rearend	PDO	Dry	Dark(Road Lit)	Clear
1	2000	Tuesday	August	15	12:00 PM	Angle	PDO	Wet	Daylight	Cloudy
2	2000	Tuesday	October	31	3:00 PM	Angle	PDO	Wet	Daylight	Rain

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ Barnstable Road
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Friday	April	18	6:00 PM	Unknown	PDO	Dry	Daylight	Clear
2	1997	Monday	July	21	1:00 PM	Parked Vehicle	Injury	Dry	Daylight	Clear
3	1997	Sunday	September	7	10:00 AM	Angle	PDO	Unknown	Unknown	Unknown
1	1998	Thursday	March	12	12:00 AM	Rearend	Injury	Dry	Daylight	Clear
2	1998	Thursday	June	4	11:00 AM	Rearend	PDO	Dry	Daylight	Clear
3	1998	Wednesday	June	10	10:00 AM	Unknown	PDO	Unknown	Unknown	Unknown
4	1998	Thursday	October	29	3:00 PM	Unknown	PDO	Dry	Daylight	Clear
1	1999	Monday	February	15	7:00 PM	Angle	Injury	Dry	Dark(Road Lit)	Clear
2	1999	Thursday	June	24	6:00 AM	Unknown	Injury	Dry	Daylight	Clear
1	2000	Monday	May	8	12:00 PM	Angle	PDO	Dry	Daylight	Clear
2	2000	Friday	August	3	9:00 PM	Rearend	Injury	DRY	Dark(Road Lit)	Clear
3	2000	Tuesday	December	26	3:00 PM	Angle	Injury	DRY	Unknown	Clear

Main Street @ Barnstable Road

Sum of Value	Year				
Day	1997	1998	1999	2000	Grand Total
Sunday	1				1
Monday	1		1	1	3
Tuesday				1	1
Wednesday		1			1
Thursday		3	1		4
Friday	1			1	2
Grand Total	3	4	2	3	12

Sum of Value	Year				
Month	1997	1998	1999	2000	Grand Total
February			1		1
March		1			1
April	1				1
May				1	1
June		2	1		3
July	1				1
August				1	1
September	1				1
October		1			1
December				1	1
Grand Total	3	4	2	3	12

Sum of Value	Year				
Time	1997	1998	1999	2000	Grand Total
12:00 AM		1			1
6:00 AM			1		1
10:00 AM	1	1			2
11:00 AM		1			1
12:00 PM				1	1
1:00 PM	1				1
3:00 PM		1		1	2
6:00 PM	1				1
7:00 PM			1		1
9:00 PM				1	1
Grand Total	3	4	2	3	12

Sum of Value	Year				
Type	1997	1998	1999	2000	Grand Total
Angle	1		1	2	4
Parked Vehicle	1				1
Rearend		2		1	3
Unknown	1	2	1		4
Grand Total	3	4	2	3	12

Sum of Value	Year				
Severity	1997	1998	1999	2000	Grand Total
Injury	1	1	2	2	6
PDO	2	3		1	6
Grand Total	3	4	2	3	12

Sum of Value	Year				
Light	1997	1998	1999	2000	Grand Total
Dark(Road Lit)			1	1	2
Daylight	2	3	1	1	7
Unknown	1	1		1	3
Grand Total	3	4	2	3	12

Sum of Value	Year				
Weather	1997	1998	1999	2000	Grand Total
Clear	2	3	2	3	10
Unknown	1	1			2
Grand Total	3	4	2	3	12

Sum of Value	Year				
Pavement	1997	1998	1999	2000	Grand Total
Dry	2	3	2	3	10
Unknown	1	1			2
Grand Total	3	4	2	3	12

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ Old Colony
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Friday	July	3	5:00 PM	Rearend	PDO	Dry	Unknown	Clear
1	1999	Monday	August	12	2:00 AM	Rearend	Injury	Wet	Dark(Road Lit)	Rain
2	1999	Sunday	November	5	4:00 PM	Angle	PDO	Dry	Daylight	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Barnstable Road
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1998	Friday	May	22	12:00 PM	Unknown	PDO	Dry	Daylight	Clear
2	1998	Friday	September	18	12:00 PM	Rearend	PDO	Dry	Daylight	Clear
1	1999	Monday	May	17	1:00 PM	Unknown	Injury	Dry	Daylight	Clear
2	1999	Saturday	August	14	12:00 PM	Rearend	PDO	Wet	Daylight	Rain
3	1999	Saturday	August	14	2:00 PM	Angle	Injury	Wet	Daylight	Cloudy
1	2000	Sunday	January	23	10:00 AM	Rearend	PDO	Snowy	Daylight	Snow
2	2000	Friday	February	18	5:00 PM	Rearend	Injury	Snowy	Dawn or Dusk	Rain
3	2000	Friday	February	25	5:00 PM	Angle	PDO	Wet	Dawn or Dusk	Rain
4	2000	Saturday	March	11	11:00 AM	Rearend	Injury	Wet	Daylight	Rain
5	2000	Friday	March	24	3:00 PM	Unknown	PDO	Dry	Daylight	Clear
6	2000	Tuesday	May	9	3:00 PM	Angle	PDO	Dry	Daylight	Clear
7	2000	Saturday	July	1	11:00 PM	Angle	PDO	Dry	Dark(Road Lit)	Clear
8	2000	Tuesday	July	11	8:00 PM	Unknown	PDO	Dry	Dark(Road Lit)	Clear
9	2000	Thursday	July	13	11:00 AM	Angle	PDO	Dry	Daylight	Clear
10	2000	Saturday	August	15	1:00 PM	Angle	PDO	Wet	Daylight	Rain
11	2000	Friday	August	28	2:00 PM	Rearend	Injury	Dry	Daylight	Clear
12	2000	Monday	October	16	12:00 AM	Angle	Injury	Dry	Daylight	Clear
13	2000	Tuesday	October	24	12:00 PM	Angle	Injury	Dry	Daylight	Clear
14	2000	Monday	October	30	8:00 AM	Angle	PDO	Dry	Daylight	Cloudy

Barnstable Road

Count of Num	Year			
Day	1998	1999	2000	Grand Total
Sunday			1	1
Monday		1	2	3
Tuesday			3	3
Thursday			1	1
Friday	2		4	6
Saturday		2	3	5
Grand Total	2	3	14	19

Count of Num	Year			
Month	1998	1999	2000	Grand Total
January			1	1
February			2	2
March			2	2
May	1	1	1	3
July			3	3
August		2	2	4
September	1			1
October			3	3
Grand Total	2	3	14	19

Count of Num	Year			
Time	1998	1999	2000	Grand Total
12:00 AM			1	1
8:00 AM			1	1
10:00 AM			1	1
11:00 AM			2	2
12:00 PM	2	1	1	4
1:00 PM		1	1	2
2:00 PM		1	1	2
3:00 PM			2	2
5:00 PM			2	2
8:00 PM			1	1
11:00 PM			1	1
Grand Total	2	3	14	19

Count of Num	Year			
Type	1998	1999	2000	Grand Total
Angle		1	8	9
Rearend	1	1	4	6
Unknown	1	1	2	4
Grand Total	2	3	14	19

Count of Num	Year			
Severity	1998	1999	2000	Grand Total
Injury		2	5	7
PDO	2	1	9	12
Grand Total	2	3	14	19

Count of Num	Year			
Light	1998	1999	2000	Grand Total
Dark(Road Lit)			2	2
Dawn or Dusk			2	2
Daylight	2	3	10	15
Grand Total	2	3	14	19

Count of Num	Year			
Weather	1998	1999	2000	Grand Total
Clear	2	1	8	11
Cloudy		1	1	2
Rain		1	4	5
Snow			1	1
Grand Total	2	3	14	19

Count of Num	Year			
Pavement	1998	1999	2000	Grand Total
Dry	2	1	9	12
Snowy			2	2
Wet		2	3	5
Grand Total	2	3	14	19

Main Street

Count of Num	Year				
Day	1997	1998	1999	2000	Grand Total
Sunday	5	3	1	3	12
Monday	2	7	4		13
Tuesday	3	1	3	3	10
Wednesday	4	4		1	9
Thursday		3	2		5
Friday	4	3	2		9
Saturday	7	4	3	1	15
Grand Total	25	25	15	8	73

Count of Num	Year				
Month	1997	1998	1999	2000	Grand Total
January	3				3
February	1	5	2		8
March				1	1
April	2	2	1	1	6
May	3	5	3	1	12
June	2	4	2	1	9
July	7	1		3	11
August	1	3	2		6
September		2	3		5
October	3	2	2		7
November	3			1	4
December		1			1
Grand Total	25	25	15	8	73

Count of Num	Year				
Time	1997	1998	1999	2000	Grand Total
12:00 AM				1	1
1:00 AM	3	1			4
7:00 AM	1				1
8:00 AM	1	1			2
9:00 AM	2	2	1	1	6
10:00 AM	1	2	3	1	7
11:00 AM	3	2	2	2	9
12:00 PM	3	2	3	1	9
1:00 PM		2	1		3
2:00 PM	2	1			3
3:00 PM	1	2		2	5
4:00 PM	1	3	1		5
5:00 PM	3	3	1		7
7:00 PM	1	1	1		3
8:00 PM	1	1	2		4
9:00 PM	1				1
10:00 PM		1			1
11:00 PM	1	1			2
Grand Total	25	25	15	8	73

Count of Numb	Year				
Type	1997	1998	1999	2000	Grand Total
Angle	5	10	4		19
Fix Obj	1	1	1	1	4
FixObj	1				1
Headon	2				2
Parked Vehicle	1	3	1		5
Pedestrian			1		1
Rearend	5	6	5	4	20
Unknown	10	5	3	3	21
Grand Total	25	25	15	8	73

Count of Numb	Year				
Severity	1997	1998	1999	2000	Grand Total
Hit & Run	2	1			3
Injury	10	12	5	2	29
PDO	13	12	10	6	41
Grand Total	25	25	15	8	73

Count of Numb	Year				
Light	1997	1998	1999	2000	Grand Total
Dark(Road Lit)	3	5	1		9
Dark(Road UnLi	1			1	2
Dawn or Dusk	1	1			2
Daylight	18	18	13	6	55
Unknown	2	1	1	1	5
Grand Total	25	25	15	8	73

Count of Numb	Year				
Weather	1997	1998	1999	2000	Grand Total
Clear	16	18	10	4	48
Cloudy		1	2	2	5
Rain	4	4	1		9
Snow	1		1		2
Unknown	4	2	1	2	9
Grand Total	25	25	15	8	73

Count of Numb	Year				
Pavement	1997	1998	1999	2000	Grand Total
Dry	14	18	10	5	47
Icy		1	1		2
Other	1				1
Snowy	1		1		2
Unknown	3	1	1	1	6
Wet	6	5	2	2	15
Grand Total	25	25	15	8	73

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Saturday	January	11	2:00 PM	Unknown	PDO	Snowy	Daylight	Clear
2	1997	Wednesday	January	22	5:00 PM	FixObj	Injury	Wet	Dawn or Dusk	Clear
3	1997	Friday	January	31	8:00 AM	Unknown	PDO	Wet	Daylight	Snow
4	1997	Monday	February	10	3:00 PM	Rearend	PDO	Other	Daylight	Clear
5	1997	Saturday	April	12	12:00 PM	Angle	PDO	Dry	Daylight	Clear
6	1997	Sunday	April	13	1:00 AM	Unknown	Injury	Unknown	Dark(Road UnLit)	Unknown
7	1997	Friday	May	2	5:00 PM	Angle	Injury	Dry	Daylight	Clear
8	1997	Sunday	May	4	8:00 PM	Unknown	Injury	Dry	Dark(Road Lit)	Clear
9	1997	Sunday	May	25	11:00 AM	Unknown	PDO	Dry	Daylight	Clear
10	1997	Tuesday	June	10	2:00 PM	Rearend	Injury	Dry	Daylight	Clear
11	1997	Friday	June	13	11:00 AM	Headon	PDO	Wet	Daylight	Rain
12	1997	Wednesday	July	2	1:00 AM	Unknown	Hit & Run	Dry	Daylight	Clear
13	1997	Friday	July	4	11:00 PM	Unknown	PDO	Dry	Dark(Road Lit)	Clear
14	1997	Saturday	July	5	10:00 AM	Rearend	Injury	Dry	Daylight	Clear
15	1997	Sunday	July	6	9:00 AM	Unknown	Injury	Dry	Daylight	Clear
16	1997	Wednesday	July	9	4:00 PM	Fix Obj	Injury	Dry	Daylight	Unknown
17	1997	Saturday	July	12	7:00 PM	Rearend	Injury	Dry	Daylight	Clear
18	1997	Tuesday	July	15	5:00 PM	Angle	Hit & Run	Dry	Daylight	Clear
19	1997	Tuesday	August	5	12:00 PM	Unknown	PDO	Unknown	Unknown	Unknown
20	1997	Sunday	October	5	9:00 PM	Unknown	PDO	Unknown	Unknown	Unknown
21	1997	Wednesday	October	8	12:00 PM	Headon	PDO	Dry	Daylight	Clear
22	1997	Saturday	October	25	9:00 AM	Rearend	PDO	Wet	Daylight	Rain
23	1997	Monday	November	3	7:00 AM	Parked Vehicle	Injury	Dry	Daylight	Clear
24	1997	Saturday	November	8	11:00 AM	Angle	PDO	Wet	Daylight	Rain
25	1997	Saturday	November	15	1:00 AM	Angle	PDO	Wet	Dark(Road Lit)	Rain

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1998	Wednesday	February	4	11:00 PM	Angle	PDO	Wet	Dark(Road Lit)	Rain
2	1998	Thursday	February	5	10:00 PM	Fix Obj	Injury	Icy	Dark(Road Lit)	Clear
3	1998	Monday	February	9	4:00 PM	Unknown	Injury	Dry	Daylight	Clear
4	1998	Thursday	February	19	3:00 PM	Angle	PDO	Wet	Daylight	Rain
5	1998	Wednesday	February	25	1:00 PM	Rearend	Injury	Wet	Daylight	Cloudy
6	1998	Sunday	April	12	12:00 PM	Angle	Injury	Dry	Daylight	Clear
7	1998	Saturday	April	18	4:00 PM	Parked Vehicle	Injury	Dry	Daylight	Clear
8	1998	Saturday	May	9	11:00 AM	Angle	PDO	Dry	Daylight	Clear
9	1998	Friday	May	15	4:00 PM	Rearend	PDO	Dry	Daylight	Clear
10	1998	Tuesday	May	19	5:00 PM	Angle	Injury	Dry	Daylight	Clear
11	1998	Sunday	May	24	9:00 AM	Angle	PDO	Dry	Daylight	Clear
12	1998	Saturday	May	30	10:00 AM	Rearend	Injury	Dry	Daylight	Clear
13	1998	Wednesday	June	3	8:00 AM	Unknown	Injury	Dry	Daylight	Clear
14	1998	Monday	June	15	5:00 PM	Angle	Injury	Dry	Daylight	Clear
15	1998	Friday	June	26	11:00 AM	Unknown	PDO	Unknown	Unknown	Unknown
16	1998	Monday	June	29	10:00 AM	Rearend	PDO	Dry	Daylight	Clear
17	1998	Monday	July	27	1:00 PM	Rearend	Injury	Dry	Daylight	Clear
18	1998	Thursday	August	6	7:00 PM	Angle	PDO	Dry	Daylight	Clear
19	1998	Monday	August	17	9:00 AM	Unknown	Injury	Wet	Daylight	Rain
20	1998	Monday	August	31	1:00 AM	Rearend	PDO	Dry	Dark(Road Lit)	Unknown
21	1998	Saturday	September	5	12:00 PM	Parked Vehicle	Hit & Run	Dry	Dark(Road Lit)	Clear
22	1998	Friday	September	18	3:00 PM	Parked Vehicle	Injury	Dry	Daylight	Clear
23	1998	Sunday	October	11	8:00 PM	Angle	PDO	Wet	Dark(Road Lit)	Rain
24	1998	Wednesday	October	21	5:00 PM	Angle	PDO	Dry	Dawn or Dusk	Clear
25	1998	Monday	December	14	2:00 PM	Unknown	PDO	Dry	Daylight	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1999	Monday	February	22	4:00 PM	Rearend	Injury	Icy	Daylight	Clear
2	1999	Thursday	February	25	10:00 AM	Rearend	PDO	Snowy	Daylight	Snow
3	1999	Friday	April	24	10:00 AM	Pedestrian	Injury	Dry	Daylight	Clear
4	1999	Tuesday	May	4	11:00 AM	Unknown	PDO	Dry	Daylight	Cloudy
5	1999	Sunday	May	9	7:00 PM	Unknown	Injury	Unknown	Unknown	Unknown
6	1999	Tuesday	May	25	12:00 PM	Rearend	PDO	Dry	Daylight	Clear
7	1999	Tuesday	June	1	5:00 PM	Angle	PDO	Dry	Daylight	Clear
8	1999	Saturday	June	19	1:00 PM	Angle	PDO	Dry	Daylight	Clear
9	1999	Saturday	August	14	11:00 AM	Angle	PDO	Wet	Daylight	Rain
10	1999	Saturday	August	21	8:00 PM	Fix Obj	Injury	Wet	Daylight	Cloudy
11	1999	Thursday	September	2	12:00 PM	Parked Vehicle	Injury	Dry	Daylight	Clear
12	1999	Monday	September	13	8:00 PM	Angle	PDO	Dry	Dark(Road Lit)	Clear
13	1999	Monday	September	20	10:00 AM	Rearend	PDO	Dry	Daylight	Clear
14	1999	Monday	October	4	12:00 PM	Unknown	PDO	Dry	Daylight	Clear
15	1999	Friday	October	22	9:00 AM	Rearend	PDO	Dry	Daylight	Clear
1	2000	Wednesday	March	15	3:00 PM	Rearend	Injury	Dry	Daylight	Clear
2	2000	Sunday	April	23	3:00 PM	Unknown	PDO	Dry	Daylight	Clear
3	2000	Tuesday	May	30	9:00 AM	Fix Obj	Injury	Dry	Daylight	Cloudy
4	2000	Tuesday	June	20	10:00 AM	Unknown	PDO	Dry	Daylight	Clear
5	2000	Sunday	July	2	12:00 PM	Rearend	PDO	Wet	Dark(Road UnLit)	Cloudy
6	2000	Sunday	July	16	12:00 AM	Unknown	PDO	Unknown	Unknown	Unknown
7	2000	Saturday	July	22	11:00 AM	Rearend	PDO	Wet	Daylight	Unknown
8	2000	Tuesday	November	28	11:00 AM	Rearend	PDO	Dry	Daylight	Clear

South Street

Sum of Value	Year				
Day	1997	1998	1999	2000	Grand Total
Sunday		1	2		3
Monday			1		1
Tuesday	2	1	1		4
Thursday		2	2	2	6
Friday	3	2		3	8
Saturday	1	1		1	3
Grand Total	6	7	6	6	25

Sum of Value	Year				
Month	1997	1998	1999	2000	Grand Total
January			1		1
February	2				2
March			1		1
April		1	1		2
May			2	1	3
June			1		1
July	1	2		1	4
August	2	1			3
September		1		1	2
October				2	2
November		2		1	3
December	1				1
Grand Total	6	7	6	6	25

Sum of Value	Year				
Time	1997	1998	1999	2000	Grand Total
8:00 AM			1	1	2
9:00 AM	1			2	3
10:00 AM	1				1
11:00 AM		1			1
12:00 PM		1	1	1	3
2:00 PM		3	1	1	5
3:00 PM			1		1
5:00 PM			1		1
6:00 PM	2	1			3
7:00 PM	2				2
9:00 PM			1	1	2
10:00 PM		1			1
Grand Total	6	7	6	6	25

Sum of Value	Year				
Type	1997	1998	1999	2000	Grand Total
Angle	3	3	3	3	12
Fix Obj		1			1
Rearend	1	3	1	2	7
Unknown	2		2	1	5
Grand Total	6	7	6	6	25

Sum of Value	Year				
Severity	1997	1998	1999	2000	Grand Total
Injury	1	5	4	3	13
PDO	5	2	2	3	12
Grand Total	6	7	6	6	25

Sum of Value	Year				
Light	1997	1998	1999	2000	Grand Total
Dark (Road Lit)	2	2			4
Dark(Road Lit)				2	2
Dawn or Dusk			1		1
Daylight	4	5	4	4	17
Unknown			1		1
Grand Total	6	7	6	6	25

Sum of Value	Year				
Weather	1997	1998	1999	2000	Grand Total
Clear	3	6	4	5	18
Cloudy		1		1	2
Foggy	1				1
Rain	2		1		3
Unknown			1		1
Grand Total	6	7	6	6	25

Sum of Value	Year				
Pavement	1997	1998	1999	2000	Grand Total
Dry	3	5	4	6	18
Unknown		2	1		3
Wet	3		1		4
Grand Total	6	7	6	6	25

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: South Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Tuesday	February	4	10:00 AM	Angle	PDO	Dry	Daylight	Clear
2	1997	Friday	February	14	7:00 PM	Angle	PDO	Wet	Dark (Road Lit)	Foggy
3	1997	Friday	July	25	6:00 PM	Angle	PDO	Wet	Daylight	Rain
4	1997	Saturday	August	2	6:00 PM	Rearend	Injury	Dry	Daylight	Clear
5	1997	Tuesday	August	5	9:00 AM	Unknown	PDO	Dry	Daylight	Clear
6	1997	Friday	December	5	7:00 PM	Unknown	PDO	Wet	Dark (Road Lit)	Rain
1	1998	Friday	April	24	2:00 PM	Rearend	Injury	Dry	Daylight	Clear
2	1998	Saturday	July	18	10:00 PM	Rearend	Injury	Dry	Dark (Road Lit)	Clear
3	1998	Friday	July	24	2:00 PM	Rearend	Injury	Dry	Daylight	Clear
4	1998	Sunday	August	30	11:00 AM	Angle	Injury	Dry	Daylight	Clear
5	1998	Thursday	September	10	12:00 PM	Angle	PDO	Unknown	Daylight	Clear
6	1998	Tuesday	November	10	2:00 PM	Fix Obj	Injury	Dry	Daylight	Cloudy
7	1998	Thursday	November	18	6:00 PM	Angle	PDO	Unknown	Dark (Road Lit)	Clear
1	1999	Thursday	January	31	9:00 PM	Unknown	PDO	Unknown	Unknown	Unknown
2	1999	Thursday	March	4	8:00 AM	Rearend	Injury	Dry	Daylight	Clear
3	1999	Sunday	April	25	12:00 PM	Angle	Injury	Dry	Daylight	Clear
4	1999	Sunday	May	2	3:00 PM	Angle	Injury	Dry	Daylight	Clear
5	1999	Monday	May	24	5:00 PM	Unknown	PDO	Wet	Dawn or Dusk	Rain
6	1999	Tuesday	June	29	2:00 PM	Angle	Injury	Dry	Daylight	Clear
1	2000	Friday	May	12	8:00 AM	Angle	PDO	Dry	Daylight	Clear
2	2000	Saturday	July	15	12:00 PM	Angle	PDO	Dry	Dark(Road Lit)	Clear
3	2000	Friday	September	8	9:00 AM	Angle	Injury	Dry	Daylight	Clear
4	2000	Friday	October	13	9:00 PM	Unknown	Injury	Dry	Dark(Road Lit)	Clear
5	2000	Thursday	October	19	9:00 AM	Rearend	PDO	Dry	Daylight	Clear
6	2000	Thursday	November	2	2:00 PM	Rearend	Injury	Dry	Daylight	Cloudy

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Stevens Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Friday	March	31	12:00 PM	Rearend	Injury	Wet	Daylight	Rain
2	1997	Friday	August	14	12:00 PM	Parked Vehicle	PDO	Dry	Daylight	Clear
1	2000	Tuesday	March	14	11:00 AM	Unknown	PDO	Dry	Daylight	Clear
2	2000	Tuesday	August	1	4:00 PM	Parked Vehicle	Injury	Wet	Daylight	Foggy
3	2000	Tuesday	October	10	2:00 PM	Unknown	Injury	Dry	Unknown	Unknown

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Ocean Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Sunday	May	18	1:00 PM	Angle	PDO	Dry	Daylight	Clear
1	2000	Thursday	January	13	3:00 PM	Rearend	PDO	Wet	Daylight	Snow
2	2000	Friday	April	7	9:00 AM	Angle	Injury	Dry	Daylight	Clear
3	2000	Tuesday	May	16	4:00 PM	Bicycle	PDO	Dry	Daylight	Unknown
4	2000	Sunday	July	16	2:00 PM	Angle	PDO	Dry	Daylight	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Old Colony Road
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Monday	December	1	2:00 PM	Angle	PDO	Dry	Daylight	Cloudy
1	1998	Wednesday	October	24	10:00 AM	Rearend	PDO	Dry	Daylight	Clear
1	1999	Monday	July	5	2:00 PM	Angle	PDO	Dry	Daylight	Clear
2	1999	Saturday	July	10	7:00 PM	Bicycle	Injury	Dry	Dawn or Dusk	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Pine Ave
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1998	Friday	July	17	11:00 AM	Angle	PDO	Dry	Daylight	Clear
2	1998	Friday	July	17	6:00 PM	Angle	PDO	Dry	Daylight	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Pearl Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1999	Friday	April	28	12:00 AM	Fix Obj	PDO	Dry	Dark (Road Lit)	Clear
2	1999	Friday	November	11	11:00 AM	Unknown	PDO	Dry	Daylight	Cloudy

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Sea Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Thursday	April	17	9:00 PM	Unknown	PDO	Wet	Dark (Road Lit)	Foggy
2	1997	Saturday	May	24	12:00 PM	Unknown	PDO	Dry	Daylight	Clear
3	1997	Monday	June	16	3:00 PM	Unknown	PDO	Dry	Daylight	Clear
4	1997	Thursday	September	11	1:00 PM	Angle	PDO	Dry	Daylight	Clear
1	1999	Friday	June	25	12:00 PM	Angle	PDO	Dry	Daylight	Clear
21	2000	Sunday	March	26	12:00 PM	Headon	FixObj	Dry	Daylight	Unknown

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: High School Road
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1999	Tuesday	August	3	5:00 PM	Unknown	Injury	Dry	Daylight	Clear
1	2000	Friday	November	3	1:00 PM	Angle	School Bus	Dry	Daylight	Clear
2	2000	Sunday	November	29	3:00 PM	Rearend	PDO	Dry	Daylight	Clear

Barnstable Police Department Data

Accident Summary
Downtown Hyannis Traffic Study

	Barnstable Police Dept. Data					
Location	1997 Total	1998 Total	1999 Total	2000 Total	2001 Total	Grand Total
Main Street*	3	1	2	6	16	28
Main St and Old Colony Rd	0	0	0	4	3	7
Main St and Barnstable Rd/Ocean St	0	1	0	5	2	8
Main St and Pearl St	1	0	0	1	2	4
Main St and Winter St	0	0	0	1	2	3
Main St and High School Road	0	0	0	3	5	8
Main St and Pine Ave	0	0	0	0	0	0
Main St and Bassett Ln	0	0	0	2	0	2
Main St and Sea St	1	0	1	6	10	18
Main St and South St/Stevens St	0	0	0	2	1	3
Total, Main Street	5	2	3	30	41	81
South Street						0
South St and Old Colony Rd/Ocean St	0	0	0	0	0	0
South St and Pearl St	0	0	0	0	0	0
South St and High School Road	0	0	0	4	4	8
South St and Pine Ave	1	0	0	0	0	1
South St and Sea St	0	0	0	4	4	8
Total, South Street	1	0	0	8	8	17
Old Colony Road	0	0	0	0	0	0
Ocean Street	0	1	0	0	0	1
Barnstable Road	1	0	0	0	0	1
Pearl Street	0	0	0	0	0	0
High School Road	0	0	0	0	0	0
Pine Avenue	0	0	0	0	0	0
Sea Street	0	0	1	0	0	1
Stevens Street	0	0	0	0	0	0
Total, cross streets	1	1	1	0	0	3
Grand Total	7	3	4	38	49	101

Notes:
1) Main Street accidents may include accidents from other villages of Barnstable.
2) 2000 data includes only data from June-December.
3) 2001 data includes January-August

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ Stevens Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	2000	Friday	August	11	10:00 PM	Angle	Injury	Dry	Dark (Road Lit)	Clear
2	2000	Friday	December	1	3:00 PM	Angle	Injury	Dry	Daylight	Clear
1	2001	Sunday	February	25	9:00 PM	Angle	Injury	Wet	Dark (Road Unlit)	Rain

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ Pearl Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Tuesday	August	5	1:00 PM	Pedestrian	Injury	Dry	Day	Cloudy
1	2000	Thursday	November	9	3:00 PM	Rearend	Injury	Dry	Daylight	Cloudy
1	2001	Sunday	May	20	2:00 PM	Angle	PDO	Unk.	Unk.	Unk.
2	2001	Friday	June	15	7:00 AM	Pedestrian	Injury	Dry	Daylight	Clear

Main Street

Count of Numbe	Year					
Day	1997	1998	1999	2000	2001	Grand Total
Sunday					3	3
Monday					4	4
Tuesday	2			1	3	6
Thursday			1	1	2	4
Friday	1			3	2	6
Saturday			1	1	1	3
Wednesday		1			1	2
Grand Total	3	1	2	6	16	28

Count of Numbe	Year					
Month	1997	1998	1999	2000	2001	Grand Total
March				1		1
April	1		1		3	5
May					1	1
June				1	1	2
July					7	7
August	1	1			3	5
October				1		1
November				1	1	2
December	1			1		2
February			1			1
September				1		1
Grand Total	3	1	2	6	16	28

Count of Numbe	Year					
Time	1997	1998	1999	2000	2001	Grand Total
9:00 AM					1	1
10:00 AM		1	2	1		4
1:00 PM				1	2	3
2:00 PM					2	2
4:00 PM				1	1	2
6:00 PM				1		1
10:00 PM				1	3	4
5:00 PM	1					1
11:00 AM	1			1	1	3
3:00 PM	1				1	2
7:00 AM					1	1
7:00 PM					4	4
Grand Total	3	1	2	6	16	28

Count of Numbe	Year					
Type	1997	1998	1999	2000	2001	Grand Total
Angle				2	9	11
Pedestrian	3	1	1	2		7
Rearend			1	1	7	9
Fixed Object				1		1
Grand Total	3	1	2	6	16	28

Count of Numbe	Year					
Severity	1997	1998	1999	2000	2001	Grand Total
Injury	3	1	1	2	1	8
PDO			1	4	15	20
Grand Total	3	1	2	6	16	28

Count of Numbe	Year					
Light	1997	1998	1999	2000	2001	Grand Total
Dark (Road Lit)				1	3	4
Daylight	2	1	2	5	11	21
Dusk	1				1	2
Unk.					1	1
Grand Total	3	1	2	6	16	28

Count of Numbe	Year					
Weather	1997	1998	1999	2000	2001	Grand Total
Clear	2		1	6	9	18
Cloudy			1		3	4
Rain	1	1			3	5
Unk.					1	1
Grand Total	3	1	2	6	16	28

Count of Numbe	Year					
Pavement	1997	1998	1999	2000	2001	Grand Total
Dry	2		1	6	11	20
Wet	1	1	1		4	7
Unk.					1	1
Grand Total	3	1	2	6	16	28

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Tuesday	April	29	5:00 PM	Pedestrian	Injury	Dry	Daylight	Clear
2	1997	Tuesday	August	12	11:00 AM	Pedestrian	Injury	Dry	Daylight	Clear
3	1997	Friday	December	5	3:00 PM	Pedestrian	Injury	Wet	Dusk	Rain
1	1998	Wednesday	August	12	10:00 AM	Pedestrian	Injury	Wet	Daylight	Rain
1	1999	Thursday	February	25	10:00 AM	Rearend	PDO	Wet	Daylight	Cloudy
2	1999	Saturday	April	24	10:00 AM	Pedestrian	Injury	Dry	Daylight	Clear
1	2000	Friday	March	31	10:00 PM	Pedestrian	Injury	Dry	Dark (Road Lit)	Clear
2	2000	Friday	June	23	10:00 AM	Rearend	PDO	Dry	Daylight	Clear
3	2000	Tuesday	September	12	4:00 PM	Angle	PDO	Dry	Daylight	Clear
4	2000	Thursday	October	26	6:00 PM	Angle	PDO	Dry	Daylight	Clear
5	2000	Friday	November	3	1:00 PM	Pedestrian	Injury	Dry	Daylight	Clear
6	2000	Saturday	December	16	11:00 AM	Fixed Objec	PDO	Dry	Daylight	Clear
1	2001	Tuesday	April	3	1:00 PM	Angle	PDO	Dry	Daylight	Clear
2	2001	Friday	April	27	2:00 PM	Rearend	Injury	Dry	Daylight	Clear
3	2001	Sunday	April	13	9:00 AM	Rearend	PDO	Wet	Daylight	Rain
4	2001	Thursday	May	24	7:00 AM	Angle	PDO	Wet	Daylight	Rain
5	2001	Thursday	June	28	7:00 PM	Angle	PDO	Unk.	Unk.	Unk.
6	2001	Monday	July	2	1:00 PM	Rearend	PDO	Dry	Daylight	Clear
7	2001	Monday	July	2	2:00 PM	Angle	PDO	Dry	Daylight	Clear
8	2001	Monday	July	2	4:00 PM	Angle	PDO	Dry	Daylight	Clear
9	2001	Tuesday	July	3	7:00 PM	Rearend	PDO	Dry	Daylight	Cloudy
10	2001	Sunday	July	8	11:00 AM	Rearend	PDO	Wet	Daylight	Cloudy
11	2001	Wednesday	July	11	7:00 PM	Angle	PDO	Dry	Daylight	Clear
12	2001	Friday	July	27	10:00 PM	Angle	PDO	Dry	Dark (Road Lit)	Clear
13	2001	Saturday	August	4	7:00 PM	Rearend	PDO	Dry	Dusk	Cloudy
14	2001	Monday	August	6	10:00 PM	Rearend	PDO	Dry	Dark (Road Lit)	Clear
15	2001	Tuesday	August	28	3:00 PM	Angle	PDO	Dry	Daylight	Clear
16	2001	Sunday	November	5	10:00 PM	Angle	PDO	Wet	Dark (Road Lit)	Rain

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ Sea Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Saturday	July	19	11:00 AM	Pedestrian	Injury	Dry	Dark (Road Lit)	Clear
1	1999	Saturday	August	9	1:00 PM	Bicycle	None	Dry	Daylight	Clear
1	2000	Tuesday	July	20	10:00 PM	Bicycle	Injury	Dry	Dark (Road Lit)	Clear
2	2000	Monday	July	31	1:00 PM	Angle	PDO	Wet	Daylight	Rain
3	2000	Saturday	August	5	9:00 PM	Rearend	PDO	Dry	Dark (Road Unlit)	Clear
4	2000	Tuesday	October	10	4:00 PM	Bicycle	Injury	Unknown	Unknown	Unknown
5	2000	Tuesday	October	17	2:00 PM	Angle	PDO	Dry	Daylight	Cloudy
6	2000	Thursday	November	11	9:00 PM	Pedestrian	Injury	Wet	Dark (Road Lit)	Rain
1	2001	Sunday	January	21	1:00 PM	Rearend	PDO	Ice	Daylight	Cloudy
2	2001	Tuesday	January	23	9:00 AM	Angle	PDO	Unknown	Daylight	Clear
3	2001	Tuesday	January	30	2:00 PM	Angle	PDO	Dry	Dark (Road Unlit)	Clear
4	2001	Friday	March	9	6:00 PM	Angle	PDO	Dry	Dark (Road Unlit)	Clear
5	2001	Saturday	April	7	1:00 AM	Angle	PDO	Wet	Dark (Road Lit)	Cloudy
6	2001	Friday	April	13	11:00 PM	Rearend	PDO	Dry	Dark (Road Lit)	Clear
7	2001	Saturday	May	5	2:00 PM	Angle	PDO	Dry	Daylight	Clear
8	2001	Friday	June	15	10:00 PM	Angle	Injury	Dry	Dark (Road Lit)	Clear
9	2001	Thursday	July	19	4:00 PM	Rearend	PDO	Dry	Daylight	Clear
10	2001	Friday	July	20	10:00 AM	Angle	Injury	Dry	Daylight	Clear

Main Street @ Sea Street

Count of Numbe	Year				
Day	1997	1999	2000	2001	Grand Total
Sunday				1	1
Monday			1		1
Tuesday			3	2	5
Thursday			1	1	2
Friday				4	4
Saturday	1	1	1	2	5
Grand Total	1	1	6	10	18

Count of Numbe	Year				
Month	1997	1999	2000	2001	Grand Total
January				3	3
March				1	1
April				2	2
May				1	1
June				1	1
July	1		2	2	5
August		1	1		2
October			2		2
November			1		1
Grand Total	1	1	6	10	18

Count of Numbe	Year				
Time	1997	1999	2000	2001	Grand Total
1:00 AM				1	1
9:00 AM				1	1
10:00 AM				1	1
1:00 PM		1	1	1	3
2:00 PM			1	2	3
4:00 PM			1	1	2
6:00 PM				1	1
9:00 PM			2		2
10:00 PM			1	1	2
11:00 PM				1	1
11:00 AM	1				1
Grand Total	1	1	6	10	18

Count of Numbe	Year				
Type	1997	1999	2000	2001	Grand Total
Angle			2	7	9
Bicycle		1	2		3
Pedestrian	1		1		2
Rearend			1	3	4
Grand Total	1	1	6	10	18

Count of Numbe	Year				
Severity	1997	1999	2000	2001	Grand Total
Injury	1		3	2	6
PDO			3	8	11
None		1			1
Grand Total	1	1	6	10	18

Count of Numbe	Year				
Light	1997	1999	2000	2001	Grand Total
Dark (Road Lit)	1		2	3	6
Dark (Road Unlit)			1	2	3
Daylight		1	2	5	8
Unknown			1		1
Grand Total	1	1	6	10	18

Count of Numbe	Year				
Weather	1997	1999	2000	2001	Grand Total
Clear	1	1	2	8	12
Cloudy			1	2	3
Rain			2		2
Unknown			1		1
Grand Total	1	1	6	10	18

Count of Numbe	Year				
Pavement	2000	2001	1997	1999	Grand Total
Dry	3	7	1	1	12
Ice		1			1
Unknown	1	1			2
Wet	2	1			3
Grand Total	6	10	1	1	18

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: South Street @ High School Road
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	2000	Wednesday	September	20	12:00 PM	Angle	Injury	Dry	Daylight	Cloudy
2	2000	Friday	September	22	8:00 AM	Angle	PDO	Dry	Daylight	Clear
3	2000	Monday	Decmeber	11	5:00 PM	Angle	PDO	Wet	Dark (Road Lit)	Foggy
4	2000	Sunday	Decmeber	17	11:00 AM	Angle	PDO	Dry	Daylight	Cloudy
1	2001	Sunday	March	4	10:00 AM	Angle	Injury	Dry	Daylight	Cloudy
2	2001	Friday	May	11	1:00 PM	Angle	PDO	Dry	Daylight	Clear
3	2001	Thursday	July	19	7:00 AM	Angle	PDO	Dry	Daylight	Cloudy
4	2001	Monday	August	13	8:00 AM	Rearend	PDO	Wet	Daylight	Rain

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: South Street @ Sea Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	2000	Sunday	July	9	12:00 PM	Angle	PDO	Dry	Daylight	Clear
2	2000	Sunday	July	23	10:00 AM	Angle	PDO	Dry	Daylight	Clear
3	2000	Saturday	July	29	11:00 AM	Bicycle	Injury	Dry	Daylight	Cloudy
4	2000	Friday	December	1	3:00 PM	Angle	Injury	Dry	Daylight	Clear
1	2001	Friday	February	16	12:00 PM	Rearend	Injury	Dry	Daylight	Clear
2	2001	Sunday	May	20	12:00 AM	Angle	PDO	Dry	Dark (Road Lit)	Cloudy
3	2001	Saturday	May	26	8:00 AM	Angle	Injury	Dry	Daylight	Clear
4	2001	Wednesday	July	25	1:00 AM	Angle	PDO	Dry	Dark (Road Lit)	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ High School Road
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	2000	Monday	August	14	12:00 PM	Rearend	PDO	Wet	Daylight	Rain
2	2000	Wednesday	August	30	1:00 PM	Rearend	PDO	Dry	Daylight	Rain
3	2000	Thursday	August	31	11:00 PM	Rearend	PDO	Dry	Dark (Road Lit)	Clear
1	2001	Thursday	March	8	12:00 PM	Angle	PDO	Dry	Daylight	Cloudy
2	2001	Wednesday	March	28	2:00 PM	Angle	PDO	Dry	Daylight	Clear
3	2001	Thursday	May	3	11:00 AM	Headon	PDO	Dry	Daylight	Clear
4	2001	Thursday	May	17	12:00 AM	Angle	PDO	Dry	Dark (Road Lit)	Cloudy
5	2001	Monday	June	25	3:00 PM	Angle	PDO	Dry	Daylight	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ Winter Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	2000	Sunday	September	3	5:00 PM	Bicycle	Injury	Wet	Daylight	Rain
1	2001	Saturday	April	21	3:00 PM	Angle	PDO	Dry	Daylight	Clear
2	2001	Saturday	July	21	10:00 PM	Bicycle	PDO	Dry	Dusk	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ Old Colony Road
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	2000	Monday	June	26	9:00 AM	Angle	PDO	Dry	Daylight	Clear
2	2000	Monday	July	24	4:00 PM	Bicycle	Injury	Dry	Daylight	Clear
3	2000	Thursday	September	14	9:00 AM	Angle	PDO	Dry	Daylight	Clear
4	2000	Sunday	December	17	4:00 PM	Rearend	PDO	Dry	Dark (Road Lit)	Cloudy
1	2001	Thursday	April	12	3:00 PM	Rearend	PDO	Wet	Daylight	Rain
2	2001	Thursday	July	12	4:00 PM	Angle	PDO	Wet	Daylight	Rain
3	2001	Monday	August	13	1:00 PM	Angle	Injury	Dry	Daylight	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ Bassett Lane
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	2000	Monday	July	24	4:00 PM	Bicycle	Injury	Dry	Daylight	Clear
2	2000	Tuesday	June	27	3:00 PM	Rearend	PDO	Dry	Daylight	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Sea Street Extension
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1999	Sunday	August	29	9:00 PM	Pedestrian	Injury	Dry	Dark (Road Unlit)	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Ocean Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1998	Monday	October	19	11:00 AM	Fixed Object	Injury	Dry	Daylight	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ Ocean Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1998	Friday	April	3	1:00 PM	Pedestrian	Injury	Wet	Daylight	Rain
1	2000	Sunday	August	27	1:00 AM	Rear Angle	PDO	Dry	Dark (Road Lit)	Clear
2	2000	Wednesday	October	25	2:00 PM	Angle	PDO	Dry	Daylight	Clear
1	2001	Friday	April	13	5:00 PM	Rear End	PDO	Dry	Daylight	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Main Street @ Barnstable Road
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	2000	Thursday	June	15	1:00 AM	Angle	PDO	Dry	Dark (Road Lit)	Clear
2	2000	Tuesday	November	14	5:00 PM	Angle	PDO	Wet	Dark (Road Lit)	Rain
3	2000	Tuesday	December	26	3:00 PM	Angle	Injury	Dry	Daylight	Clear
1	2001	Tuesday	August	21	3:00 PM	Pedestrian	Injury	Dry	Daylight	Cloudy

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: Barnstable Rd.
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Wednesday	May	28	4:00 PM	Pedestrian	Injury	Dry	Daylight	Clear

PROJECT: Downtown Hyannis Traffic Circulation Study
LOCATION: South Street @ Pine Street
PROJECT #: 2001-215-00

ACCIDENT DETAILS

Number	Year	Day	Month	Date	Time	Type	Severity	Pavement	Light	Weather
1	1997	Wednesday	April	30	4:00 PM	Pedestrian	Injury	Dry	Daylight	Clear

Appendix C

Capacity Analysis
Computer Printouts

Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Storage Length (ft)	0		0	0		100	0		0	0		0
Storage Lanes	0		0	0		1	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.850		0.973	
Flt Protected							0.950				0.961	
Satd. Flow (prot)	0	0	0	0	2597	1275	1425	1500	1275	0	1403	0
Flt Permitted							0.502				0.564	
Satd. Flow (perm)	0	0	0	0	2597	1275	753	1500	1275	0	823	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						339			273		32	
Headway Factor	1.14	1.14	1.14	1.14	1.28	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		10			20			30			30	
Link Distance (ft)		438			451			1076			311	
Travel Time (s)		29.9			15.4			24.5			7.1	
Volume (vph)	0	0	0	0	710	457	232	175	251	333	0	83
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
Bus Blockages (#/hr)	0	0	0	0	10	0	0	0	0	0	0	0
Parking (#/hr)					8							
Adj. Flow (vph)	0	0	0	0	772	497	252	190	273	362	0	90
Lane Group Flow (vph)	0	0	0	0	772	497	252	190	273	0	452	0
Turn Type						Free	Perm		Perm	pm+pt		
Protected Phases					6			8		7	4	
Permitted Phases						Free	8		8	4		
Minimum Split (s)					18.0		18.0	18.0	18.0	8.0	18.0	
Total Split (s)	0.0	0.0	0.0	0.0	24.0	0.0	33.0	33.0	33.0	8.0	41.0	0.0
Total Split (%)	0%	0%	0%	0%	37%	0%	51%	51%	51%	12%	63%	0%
Maximum Green (s)					20.0		29.0	29.0	29.0	4.0	37.0	
Yellow Time (s)					3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)					1.0		1.0	1.0	1.0	1.0	1.0	
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Walk Time (s)					5.0		5.0	5.0	5.0		5.0	
Flash Dont Walk (s)					7.0		7.0	7.0	7.0		7.0	
Pedestrian Calls (#/hr)					0		0	0	0		0	
Act Effct Green (s)					20.0	65.0	29.0	29.0	29.0		37.0	
Actuated g/C Ratio					0.31	1.00	0.45	0.45	0.45		0.57	
v/c Ratio					0.97	0.39	0.75	0.28	0.38		0.87	
Uniform Delay, d1					22.2	0.0	15.0	11.4	0.0		9.8	
Delay					41.1	0.0	23.7	11.8	1.9		22.8	
LOS					D	A	C	B	A		C	
Approach Delay					25.0			12.2			22.8	
Approach LOS					C			B			C	
Queue Length 50th (ft)					156	0	79	45	0		93	
Queue Length 95th (ft)					#268	0	#198	86	37		#271	
Internal Link Dist (ft)		358			371			996			231	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
50th Up Block Time (%)												
95th Up Block Time (%)											17%	
Turn Bay Length (ft)						100						
50th Bay Block Time %					29%							
95th Bay Block Time %					50%							
Queuing Penalty (veh)					195							

Intersection Summary

Area Type: CBD

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 64 (98%), Referenced to phase 6:WBT, Start of Green

Natural Cycle: 65

Control Type: Pretimed

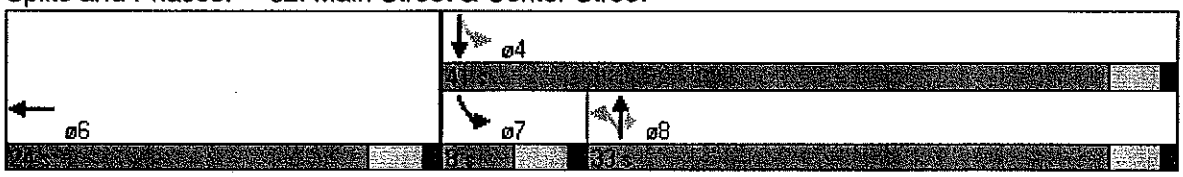
Maximum v/c Ratio: 0.97

Intersection Signal Delay: 20.8 Intersection LOS: C

Intersection Capacity Utilization 85.6% ICU Level of Service D

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 32: Main Street & Center Street



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.92							0.90
Frt					0.982							0.850
Flt Protected					0.991							
Satd. Flow (prot)	0	0	0	0	2222	0	0	0	0	0	1500	1275
Flt Permitted					0.991							
Satd. Flow (perm)	0	0	0	0	2160	0	0	0	0	0	1500	1146
Right Turn on Red			Yes		Yes		Yes			Yes		Yes
Satd. Flow (RTOR)					112							79
Headway Factor	1.14	1.14	1.14	1.14	1.40	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		10			10			30			30	
Link Distance (ft)		340			212			825			335	
Travel Time (s)		77.4			14.5			18.8			7.6	
Volume (vph)	0	0	0	185	733	128	0	0	0	0	322	196
Confl. Peds. (#/hr)				115		165				18		66
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	10	0	0	0	0	0	0	0
Parking (#/hr)				33	33	33						
Mid-Block Traffic (%)		0%			5%			0%			0%	
Adj. Flow (vph)	0	0	0	199	788	138	0	0	0	0	346	211
Lane Group Flow (vph)	0	0	0	0	1125	0	0	0	0	0	346	211
Turn Type				custom								Perm
Protected Phases				6	6						4	
Permitted Phases				6								4
Minimum Split (s)				18.0	18.0						18.0	18.0
Total Split (s)	0.0	0.0	0.0	38.0	38.0	0.0	0.0	0.0	0.0	0.0	22.0	22.0
Total Split (%)	0%	0%	0%	63%	63%	0%	0%	0%	0%	0%	37%	37%
Maximum Green (s)				34.0	34.0						18.0	18.0
Yellow Time (s)				3.0	3.0						3.0	3.0
All-Red Time (s)				1.0	1.0						1.0	1.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				5.0	5.0						5.0	5.0
Flash Dont Walk (s)				8.0	8.0						8.0	8.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)					34.0						18.0	18.0
Actuated g/C Ratio					0.57						0.30	0.30
v/c Ratio					0.86						0.77	0.53
Uniform Delay, d1					9.8						19.1	10.5
Delay					13.9						25.8	11.6
LOS					B						C	B
Approach Delay					13.9						20.4	
Approach LOS					B						C	
Queue Length 50th (ft)					126						112	37

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)					#267						#234	96
Internal Link Dist (ft)		260			132			745			255	
50th Up Block Time (%)					8%							
95th Up Block Time (%)					26%							
Turn Bay Length (ft)												
50th Bay Block Time %												
95th Bay Block Time %												
Queuing Penalty (veh)					185							

Intersection Summary

Area Type: CBD
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 16.1 Intersection LOS: B
Intersection Capacity Utilization 69.9% ICU Level of Service B
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 29: Main Street & Barnstable Road

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	15	15	9	15		9	15		9	15	9
Lane Util. Factor	0.95	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.50									
Frt		0.981							0.850		
Flt Protected		0.958			0.980						
Satd. Flow (prot)	0	2031	0	0	1479	0	0	1485	1275	0	0
Flt Permitted		0.958			0.858						
Satd. Flow (perm)	0	1100	0	0	1295	0	0	1485	1275	0	0
Right Turn on Red			Yes			Yes			Yes		
Satd. Flow (RTOR)		43							21		
Headway Factor	1.14	1.51	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		10			30			30		10	
Link Distance (ft)		425			555			510		654	
Travel Time (s)		29.0			12.6			11.6		44.6	
Volume (vph)	45	767	120	40	56	0	0	133	59	0	0
Confl. Peds. (#/hr)	269		380			96	96				
Peak Hour Factor	0.95	0.92	0.95	0.92	0.86	0.86	0.84	0.84	0.92	0.92	0.92
Heavy Vehicles (%)	1%	2%	1%	2%	1%	1%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	50	100	50	0	0	0	0	0	0	0	0
Parking (#/hr)	18		18								
Mid-Block Traffic (%)		5%			0%			0%		0%	
Adj. Flow (vph)	47	834	126	43	65	0	0	158	64	0	0
Lane Group Flow (vph)	0	1007	0	0	108	0	0	158	64	0	0
Turn Type	custom			Perm					Perm		
Protected Phases	6	6			8			4			
Permitted Phases	6			8					4		
Minimum Split (s)	18.0	18.0		18.0	18.0			18.0	18.0		
Total Split (s)	37.0	37.0	0.0	23.0	23.0	0.0	0.0	23.0	23.0	0.0	0.0
Total Split (%)	62%	62%	0%	38%	38%	0%	0%	38%	38%	0%	0%
Maximum Green (s)	33.0	33.0		19.0	19.0			19.0	19.0		
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0			1.0	1.0		
Lead/Lag											
Lead-Lag Optimize?											
Walk Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		
Flash Dont Walk (s)	8.0	8.0		8.0	8.0			8.0	8.0		
Pedestrian Calls (#/hr)	0	0		0	0			0	0		
Act Effct Green (s)		33.0			19.0			19.0	19.0		
Actuated g/C Ratio		0.55			0.32			0.32	0.32		
v/c Ratio		0.89			0.26			0.34	0.15		
Uniform Delay, d1		11.3			15.3			15.6	9.7		
Delay		17.5			15.9			16.3	11.3		
LOS		B			B			B	B		
Approach Delay		17.5			15.9			14.8			
Approach LOS		B			B			B			
Queue Length 50th (ft)		142			29			43	0		

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Queue Length 95th (ft)		#279			60			79	0		
Internal Link Dist (ft)		345			475			430		574	
50th Up Block Time (%)											
95th Up Block Time (%)											
Turn Bay Length (ft)											
50th Bay Block Time %											
95th Bay Block Time %											
Queuing Penalty (veh)											

Intersection Summary

Area Type: CBD

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 25 (42%), Referenced to phase 6:WBL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.89

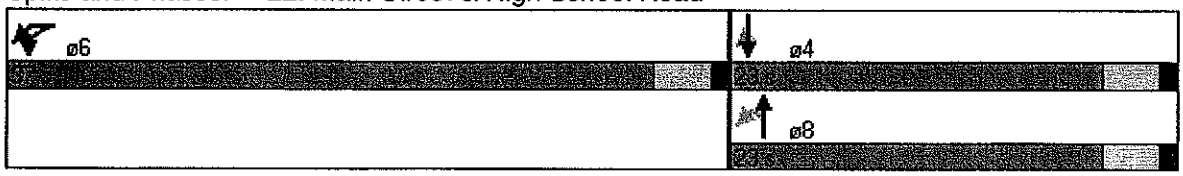
Intersection Signal Delay: 17.0 Intersection LOS: B

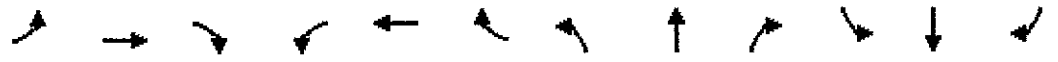
Intersection Capacity Utilization 63.1% ICU Level of Service B

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

Queue shown is maximum after two cycles.

Splits and Phases: 22: Main Street & High School Road





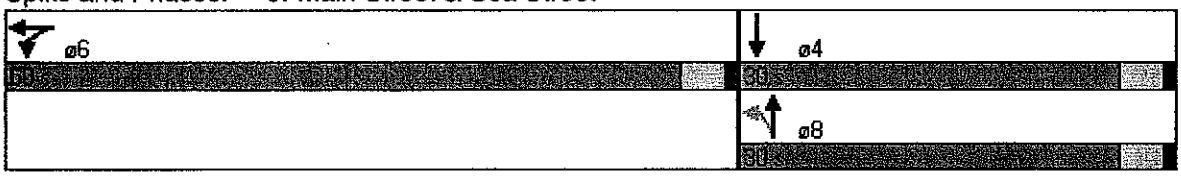
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.93							
Frt					0.988						0.974	
Flt Protected					0.990			0.981				
Satd. Flow (prot)	0	0	0	0	2351	0	0	1501	0	0	1490	0
Flt Permitted					0.990			0.817				
Satd. Flow (perm)	0	0	0	0	2244	0	0	1250	0	0	1490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					20						16	
Headway Factor	1.14	1.14	1.14	1.14	1.39	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		20			20			30			30	
Link Distance (ft)		525			688			417			786	
Travel Time (s)		17.9			23.5			9.5			17.9	
Volume (vph)	0	0	0	181	617	72	84	133	0	0	112	27
Confl. Peds. (#/hr)				71		87			67			
Peak Hour Factor	0.92	0.92	0.92	0.90	0.90	0.90	0.79	0.79	0.79	0.85	0.85	0.85
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)				38	38	38						
Adj. Flow (vph)	0	0	0	201	686	80	106	168	0	0	132	32
Lane Group Flow (vph)	0	0	0	0	967	0	0	274	0	0	164	0
Turn Type				custom			Perm					
Protected Phases				6	6			8			4	
Permitted Phases				6	6		8					
Minimum Split (s)				18.0	18.0		18.0	18.0			18.0	
Total Split (s)	0.0	0.0	0.0	50.0	50.0	0.0	30.0	30.0	0.0	0.0	30.0	0.0
Total Split (%)	0%	0%	0%	63%	63%	0%	38%	38%	0%	0%	38%	0%
Maximum Green (s)				46.0	46.0		26.0	26.0			26.0	
Yellow Time (s)				3.0	3.0		3.0	3.0			3.0	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				5.0	5.0		5.0	5.0			5.0	
Flash Dont Walk (s)				8.0	8.0		8.0	8.0			8.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					46.0			26.0			26.0	
Actuated g/C Ratio					0.58			0.33			0.33	
v/c Ratio					0.71			0.67			0.33	
Uniform Delay, d1					11.9			23.3			18.3	
Delay					12.4			25.2			18.9	
LOS					B			C			B	
Approach Delay					12.4			25.2			18.9	
Approach LOS					B			C			B	
Queue Length 50th (ft)					163			117			52	
Queue Length 95th (ft)					237			169			92	
Internal Link Dist (ft)		445			608			337			706	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
50th Up Block Time (%)												
95th Up Block Time (%)												
Turn Bay Length (ft)												
50th Bay Block Time %												
95th Bay Block Time %												
Queuing Penalty (veh)												

Intersection Summary

Area Type: CBD
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 30 (38%), Referenced to phase 6:WBTL, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 15.7 Intersection LOS: B
Intersection Capacity Utilization 73.7% ICU Level of Service C

Splits and Phases: 9: Main Street & Sea Street



TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*KP*
Agency/Co.	*Vollmer Associates LLP*
Date Performed	*11/28/01*
Analysis Time Period	*5:00 pm*

Site Information

Intersection	*Main/South St & Stevens/Potter*
Jurisdiction	
Analysis Year	*2001*

Project Description *2001215*

East/West Street: *Main/South Street* | North/South Street: *Potter Ave/Stevens St*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*20*	*657*	*12*	*2*	*651*	*34*
Peak-Hour Factor, PHF	*0.91*	*0.91*	*0.91*	*0.88*	*0.88*	*0.88*
Hourly Flow Rate, HFR	*21*	*721*	*13*	*2*	*739*	*38*
Percent Heavy Vehicles	*2*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LTR*			*LTR*		
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*7*	*2*	*5*	*14*	*6*	*28*
Peak-Hour Factor, PHF	*0.58*	*0.58*	*0.58*	*0.80*	*0.80*	*0.80*
Hourly Flow Rate, HFR	*12*	*3*	*8*	*17*	*7*	*34*
Percent Heavy Vehicles	*0*	*0*	*0*	*4*	*4*	*4*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LTR*	*LTR*		*LTR*			*LTR*	
v (vph)	*21*	*2*		*23*			*58*	
C (m) (vph)	*839*	*871*		*115*			*169*	
v/c	*0.03*	*0.00*		*0.20*			*0.34*	
95% queue length	*0.08*	*0.01*		*0.71*			*1.42*	
Control Delay	*9.4*	*9.1*		*44.0*			*37.0*	
LOS	*A*	*A*		*E*			*E*	
Approach Delay	--	--	*44.0*			*37.0*		
Approach LOS	--	--	*E*			*E*		

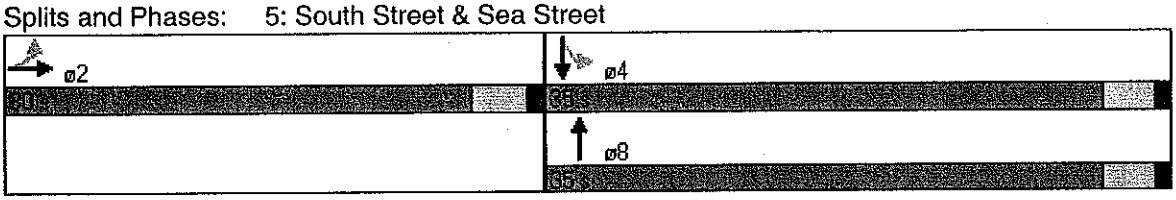
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00										
Frt		0.983						0.959				
Flt Protected		0.997									0.983	
Satd. Flow (prot)	0	3114	0	0	0	0	0	1597	0	0	1659	0
Flt Permitted		0.997									0.829	
Satd. Flow (perm)	0	3114	0	0	0	0	0	1597	0	0	1399	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25						47				
Headway Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		498			1397			402			417	
Travel Time (s)		13.6			38.1			9.1			9.5	
Volume (vph)	47	553	79	0	0	0	0	133	62	97	177	0
Confl. Peds. (#/hr)			1				8					8
Peak Hour Factor	0.95	0.92	0.95	0.92	0.92	0.92	0.88	0.88	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	49	601	83	0	0	0	0	151	67	105	201	0
Lane Group Flow (vph)	0	733	0	0	0	0	0	218	0	0	306	0
Turn Type	Perm									Perm		
Protected Phases		2						8			4	
Permitted Phases	2									4		
Minimum Split (s)	18.0	18.0						18.0		18.0	18.0	
Total Split (s)	30.0	30.0	0.0	0.0	0.0	0.0	0.0	35.0	0.0	35.0	35.0	0.0
Total Split (%)	46%	46%	0%	0%	0%	0%	0%	54%	0%	54%	54%	0%
Maximum Green (s)	26.0	26.0						31.0		31.0	31.0	
Yellow Time (s)	3.0	3.0						3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0						1.0		1.0	1.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0						5.0		5.0	5.0	
Flash Dont Walk (s)	8.0	8.0						8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		26.0						31.0			31.0	
Actuated g/C Ratio		0.40						0.48			0.48	
v/c Ratio		0.58						0.28			0.46	
Uniform Delay, d1		14.6						7.8			11.4	
Delay		15.0						8.2			11.9	
LOS		B						A			B	
Approach Delay		15.0						8.2			11.9	
Approach LOS		B						A			B	
Queue Length 50th (ft)		102						37			76	
Queue Length 95th (ft)		149						73			132	
Internal Link Dist (ft)		418			1317			322			337	
50th Up Block Time (%)												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
95th Up Block Time (%)												
Turn Bay Length (ft)												
50th Bay Block Time %												
95th Bay Block Time %												
Queuing Penalty (veh)												

Intersection Summary

Area Type: CBD
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 40
Control Type: Pretimed
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 13.1 Intersection LOS: B
Intersection Capacity Utilization 64.7% ICU Level of Service B

Splits and Phases: 5: South Street & Sea Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	72	619	12	0	0	0	0	22	12	159	14	0
Peak Hour Factor	0.75	0.75	0.75	0.92	0.92	0.92	0.71	0.71	0.71	0.96	0.96	0.96
Hourly flow rate (veh/h)	96	825	16	0	0	0	0	31	17	166	15	0
Pedestrians		4			8			4			6	
Lane Width (ft)		12.0			0.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
vC, conflicting volume	6			845			1041	1035	433	651	1043	10
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
tC, single (s)	4.2			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			100			100	86	97	43	93	100
cM capacity (veh/h)	1598			785			167	218	575	289	212	1060

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	509	429	48	180
Volume Left	96	0	0	166
Volume Right	0	16	17	0
cSH	1598	1700	279	281
Volume to Capacity	0.06	0.25	0.17	0.64
Queue Length (ft)	5	0	15	102
Control Delay (s)	1.9	0.0	20.6	38.3
Lane LOS	A		C	E
Approach Delay (s)	1.0		20.6	38.3
Approach LOS			C	E

Intersection Summary			
Average Delay	7.6		
Intersection Capacity Utilization	53.4%	ICU Level of Service	A

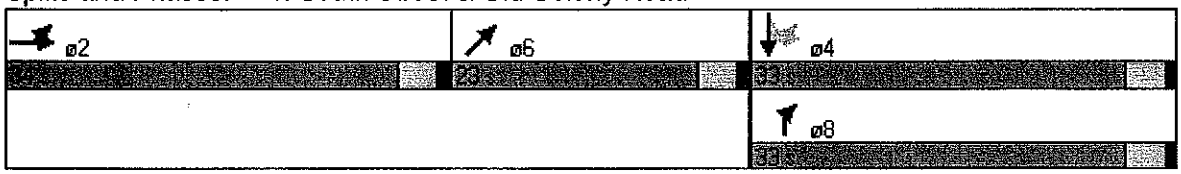
Lane Group	EBL	EBT	EBR	EBR2	NBR	NBR2	SBL2	SBL	SBT	SBR	NET	NER
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	15		9	9	9	9	15	15		9		9
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.96	0.96			0.97			0.99	
Frt		0.985		0.850	0.865				0.962		0.930	
Flt Protected		0.978						0.950				
Satd. Flow (prot)	0	3060	0	1425	1465	0	0	1608	1629	0	1567	0
Flt Permitted		0.978						0.950				
Satd. Flow (perm)	0	3056	0	1375	1408	0	0	1565	1629	0	1567	0
Right Turn on Red				Yes		Yes	Yes					
Satd. Flow (RTOR)				8	20			29				
Headway Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		25							30		30	
Link Distance (ft)		221							825		268	
Travel Time (s)		6.0							18.8		6.1	
Volume (vph)	381	378	86	8	200	66	54	111	240	83	23	24
Confl. Peds. (#/hr)	2		2	31		16		16				
Confl. Bikes (#/hr)												16
Peak Hour Factor	0.96	0.96	0.96	0.96	0.83	0.83	0.90	0.90	0.90	0.90	0.84	0.84
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	0%	0%
Adj. Flow (vph)	397	394	90	8	241	80	60	123	267	92	27	29
Lane Group Flow (vph)	0	881	0	8	321	0	0	183	359	0	56	0
Turn Type	Split			Free	custom		Perm	Perm				
Protected Phases	2	2			8				4		6	
Permitted Phases				Free	8		4	4				
Minimum Split (s)	20.0	20.0			20.0		20.0	20.0	20.0		20.0	
Total Split (s)	34.0	34.0	0.0	0.0	33.0	0.0	33.0	33.0	33.0	0.0	23.0	0.0
Total Split (%)	38%	38%	0%	0%	37%	0%	37%	37%	37%	0%	26%	0%
Maximum Green (s)	30.0	30.0			29.0		29.0	29.0	29.0		19.0	
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0	1.0		1.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0			5.0		5.0	5.0	5.0		5.0	
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)		30.0		90.0	29.0			29.0	29.0		19.0	
Actuated g/C Ratio		0.33		1.00	0.32			0.32	0.32		0.21	
v/c Ratio		0.86		0.01	0.66			0.35	0.68		0.17	
Uniform Delay, d1		28.1		0.0	24.5			19.3	26.5		29.0	
Delay		32.2		0.0	25.4			19.9	27.3		29.6	
LOS		C		A	C			B	C		C	
Approach Delay		31.9							24.8		29.6	
Approach LOS		C							C		C	
Queue Length 50th (ft)		244		0	146			65	176		26	
Queue Length 95th (ft)		#352		0	214			122	276		55	
Internal Link Dist (ft)		141							745		188	

Lane Group	EBL	EBT	EBR	EBR2	NBR	NBR2	SBL2	SBL	SBT	SBR	NET	NER
50th Up Block Time (%)		30%										
95th Up Block Time (%)		41%										
Turn Bay Length (ft)												
50th Bay Block Time %												
95th Bay Block Time %												
Queuing Penalty (veh)		314										

Intersection Summary

Area Type: CBD
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 70
Control Type: Pretimed
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 28.6 Intersection LOS: C
Intersection Capacity Utilization 78.6% ICU Level of Service C
#_ 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: South Street & Old Colony Road



Alternative One

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Storage Length (ft)	0		0	0		100	0		0	0		0
Storage Lanes	0		0	1		1	1		1	1		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				50	50	50	50	50	50	50	50	
Trailing Detector (ft)				0	0	0	0	0	0	0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
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						0.850			0.850		0.967	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1425	1238	1275	1425	1500	1275	1425	1451	0
Flt Permitted				0.950			0.133			0.416		
Satd. Flow (perm)	0	0	0	1425	1238	1275	200	1500	1275	624	1451	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						175			273		9	
Headway Factor	1.14	1.14	1.14	1.14	1.45	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		10			20			30			30	
Link Distance (ft)		438			451			533			311	
Travel Time (s)		29.9			15.4			12.1			7.1	
Volume (vph)	0	0	0	176	534	457	232	175	251	200	262	73
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
Bus Blockages (#/hr)	0	0	0	0	10	0	0	0	0	0	0	0
Parking (#/hr)					8							
Adj. Flow (vph)	0	0	0	191	580	497	252	190	273	217	285	79
Lane Group Flow (vph)	0	0	0	191	580	497	252	190	273	217	364	0
Turn Type				Split		Prot	pm+pt		pm+ov	pm+pt		
Protected Phases				1	1	1	3	8	1	7	4	
Permitted Phases							8		8	4		
Detector Phases				1	1	1	3	8	1	7	4	
Minimum Initial (s)				6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)				11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
Total Split (s)	0.0	0.0	0.0	63.0	63.0	63.0	22.0	34.0	63.0	23.0	35.0	0.0
Total Split (%)	0%	0%	0%	43%	43%	43%	15%	23%	43%	16%	24%	0%
Maximum Green (s)				58.0	58.0	58.0	17.0	29.0	58.0	18.0	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	
Lead/Lag							Lead	Lag		Lead	Lag	
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	Min	None	None	Min	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)				59.2	59.2	59.2	50.0	32.3	94.8	48.1	31.1	
Actuated g/C Ratio				0.48	0.48	0.48	0.40	0.26	0.76	0.39	0.25	
v/c Ratio				0.28	0.98	0.71	0.97	0.49	0.26	0.62	0.98	
Uniform Delay, d1				21.0	34.0	16.6	34.5	40.5	0.0	25.5	46.9	
Delay				21.2	60.2	17.6	75.2	41.8	0.5	26.3	79.5	

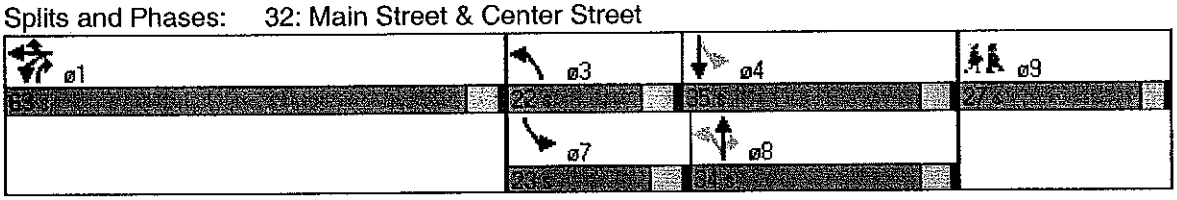
Lane Group	ø9
Lane Configurations	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Total Lost Time (s)	
Leading Detector (ft)	
Trailing Detector (ft)	
Turning Speed (mph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Headway Factor	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Volume (vph)	
Peak Hour Factor	
Bus Blockages (#/hr)	
Parking (#/hr)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phases	
Minimum Initial (s)	6.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	18%
Maximum Green (s)	23.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	5
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Uniform Delay, d1	
Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				C	E	B	E	D	A	C	E	
Approach Delay					37.6			37.8			59.6	
Approach LOS					D			D			E	
Queue Length 50th (ft)				84	417	181	153	126	0	108	273	
Queue Length 95th (ft)				178	#835	414	#402	243	0	219	#577	
Internal Link Dist (ft)		358			371			453			231	
50th Up Block Time (%)					10%						15%	
95th Up Block Time (%)					46%	8%				1%	61%	
Turn Bay Length (ft)						100						
50th Bay Block Time %					40%	21%						
95th Bay Block Time %					55%	41%						
Queuing Penalty (veh)					234	179						

Intersection Summary

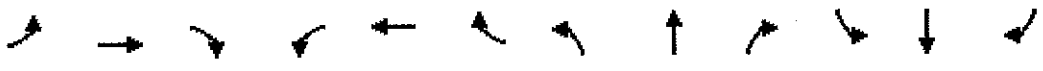
Area Type: CBD
Cycle Length: 147
Actuated Cycle Length: 124
Natural Cycle: 150
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 42.7 Intersection LOS: D
Intersection Capacity Utilization 89.9% ICU Level of Service D
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 32: Main Street & Center Street



Lane Group	ø9
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
50th Up Block Time (%)	
95th Up Block Time (%)	
Turn Bay Length (ft)	
50th Bay Block Time %	
95th Bay Block Time %	
Queuing Penalty (veh)	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				50	50						50	50
Trailing Detector (ft)				0	0						0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.97							0.88
Frt					0.978							0.850
Flt Protected					0.999							
Satd. Flow (prot)	0	0	0	0	2277	0	0	0	0	0	1500	1275
Flt Permitted					0.999							
Satd. Flow (perm)	0	0	0	0	2275	0	0	0	0	0	1500	1128
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)					35							211
Headway Factor	1.14	1.14	1.14	1.14	1.40	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		10			10			30			30	
Link Distance (ft)		340			212			825			335	
Travel Time (s)		77.4			14.5			18.8			7.6	
Volume (vph)	0	0	0	9	733	128	0	0	0	0	193	196
Confl. Peds. (#/hr)				115		165				18		66
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	10	0	0	0	0	0	0	0
Parking (#/hr)				33	33	33						
Mid-Block Traffic (%)		0%			5%			0%			0%	
Adj. Flow (vph)	0	0	0	10	788	138	0	0	0	0	208	211
Lane Group Flow (vph)	0	0	0	0	936	0	0	0	0	0	208	211
Turn Type				custom								Perm
Protected Phases				6	6						4	
Permitted Phases				6								4
Detector Phases				6	6						4	4
Minimum Initial (s)				4.0	4.0						4.0	4.0
Minimum Split (s)				18.0	18.0						18.0	18.0
Total Split (s)	0.0	0.0	0.0	41.0	41.0	0.0	0.0	0.0	0.0	0.0	19.0	19.0
Total Split (%)	0%	0%	0%	51%	51%	0%	0%	0%	0%	0%	24%	24%
Maximum Green (s)				37.0	37.0						15.0	15.0
Yellow Time (s)				3.0	3.0						3.0	3.0
All-Red Time (s)				1.0	1.0						1.0	1.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0						3.0	3.0
Recall Mode				Min	Min						None	None
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)					34.4						13.5	13.5
Actuated g/C Ratio					0.45						0.18	0.18
v/c Ratio					0.89						0.78	0.57

Lane Group	ø9
Lane Configurations	
Ideal Flow (vphpl)	
Total Lost Time (s)	
Leading Detector (ft)	
Trailing Detector (ft)	
Turning Speed (mph)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Headway Factor	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Volume (vph)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phases	
Minimum Initial (s)	4.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	25%
Maximum Green (s)	16.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Ped
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	100
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Uniform Delay, d1					18.3						29.9	0.0
Delay					23.1						37.6	5.1
LOS					C						D	A
Approach Delay					23.1						21.2	
Approach LOS					C						C	
Queue Length 50th (ft)					192						99	0
Queue Length 95th (ft)					#335						#200	59
Internal Link Dist (ft)		260			132			745			255	
50th Up Block Time (%)					19%							
95th Up Block Time (%)					34%							
Turn Bay Length (ft)												
50th Bay Block Time %												
95th Bay Block Time %												
Queuing Penalty (veh)					246							

Intersection Summary

Area Type: CBD

Cycle Length: 80

Actuated Cycle Length: 76.1

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

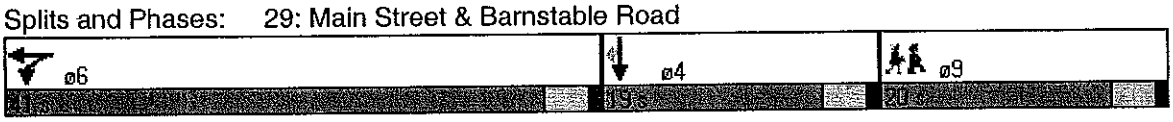
Intersection Signal Delay: 22.5 Intersection LOS: C

Intersection Capacity Utilization 61.6% ICU Level of Service B

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

Queue shown is maximum after two cycles.

Splits and Phases: 29: Main Street & Barnstable Road



Lane Group	ø9
Uniform Delay, d1	
Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
50th Up Block Time (%)	
95th Up Block Time (%)	
Turn Bay Length (ft)	
50th Bay Block Time %	
95th Bay Block Time %	
Queuing Penalty (veh)	

Intersection Summary

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER	ø9
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	
Storage Length (ft)		0	0	0		0	0		100	0	0	
Storage Lanes		0	0	0		0	0		1	0	0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50		50	50			50	50			
Trailing Detector (ft)	0	0		0	0			0	0			
Turning Speed (mph)	15	15	9	15		9	15		9	15	9	
Lane Util. Factor	0.95	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor		0.71										
Frt		0.981							0.850			
Flt Protected		0.958			0.980							
Satd. Flow (prot)	0	2079	0	0	1479	0	0	1485	1275	0	0	
Flt Permitted		0.958			0.814							
Satd. Flow (perm)	0	1564	0	0	1228	0	0	1485	1275	0	0	
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		27							64			
Headway Factor	1.14	1.51	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	
Link Speed (mph)		10			30			30		10		
Link Distance (ft)		425			555			510		654		
Travel Time (s)		29.0			12.6			11.6		44.6		
Volume (vph)	45	767	120	40	56	0	0	133	59	0	0	
Confl. Peds. (#/hr)	269		380			96	96					
Peak Hour Factor	0.95	0.92	0.95	0.92	0.86	0.86	0.84	0.84	0.92	0.92	0.92	
Heavy Vehicles (%)	1%	2%	1%	2%	1%	1%	3%	3%	2%	2%	2%	
Bus Blockages (#/hr)	50	100	50	0	0	0	0	0	0	0	0	
Parking (#/hr)	18		18									
Mid-Block Traffic (%)		5%			0%			0%		0%		
Adj. Flow (vph)	47	834	126	43	65	0	0	158	64	0	0	
Lane Group Flow (vph)	0	1007	0	0	108	0	0	158	64	0	0	
Turn Type	custom			Perm					Perm			
Protected Phases	6	6			8			4				9
Permitted Phases	6			8					4			
Detector Phases	6	6		8	8			4	4			
Minimum Initial (s)	4.0	4.0		1.0	1.0			4.0	4.0			4.0
Minimum Split (s)	18.0	18.0		18.0	18.0			18.0	18.0			20.0
Total Split (s)	42.0	42.0	0.0	18.0	18.0	0.0	0.0	18.0	18.0	0.0	0.0	20.0
Total Split (%)	53%	53%	0%	23%	23%	0%	0%	23%	23%	0%	0%	25%
Maximum Green (s)	38.0	38.0		14.0	14.0			14.0	14.0			16.0
Yellow Time (s)	3.0	3.0		3.0	3.0			3.0	3.0			3.0
All-Red Time (s)	1.0	1.0		1.0	1.0			1.0	1.0			1.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0			3.0
Recall Mode	Min	Min		None	None			None	None			Ped
Walk Time (s)												5.0
Flash Dont Walk (s)												11.0
Pedestrian Calls (#/hr)												100
Act Effct Green (s)		38.0			12.0			12.0	12.0			

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER	ø9
Actuated g/C Ratio		0.49			0.15			0.15	0.15			
v/c Ratio		0.98			0.57			0.69	0.25			
Uniform Delay, d1		19.2			30.5			31.2	0.0			
Delay		42.8			31.1			32.6	8.5			
LOS		D			C			C	A			
Approach Delay		42.8			31.1			25.7				
Approach LOS		D			C			C				
Queue Length 50th (ft)		~225			49			74	0			
Queue Length 95th (ft)		#391			95			125	32			
Internal Link Dist (ft)		345			475			430		574		
50th Up Block Time (%)												
95th Up Block Time (%)		18%										
Turn Bay Length (ft)									100			
50th Bay Block Time %												
95th Bay Block Time %								22%				
Queuing Penalty (veh)		88						7				

Intersection Summary

Area Type: CBD

Cycle Length: 80

Actuated Cycle Length: 78.1

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 39.0 Intersection LOS: D

Intersection Capacity Utilization 65.3% ICU Level of Service B

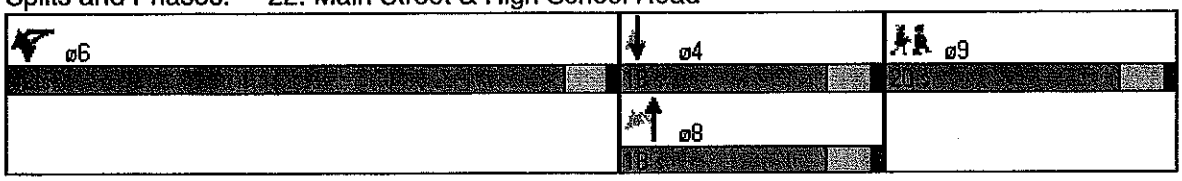
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 22: Main Street & High School Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				50	50		50	50			50	
Trailing Detector (ft)				0	0		0	0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.97							
Frt					0.988						0.974	
Flt Protected					0.990			0.981				
Satd. Flow (prot)	0	0	0	0	2382	0	0	1501	0	0	1490	0
Flt Permitted					0.990			0.751				
Satd. Flow (perm)	0	0	0	0	2338	0	0	1149	0	0	1490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					14						15	
Headway Factor	1.14	1.14	1.14	1.14	1.39	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		20			20			30			30	
Link Distance (ft)		525			688			417			786	
Travel Time (s)		17.9			23.5			9.5			17.9	
Volume (vph)	0	0	0	181	617	72	84	133	0	0	112	27
Confl. Peds. (#/hr)				71		87			67			
Peak Hour Factor	0.92	0.92	0.92	0.90	0.90	0.90	0.79	0.79	0.79	0.85	0.85	0.85
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)				38	38	38						
Adj. Flow (vph)	0	0	0	201	686	80	106	168	0	0	132	32
Lane Group Flow (vph)	0	0	0	0	967	0	0	274	0	0	164	0
Turn Type				custom			Perm					
Protected Phases				6	6			8			4	
Permitted Phases				6	6		8					
Detector Phases				6	6		8	8			4	
Minimum Initial (s)				4.0	4.0		4.0	4.0			4.0	
Minimum Split (s)				18.0	18.0		18.0	18.0			18.0	
Total Split (s)	0.0	0.0	0.0	36.0	36.0	0.0	24.0	24.0	0.0	0.0	24.0	0.0
Total Split (%)	0%	0%	0%	45%	45%	0%	30%	30%	0%	0%	30%	0%
Maximum Green (s)				32.0	32.0		20.0	20.0			20.0	
Yellow Time (s)				3.0	3.0		3.0	3.0			3.0	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Recall Mode				Min	Min		None	None			None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)					32.0			20.0			20.0	
Actuated g/C Ratio					0.40			0.25			0.25	
v/c Ratio					1.01			0.95			0.43	
Uniform Delay, d1					23.6			29.5			22.7	
Delay					50.2			64.6			23.4	

Lane Group	ø9
Lane Configurations	
Ideal Flow (vphpl)	
Total Lost Time (s)	
Leading Detector (ft)	
Trailing Detector (ft)	
Turning Speed (mph)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Headway Factor	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Volume (vph)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phases	
Minimum Initial (s)	4.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	25%
Maximum Green (s)	16.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Ped
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	100
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Uniform Delay, d1	
Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					D			E			C	
Approach Delay					50.2			64.6			23.4	
Approach LOS					D			E			C	
Queue Length 50th (ft)					~234			135			62	
Queue Length 95th (ft)					#388			#230			110	
Internal Link Dist (ft)		445			608			337			706	
50th Up Block Time (%)												
95th Up Block Time (%)												
Turn Bay Length (ft)												
50th Bay Block Time %												
95th Bay Block Time %												
Queuing Penalty (veh)												

Intersection Summary

Area Type: CBD

Cycle Length: 80

Actuated Cycle Length: 80

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 49.9 Intersection LOS: D

Intersection Capacity Utilization 73.7% ICU Level of Service C

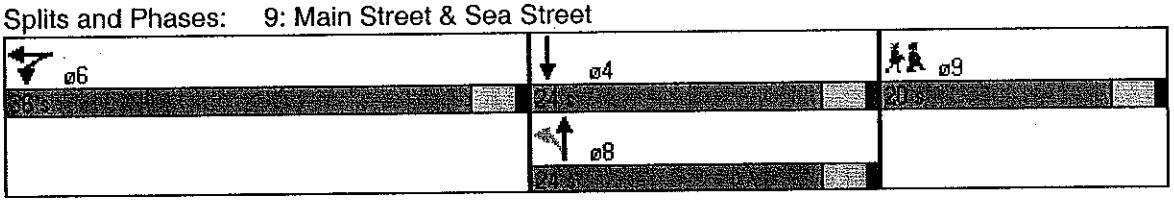
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 9: Main Street & Sea Street



Lane Group	ø9
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
50th Up Block Time (%)	
95th Up Block Time (%)	
Turn Bay Length (ft)	
50th Bay Block Time %	
95th Bay Block Time %	
Queuing Penalty (veh)	

Intersection Summary

Lane Group	EBL	EBT	EBR	EBR2	NBR	NBR2	SBL2	SBL	SBT	SBR	NET	NER
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50	50		50	
Trailing Detector (ft)	0	0		0	0		0	0	0		0	
Turning Speed (mph)	15		9	9	9	9	15	15		9		9
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		0.96	0.97			0.99			0.99	
Frt		0.985		0.850	0.865				0.916		0.930	
Flt Protected		0.978						0.950				
Satd. Flow (prot)	0	3061	0	1425	1465	0	0	1608	1551	0	1567	0
Flt Permitted		0.978						0.950				
Satd. Flow (perm)	0	3059	0	1375	1422	0	0	1585	1551	0	1567	0
Right Turn on Red				Yes		Yes						
Satd. Flow (RTOR)				4	8							
Headway Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		25							30		30	
Link Distance (ft)		221							825		268	
Travel Time (s)		6.0							18.8		6.1	
Volume (vph)	381	378	86	8	200	66	39	82	48	61	23	24
Confl. Peds. (#/hr)	2		2	31		16		16				
Confl. Bikes (#/hr)												16
Peak Hour Factor	0.96	0.96	0.96	0.96	0.83	0.83	0.90	0.90	0.90	0.90	0.84	0.84
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	0%	0%
Adj. Flow (vph)	397	394	90	8	241	80	43	91	53	68	27	29
Lane Group Flow (vph)	0	881	0	8	321	0	0	134	121	0	56	0
Turn Type	Split			Free	custom		pm+pt	pm+pt				
Protected Phases	9	9			2		1	1	6			
Permitted Phases				Free	2		6	6	6		4	
Detector Phases	9	9			2		1	1	6		4	
Minimum Initial (s)	6.0	6.0			6.0		6.0	6.0	6.0		6.0	
Minimum Split (s)	11.0	11.0			11.0		11.0	11.0	11.0		11.0	
Total Split (s)	67.0	67.0	0.0	0.0	57.0	0.0	11.0	11.0	68.0	0.0	47.0	0.0
Total Split (%)	35%	35%	0%	0%	29%	0%	6%	6%	35%	0%	24%	0%
Maximum Green (s)	62.0	62.0			52.0		6.0	6.0	63.0		42.0	
Yellow Time (s)	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	
Lead/Lag					Lag		Lead	Lead				
Lead-Lag Optimize?					Yes		Yes	Yes				
Vehicle Extension (s)	2.0	2.0			2.0		2.0	2.0	2.0		2.0	
Recall Mode	Min	Min			Min		Min	Min	Min		None	
Act Effct Green (s)		48.9		155.7	37.4			49.3	49.3		31.5	
Actuated g/C Ratio		0.31		1.00	0.24			0.32	0.32		0.20	
v/c Ratio		0.92		0.01	0.90			0.27	0.25		0.18	
Uniform Delay, d1		50.5		0.0	54.6			38.9	38.7		50.6	
Delay		55.1		0.0	59.9			43.6	43.6		57.8	
LOS		E		A	E			D	D		E	
Approach Delay		54.6							43.6		57.8	
Approach LOS		D							D		E	

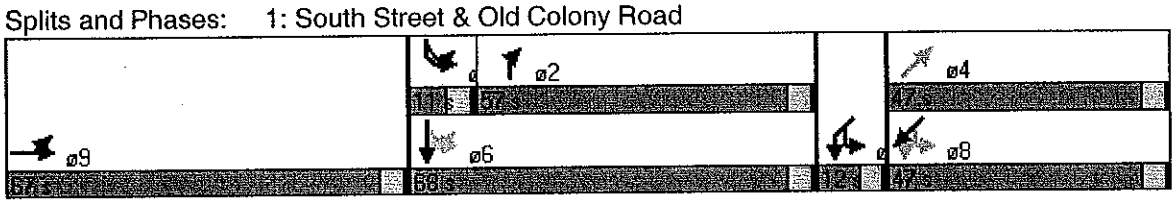
Lane Group	SWL2	SWL	SWT
Lane Configurations			
Ideal Flow (vphpl)	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0
Leading Detector (ft)	50	50	50
Trailing Detector (ft)	0	0	0
Turning Speed (mph)	15	15	
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			
Frt			
Flt Protected	0.950		0.956
Satd. Flow (prot)	1593	0	1603
Flt Permitted	0.706		0.956
Satd. Flow (perm)	1184	0	1603
Right Turn on Red			
Satd. Flow (RTOR)			
Headway Factor	1.14	1.14	1.14
Link Speed (mph)			30
Link Distance (ft)			542
Travel Time (s)			12.3
Volume (vph)	167	240	22
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Peak Hour Factor	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%
Adj. Flow (vph)	182	261	24
Lane Group Flow (vph)	182	0	285
Turn Type	custom	pm+pt	
Protected Phases	5	5	8
Permitted Phases	8 5	8	8
Detector Phases	5	5	8
Minimum Initial (s)	6.0	6.0	6.0
Minimum Split (s)	11.0	11.0	11.0
Total Split (s)	12.0	12.0	47.0
Total Split (%)	6%	6%	24%
Maximum Green (s)	7.0	7.0	42.0
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0
Lead/Lag			
Lead-Lag Optimize?			
Vehicle Extension (s)	2.0	2.0	2.0
Recall Mode	None	None	None
Act Effct Green (s)	40.2		31.5
Actuated g/C Ratio	0.26		0.20
v/c Ratio	0.55		0.88
Uniform Delay, d1	46.0		59.3
Delay	52.6		66.6
LOS	D		E
Approach Delay			61.2
Approach LOS			E

Lane Group	EBL	EBT	EBR	EBR2	NBR	NBR2	SBL2	SBL	SBT	SBR	NET	NER
Queue Length 50th (ft)		480		0	332			110	99		51	
Queue Length 95th (ft)		660		0	457			190	174		98	
Internal Link Dist (ft)		141							745		188	
50th Up Block Time (%)		48%			16%							
95th Up Block Time (%)		53%			24%							
Turn Bay Length (ft)												
50th Bay Block Time %												
95th Bay Block Time %												
Queuing Penalty (veh)		443										

Intersection Summary	
Area Type:	CBD
Cycle Length: 194	
Actuated Cycle Length: 155.7	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 55.7	Intersection LOS: E
Intersection Capacity Utilization 96.1%	ICU Level of Service E

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: South Street & Old Colony Road



Lane Group	SWL2	SWL	SWT
Queue Length 50th (ft)	162		302
Queue Length 95th (ft)	274		#495
Internal Link Dist (ft)			462
50th Up Block Time (%)			
95th Up Block Time (%)			8%
Turn Bay Length (ft)			
50th Bay Block Time %			
95th Bay Block Time %			
Queuing Penalty (veh)			11

Intersection Summary

Alternative Two

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Storage Length (ft)	50		0	100		100	250		250	250		0
Storage Lanes	1		0	1		1	1		1	1		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
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
Flt		0.963				0.850			0.850		0.967	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1047	1062	0	1425	1238	1096	1425	1500	1275	1425	1451	0
Flt Permitted	0.334			0.494			0.409			0.462		
Satd. Flow (perm)	368	1062	0	741	1238	1096	614	1500	1275	693	1451	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19				447			118		15	
Headway Factor	1.67	1.67	1.14	1.14	1.45	1.38	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		10			20			30			30	
Link Distance (ft)		438			451			533			311	
Travel Time (s)		29.9			15.4			12.1			7.1	
Volume (vph)	61	168	54	18	331	411	101	121	109	200	262	73
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
Bus Blockages (#/hr)	0	0	0	0	10	0	0	0	0	0	0	0
Parking (#/hr)	33	33	33		8	8						
Adj. Flow (vph)	66	183	59	20	360	447	110	132	118	217	285	79
Lane Group Flow (vph)	66	242	0	20	360	447	110	132	118	217	364	0
Turn Type	Perm			Perm		custom	pm+pt		Prot	pm+pt		
Protected Phases		2			6	6	3	8	8	7	4	
Permitted Phases	2			6		7	8			4		
Detector Phases	2	2		6	6	6	3	8	8	7	4	
Minimum Initial (s)	6.0	6.0		6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Minimum Split (s)	21.0	21.0		20.0	20.0	20.0	9.0	11.0	11.0	9.0	11.0	
Total Split (s)	33.0	33.0	0.0	33.0	33.0	33.0	9.0	19.0	19.0	18.0	28.0	0.0
Total Split (%)	37%	37%	0%	37%	37%	37%	10%	21%	21%	20%	31%	0%
Maximum Green (s)	28.0	28.0		28.0	28.0	28.0	4.0	14.0	14.0	13.0	23.0	
Yellow Time (s)	4.0	4.0		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	1.0	1.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	Coord	Coord		Coord	Coord	Coord	None	None	None	None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	41.8	41.8		41.8	41.8	59.3	18.7	13.8	13.8	31.2	24.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46	0.66	0.21	0.15	0.15	0.35	0.27	
v/c Ratio	0.39	0.48		0.06	0.63	0.51	0.64	0.58	0.40	0.62	0.91	
Uniform Delay, d1	17.7	17.1		15.0	20.5	0.0	22.7	34.5	0.0	21.9	30.6	
Delay	22.9	19.1		18.1	25.9	1.1	27.6	35.4	7.0	22.7	51.0	

Lane Group	ø9
Lane Configurations	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Total Lost Time (s)	
Leading Detector (ft)	
Trailing Detector (ft)	
Turning Speed (mph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Headway Factor	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Volume (vph)	
Peak Hour Factor	
Bus Blockages (#/hr)	
Parking (#/hr)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phases	
Minimum Initial (s)	5.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	22%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	5.0
Pedestrian Calls (#/hr)	50
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Uniform Delay, d1	
Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	B		B	C	A	C	D	A	C	D	
Approach Delay		19.9			12.3			23.7			40.4	
Approach LOS		B			B			C			D	
Queue Length 50th (ft)	28	99		7	176	0	42	69	0	91	193	
Queue Length 95th (ft)	75	181		23	#319	40	#91	128	46	154	#363	
Internal Link Dist (ft)		358			371			453			231	
50th Up Block Time (%)												
95th Up Block Time (%)											36%	
Turn Bay Length (ft)	50			100		100	250		250	250		
50th Bay Block Time %		34%			31%							
95th Bay Block Time %	25%	47%			45%						36%	
Queuing Penalty (veh)	30	26			7						39	

Intersection Summary

Area Type: CBD

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 28 (31%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

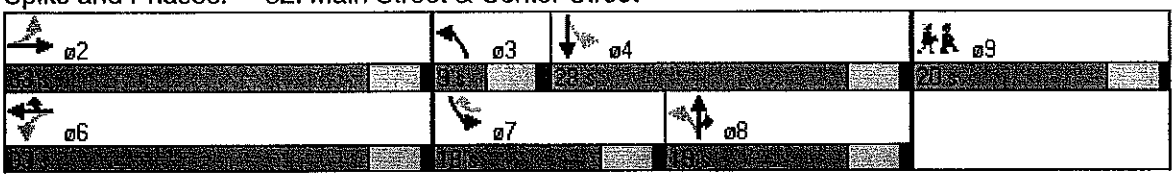
Intersection Signal Delay: 23.3 Intersection LOS: C

Intersection Capacity Utilization 74.0% ICU Level of Service C

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

Queue shown is maximum after two cycles.

Splits and Phases: 32: Main Street & Center Street



Lane Group	ø9
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
50th Up Block Time (%)	
95th Up Block Time (%)	
Turn Bay Length (ft)	
50th Bay Block Time %	
95th Bay Block Time %	
Queuing Penalty (veh)	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Storage Length (ft)	0		0	0		50	0		0	0		50
Storage Lanes	1		0	0		1	0		0	0		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	50				50	50	50
Trailing Detector (ft)	0	0		0	0	0				0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
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
Ped Bike Factor					1.00	0.81					0.99	0.83
Frt		0.994				0.850						0.850
Flt Protected	0.950				0.999						0.991	
Satd. Flow (prot)	1154	1208	0	0	1047	928	0	0	0	0	1487	1275
Flt Permitted	0.277				0.994						0.991	
Satd. Flow (perm)	337	1208	0	0	1041	752	0	0	0	0	1475	1054
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				57						128
Headway Factor	1.48	1.48	1.14	1.14	1.75	1.67	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		10			10			30			30	
Link Distance (ft)		340			212			825			335	
Travel Time (s)		77.4			14.5			18.8			7.6	
Volume (vph)	61	229	10	9	506	128	0	0	0	39	172	178
Confl. Peds. (#/hr)				115		165				18		66
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	10	0	0	0	0	0	0	0
Parking (#/hr)	18	18	18	33	33	33						
Mid-Block Traffic (%)		0%			5%			0%			0%	
Adj. Flow (vph)	66	249	11	10	544	138	0	0	0	42	185	191
Lane Group Flow (vph)	66	260	0	0	554	138	0	0	0	0	227	191
Turn Type	Perm			Perm		Perm				Perm		Perm
Protected Phases		2			6						4	
Permitted Phases	2			6		6				4		4
Minimum Initial (s)	6.0	6.0		6.0	6.0	6.0				4.0	4.0	4.0
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0				11.0	11.0	11.0
Total Split (s)	47.0	47.0	0.0	47.0	47.0	47.0	0.0	0.0	0.0	23.0	23.0	23.0
Total Split (%)	52%	52%	0%	52%	52%	52%	0%	0%	0%	26%	26%	26%
Maximum Green (s)	42.0	42.0		42.0	42.0	42.0				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
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	Coord	Coord		Coord	Coord	Coord				None	None	None
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	51.7	51.7			51.7	51.7					17.4	17.4
Actuated g/C Ratio	0.57	0.57			0.57	0.57					0.19	0.19

Lane Group	09
Lane Configurations	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Total Lost Time (s)	
Leading Detector (ft)	
Trailing Detector (ft)	
Turning Speed (mph)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Headway Factor	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Volume (vph)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Minimum Initial (s)	4.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	22%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	6.0
Pedestrian Calls (#/hr)	100
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.34	0.37			0.92	0.30					0.79	0.62
Uniform Delay, d1	10.7	10.8			18.3	5.7					34.5	10.3
Delay	14.6	12.4			51.3	7.6					39.4	12.5
LOS	B	B			D	A					D	B
Approach Delay		12.9			42.6						27.1	
Approach LOS		B			D						C	
Queue Length 50th (ft)	21	84			~317	23					121	30
Queue Length 95th (ft)	59	144			#534	63					#227	103
Internal Link Dist (ft)		260			132			745			255	
50th Up Block Time (%)					31%							
95th Up Block Time (%)					44%							
Turn Bay Length (ft)						50						50
50th Bay Block Time %					41%						49%	
95th Bay Block Time %					46%	13%					63%	40%
Queuing Penalty (veh)					268	35					107	46

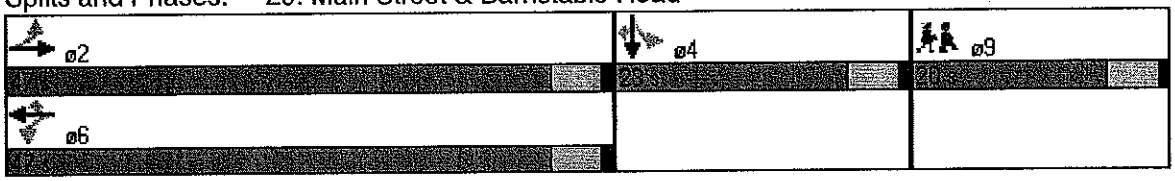
Intersection Summary

Area Type: CBD
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 76 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 31.4 Intersection LOS: C
Intersection Capacity Utilization 78.3% ICU Level of Service C

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 29: Main Street & Barnstable Road



Lane Group	ø9
v/c Ratio	
Uniform Delay, d1	
Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
50th Up Block Time (%)	
95th Up Block Time (%)	
Turn Bay Length (ft)	
50th Bay Block Time %	
95th Bay Block Time %	
Queuing Penalty (veh)	
Intersection Summary	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Storage Length (ft)	100		0	0		50	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
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
Ped Bike Factor				0.86		0.65		0.96			0.98	
Frt		0.995				0.850		0.987				0.850
Flt Protected	0.950			0.950				0.981			0.995	
Satd. Flow (prot)	1012	1060	0	933	736	834	0	1409	0	0	1478	1263
Flt Permitted	0.341			0.490				0.544			0.959	
Satd. Flow (perm)	363	1060	0	415	736	544	0	781	0	0	1392	1263
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				64		5				70
Headway Factor	1.73	1.73	1.14	1.93	2.67	1.93	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		10			10			30			30	
Link Distance (ft)		654			425			555			510	
Travel Time (s)		44.6			29.0			12.6			11.6	
Volume (vph)	14	315	10	45	522	120	40	56	10	13	120	59
Confl. Peds. (#/hr)				269		380			96	96		
Peak Hour Factor	0.92	0.92	0.92	0.95	0.95	0.95	0.86	0.86	0.86	0.84	0.84	0.84
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	1%	1%	1%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	50	100	50	0	0	0	0	0	0
Parking (#/hr)	38	38	38	18	18	18						
Mid-Block Traffic (%)		0%			5%			0%			0%	
Adj. Flow (vph)	15	342	11	47	549	126	47	65	12	15	143	70
Lane Group Flow (vph)	15	353	0	47	549	126	0	124	0	0	158	70
Turn Type	Perm			Perm		Perm	Perm			Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		4
Minimum Initial (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0
Total Split (s)	55.0	55.0	0.0	55.0	55.0	55.0	15.0	15.0	0.0	15.0	15.0	15.0
Total Split (%)	61%	61%	0%	61%	61%	61%	17%	17%	0%	17%	17%	17%
Maximum Green (s)	50.0	50.0		50.0	50.0	50.0	10.0	10.0		10.0	10.0	10.0
Yellow Time (s)	4.0	4.0		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	1.0	1.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	Coord	Coord		Coord	Coord	Coord	None	None		None	None	None
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	59.0	59.0		59.0	59.0	59.0		11.0			11.0	11.0
Actuated g/C Ratio	0.66	0.66		0.66	0.66	0.66		0.12			0.12	0.12

Lane Group	ø9
Lane Configurations	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Total Lost Time (s)	
Leading Detector (ft)	
Trailing Detector (ft)	
Turning Speed (mph)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Headway Factor	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Volume (vph)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Minimum Initial (s)	4.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	22%
Maximum Green (s)	16.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	6.0
Pedestrian Calls (#/hr)	100
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.06	0.51		0.17	1.14	0.33		1.24			0.93	0.32
Uniform Delay, d1	5.9	8.3		6.3	15.9	3.2		37.5			39.1	0.0
Delay	2.2	2.7		7.9	97.7	4.6		159.6			81.8	10.0
LOS	A	A		A	F	A		F			F	A
Approach Delay		2.7			75.6			159.6			59.8	
Approach LOS		A			E			F			E	
Queue Length 50th (ft)	0	48		10	~383	0		~87			90	0
Queue Length 95th (ft)	m0	m16		28	#580	38		#187			#189	33
Internal Link Dist (ft)		574			345			475			430	
50th Up Block Time (%)					16%							
95th Up Block Time (%)					45%							
Turn Bay Length (ft)	100					50						
50th Bay Block Time %					36%							
95th Bay Block Time %					40%	1%						
Queuing Penalty (veh)					217							

Intersection Summary

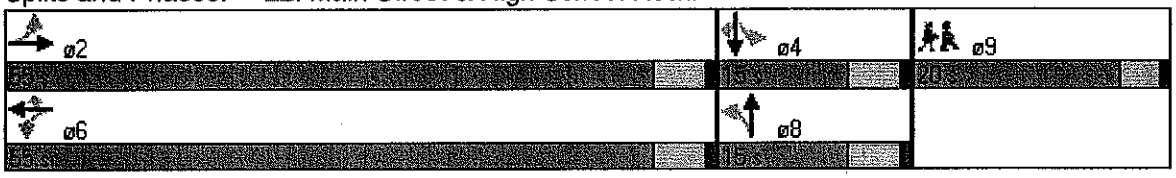
Area Type: CBD
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 57 (63%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.24
Intersection Signal Delay: 61.7 Intersection LOS: E
Intersection Capacity Utilization 66.0% ICU Level of Service B

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 22: Main Street & High School Road



Lane Group	ø9
v/c Ratio	
Uniform Delay, d1	
Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
50th Up Block Time (%)	
95th Up Block Time (%)	
Turn Bay Length (ft)	
50th Bay Block Time %	
95th Bay Block Time %	
Queuing Penalty (veh)	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Storage Length (ft)	50		0	50		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
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
Ped Bike Factor				0.96	0.98			0.99				
Frt		0.996			0.979			0.995			0.974	
Flt Protected	0.950			0.950				0.989			0.996	
Satd. Flow (prot)	1104	1158	0	1022	1036	0	0	1497	0	0	1484	0
Flt Permitted	0.243			0.418				0.886			0.973	
Satd. Flow (perm)	282	1158	0	431	1036	0	0	1341	0	0	1450	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			12			2			13	
Headway Factor	1.56	1.56	1.14	1.73	1.73	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		20			20			30			30	
Link Distance (ft)		525			688			417			786	
Travel Time (s)		17.9			23.5			9.5			17.9	
Volume (vph)	9	339	10	110	443	72	42	133	6	11	101	27
Confl. Peds. (#/hr)				71		87			67			
Peak Hour Factor	0.92	0.92	0.92	0.90	0.90	0.90	0.79	0.79	0.79	0.85	0.85	0.85
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)	25	25	25	38	38	38						
Adj. Flow (vph)	10	368	11	122	492	80	53	168	8	13	119	32
Lane Group Flow (vph)	10	379	0	122	572	0	0	229	0	0	164	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6	6		8			4		
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		9.0	9.0		9.0	9.0	
Total Split (s)	45.0	45.0	0.0	45.0	45.0	0.0	25.0	25.0	0.0	25.0	25.0	0.0
Total Split (%)	50%	50%	0%	50%	50%	0%	28%	28%	0%	28%	28%	0%
Maximum Green (s)	40.0	40.0		40.0	40.0		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	
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	Coord	Coord		Coord	Coord		None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	59.1	59.1		59.1	59.1			18.9			18.9	
Actuated g/C Ratio	0.66	0.66		0.66	0.66			0.21			0.21	
v/c Ratio	0.05	0.50		0.43	0.84			0.81			0.52	
Uniform Delay, d1	6.7	9.6		9.1	14.0			33.4			28.8	

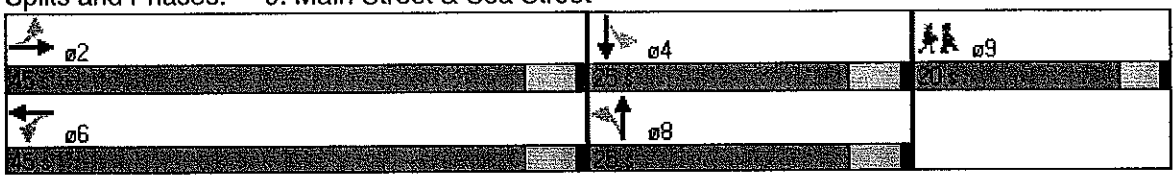
Lane Group	ø9
Lane Configurations	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Total Lost Time (s)	
Leading Detector (ft)	
Trailing Detector (ft)	
Turning Speed (mph)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Headway Factor	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Volume (vph)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Minimum Initial (s)	4.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	22%
Maximum Green (s)	16.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	10
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Uniform Delay, d1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Delay	11.9	11.2		18.2	26.3			38.3			28.7	
LOS	B	B		B	C			D			C	
Approach Delay		11.2			24.9			38.3			28.7	
Approach LOS		B			C			D			C	
Queue Length 50th (ft)	1	0		42	302			120			74	
Queue Length 95th (ft)	m5	m169		m74	m#383			172			126	
Internal Link Dist (ft)		445			608			337			706	
50th Up Block Time (%)												
95th Up Block Time (%)												
Turn Bay Length (ft)	50			50								
50th Bay Block Time %				2%	29%							
95th Bay Block Time %		22%		28%	53%							
Queuing Penalty (veh)		1		79	50							

Intersection Summary

Area Type: CBD
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 75 (83%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 23.8 Intersection LOS: C
Intersection Capacity Utilization 83.8% ICU Level of Service D
#. 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Main Street & Sea Street



Lane Group	ø9
Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
50th Up Block Time (%)	
95th Up Block Time (%)	
Turn Bay Length (ft)	
50th Bay Block Time %	
95th Bay Block Time %	
Queuing Penalty (veh)	

Intersection Summary

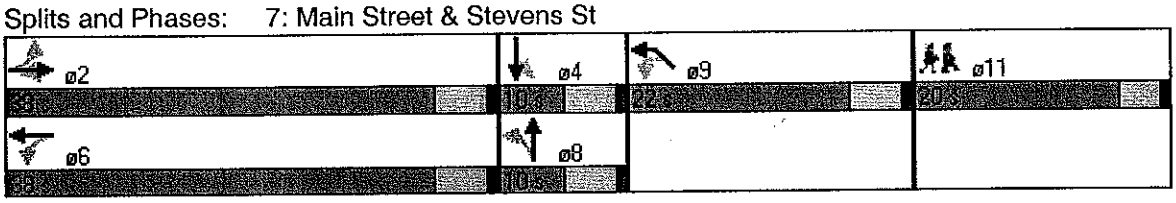
Lane Group	EBL	EBT	EBR	EBR2	WBL	WBT	WBR	NBL	NBT	NBR2	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1700	1700	1700	1900	1900	1000	1900	1900
Storage Length (ft)	0		0		50		0	0			0	
Storage Lanes	0		1		1		0	0			0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50		50	50		50	50		50	50
Trailing Detector (ft)	0	0	0		0	0		0	0		0	0
Turning Speed (mph)	15		9	9	15		9	15		9	15	
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
Ped Bike Factor		1.00										
Frt			0.850			0.990			0.949			0.923
Flt Protected		0.997			0.950				0.976			0.985
Satd. Flow (prot)	0	1671	1425	0	1104	1151	0	0	1584	0	0	1495
Flt Permitted		0.728			0.336				0.859			0.892
Satd. Flow (perm)	0	1220	1425	0	391	1151	0	0	1394	0	0	1354
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			2			5			9			35
Headway Factor	1.14	1.14	1.14	1.14	1.56	1.56	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		20				20			30			30
Link Distance (ft)		329				164			196			876
Travel Time (s)		11.2				5.6			4.5			19.9
Volume (vph)	20	348	309	12	2	477	34	7	2	5	14	6
Confl. Peds. (#/hr)	16											
Peak Hour Factor	0.91	0.91	0.91	0.91	0.88	0.88	0.88	0.58	0.58	0.58	0.80	0.80
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	0%	0%	0%	4%	4%
Parking (#/hr)					25	25	25					
Adj. Flow (vph)	22	382	340	13	2	542	39	12	3	9	18	8
Lane Group Flow (vph)	0	404	353	0	2	581	0	0	24	0	0	61
Turn Type	Perm		Perm		Perm			Perm			Perm	
Protected Phases		2				6			8			4
Permitted Phases	2		2		6			8			4	
Minimum Initial (s)	6.0	6.0	6.0		6.0	6.0		4.0	4.0		4.0	4.0
Minimum Split (s)	11.0	11.0	11.0		11.0	11.0		9.0	9.0		9.0	9.0
Total Split (s)	38.0	38.0	38.0	0.0	38.0	38.0	0.0	10.0	10.0	0.0	10.0	10.0
Total Split (%)	42%	42%	42%	0%	42%	42%	0%	11%	11%	0%	11%	11%
Maximum Green (s)	33.0	33.0	33.0		33.0	33.0		5.0	5.0		5.0	5.0
Yellow Time (s)	4.0	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	1.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode	Coord	Coord	Coord		Coord	Coord		None	None		None	None
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		52.6	52.6		52.6	52.6			6.0			6.0
Actuated g/C Ratio		0.58	0.58		0.58	0.58			0.07			0.07
v/c Ratio		0.57	0.42		0.01	0.86			0.24			0.50
Uniform Delay, d1		14.4	12.7		9.5	19.2			25.3			17.4

Lane Group	SBR	NWL2	NWL	NWR	NWR2	ø11
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	
Storage Length (ft)	0		0	0		
Storage Lanes	0		1	0		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)		50	50			
Trailing Detector (ft)		0	0			
Turning Speed (mph)	9	15	15	9	9	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor						
Frt			0.995			
Flt Protected			0.954			
Satd. Flow (prot)	0	0	1591	0	0	
Flt Permitted			0.997			
Satd. Flow (perm)	0	0	1663	0	0	
Right Turn on Red	Yes				Yes	
Satd. Flow (RTOR)			1			
Headway Factor	1.14	1.14	1.14	1.14	1.14	
Link Speed (mph)			25			
Link Distance (ft)			245			
Travel Time (s)			6.7			
Volume (vph)	28	2	245	5	5	
Confl. Peds. (#/hr)						
Peak Hour Factor	0.80	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	4%	2%	2%	2%	2%	
Parking (#/hr)						
Adj. Flow (vph)	35	2	266	5	5	
Lane Group Flow (vph)	0	0	278	0	0	
Turn Type		Perm				
Protected Phases			9			11
Permitted Phases		9				
Minimum Initial (s)		4.0	4.0			4.0
Minimum Split (s)		9.0	9.0			20.0
Total Split (s)	0.0	22.0	22.0	0.0	0.0	20.0
Total Split (%)	0%	24%	24%	0%	0%	22%
Maximum Green (s)		17.0	17.0			16.0
Yellow Time (s)		4.0	4.0			3.0
All-Red Time (s)		1.0	1.0			1.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0			3.0
Recall Mode		None	None			None
Walk Time (s)						5.0
Flash Dont Walk (s)						11.0
Pedestrian Calls (#/hr)						5
Act Effct Green (s)			17.4			
Actuated g/C Ratio			0.19			
v/c Ratio			0.86			
Uniform Delay, d1			35.0			

Lane Group	EBL	EBT	EBR	EBR2	WBL	WBT	WBR	NBL	NBT	NBR2	SBL	SBT
Delay		22.6	13.8		20.5	41.6			30.0			22.9
LOS		C	B		C	D			C			C
Approach Delay		18.5				41.5			30.0			22.9
Approach LOS		B				D			C			C
Queue Length 50th (ft)		126	97		0	173			8			14
Queue Length 95th (ft)		#384	261		m1	m#566			19			45
Internal Link Dist (ft)		249				84			116			796
50th Up Block Time (%)						27%						
95th Up Block Time (%)		33%	9%			41%						
Turn Bay Length (ft)					50							
50th Bay Block Time %						25%						
95th Bay Block Time %						39%						
Queuing Penalty (veh)						198						

Intersection Summary
Area Type: CBD
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 66 (73%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 31.3 Intersection LOS: C
Intersection Capacity Utilization 97.2% ICU Level of Service E
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Main Street & Stevens St



Lane Group	SBR	NWL2	NWL	NWR	NWR2	ø11
Delay			46.5			
LOS			D			
Approach Delay			46.5			
Approach LOS			D			
Queue Length 50th (ft)			153			
Queue Length 95th (ft)			#288			
Internal Link Dist (ft)			165			
50th Up Block Time (%)			1%			
95th Up Block Time (%)			43%			
Turn Bay Length (ft)						
50th Bay Block Time %						
95th Bay Block Time %						
Queuing Penalty (veh)			59			

Intersection Summary

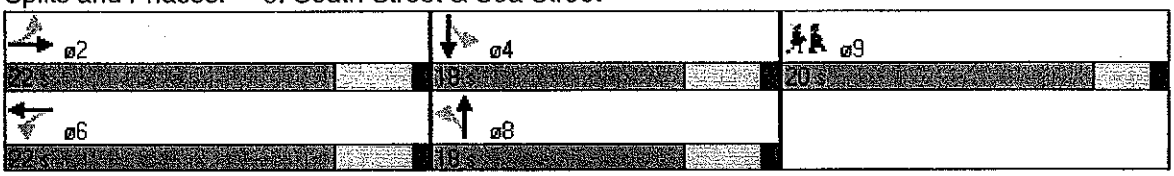
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
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
Ped Bike Factor		0.99						1.00			1.00	
Frt		0.968			0.995			0.961			0.996	
Flt Protected		0.994			0.998			0.989			0.979	
Satd. Flow (prot)	0	1599	0	0	1665	0	0	1578	0	0	1649	0
Flt Permitted		0.940			0.984			0.892			0.696	
Satd. Flow (perm)	0	1511	0	0	1641	0	0	1420	0	0	1173	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			3			32			2	
Headway Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		498			1397			402			417	
Travel Time (s)		13.6			38.1			9.1			9.5	
Volume (vph)	38	214	79	10	260	10	42	97	56	86	106	5
Confl. Peds. (#/hr)	10		10				8					8
Peak Hour Factor	0.95	0.92	0.92	0.92	0.92	0.92	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	1%	1%	1%
Adj. Flow (vph)	40	233	86	11	283	11	48	110	64	98	120	6
Lane Group Flow (vph)	0	359	0	0	305	0	0	222	0	0	224	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phases	2	2		6	6		8	8		4	4	
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	18.0	18.0		21.0	21.0		18.0	18.0		18.0	18.0	
Total Split (s)	22.0	22.0	0.0	22.0	22.0	0.0	18.0	18.0	0.0	18.0	18.0	0.0
Total Split (%)	37%	37%	0%	37%	37%	0%	30%	30%	0%	30%	30%	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	
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	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		18.1			18.1			13.2			13.2	
Actuated g/C Ratio		0.42			0.42			0.31			0.31	
v/c Ratio		0.54			0.44			0.48			0.61	
Uniform Delay, d1		9.9			10.1			11.4			14.0	
Delay		15.2			11.5			13.2			22.6	
LOS		B			B			B			C	

Lane Group	ø9
Lane Configurations	
Ideal Flow (vphpl)	
Total Lost Time (s)	
Leading Detector (ft)	
Trailing Detector (ft)	
Turning Speed (mph)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Headway Factor	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Volume (vph)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phases	
Minimum Initial (s)	4.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	33%
Maximum Green (s)	16.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	5
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Uniform Delay, d1	
Delay	
LOS	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		15.2			11.5			13.2			22.6	
Approach LOS		B			B			B			C	
Queue Length 50th (ft)		40			35			25			32	
Queue Length 95th (ft)		#231			154			#126			#179	
Internal Link Dist (ft)		418			1317			322			337	
50th Up Block Time (%)												
95th Up Block Time (%)												
Turn Bay Length (ft)												
50th Bay Block Time %												
95th Bay Block Time %												
Queuing Penalty (veh)												

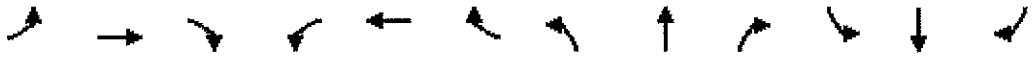
Intersection Summary			
Area Type:	CBD		
Cycle Length: 60			
Actuated Cycle Length: 42.6			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 15.3		Intersection LOS: B	
Intersection Capacity Utilization 80.5%		ICU Level of Service D	
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: South Street & Sea Street



Lane Group	ø9
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
50th Up Block Time (%)	
95th Up Block Time (%)	
Turn Bay Length (ft)	
50th Bay Block Time %	
95th Bay Block Time %	
Queuing Penalty (veh)	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	58	283	5	5	290	10	5	22	12	146	14	10
Peak Hour Factor	0.75	0.75	0.75	0.92	0.92	0.92	0.71	0.71	0.71	0.96	0.96	0.96
Hourly flow rate (veh/h)	77	377	7	5	315	11	7	31	17	152	15	10
Pedestrians		4			8			4			6	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			1			0			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
vC, conflicting volume	332			388			893	882	393	913	880	331
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			100			97	88	97	28	94	99
cM capacity (veh/h)	1216			1167			234	265	654	210	264	705

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	461	332	55	177
Volume Left	77	5	7	152
Volume Right	7	11	17	10
cSH	1216	1167	318	223
Volume to Capacity	0.06	0.00	0.17	0.79
Queue Length (ft)	5	0	15	144
Control Delay (s)	1.9	0.2	18.7	63.7
Lane LOS	A	A	C	F
Approach Delay (s)	1.9	0.2	18.7	63.7
Approach LOS			C	F

Intersection Summary			
Average Delay	12.9		
Intersection Capacity Utilization	74.4%	ICU Level of Service	C

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR2	NBL	NBT	NBR	NBR2
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0			0			0		0	
Storage Lanes	1		1			1			0		0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	50	50		50	50		
Trailing Detector (ft)	0	0		0	0	0	0		0	0		
Turning Speed (mph)	15		9	9	15	15		9	15		9	9
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
Ped Bike Factor	1.00	1.00		0.96						0.94		
Frt		0.972		0.850			0.972			0.877		
Flt Protected	0.950					0.950				0.996		
Satd. Flow (prot)	1593	1622	0	1425	0	1593	1630	0	0	1397	0	0
Flt Permitted	0.950					0.950				0.912		
Satd. Flow (perm)	1590	1622	0	1375	0	1593	1630	0	0	1280	0	0
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				4			6			10		
Headway Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Link Speed (mph)		25					25			30		
Link Distance (ft)		221					679			348		
Travel Time (s)		6.0					18.5			7.9		
Volume (vph)	32	378	86	8	158	10	203	46	24	0	176	66
Confl. Peds. (#/hr)	2		2	31								16
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.92	0.92	0.92	0.92	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%
Adj. Flow (vph)	33	394	90	8	172	11	221	50	29	0	212	80
Lane Group Flow (vph)	33	484	0	8	0	183	271	0	0	321	0	0
Turn Type	Split			Free	Split	Split			Perm			
Protected Phases	2	2			1	1	1			8		
Permitted Phases				Free					8			
Detector Phases	2	2			1	1	1		8	8		
Minimum Initial (s)	6.0	6.0			6.0	6.0	6.0		6.0	6.0		
Minimum Split (s)	11.0	11.0			11.0	11.0	11.0		11.0	11.0		
Total Split (s)	38.0	38.0	0.0	0.0	20.0	20.0	20.0	0.0	33.0	33.0	0.0	0.0
Total Split (%)	25%	25%	0%	0%	13%	13%	13%	0%	22%	22%	0%	0%
Maximum Green (s)	33.0	33.0			15.0	15.0	15.0		28.0	28.0		
Yellow Time (s)	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		
Lead/Lag	Lag	Lag			Lead	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0		2.0	2.0		
Recall Mode	None	None			None	None	None		None	None		
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	34.2	34.2		134.0		16.1	16.1			29.1		
Actuated g/C Ratio	0.26	0.26		1.00		0.12	0.12			0.22		
v/c Ratio	0.08	1.17		0.01		0.96	1.35			1.12		

Lane Group	SBL	SBT	SBR	SBR2	NEL2	NET	NER	SWL2	SWL	SWT	SWR	ø11
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	200		0				0		200		0	
Storage Lanes	1		0				0		1		0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50			50	50		50	50	50		
Trailing Detector (ft)	0	0			0	0		0	0	0		
Turning Speed (mph)	15		9	9	15		9	15	15		9	
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	
Ped Bike Factor	0.98					0.96						
Frt		0.899				0.937				0.978		
Flt Protected	0.950					0.995		0.950		0.967		
Satd. Flow (prot)	1608	1522	0	0	0	1535	0	1593	0	1585	0	
Flt Permitted	0.201					0.966		0.950		0.345		
Satd. Flow (perm)	335	1522	0	0	0	1490	0	1593	0	566	0	
Right Turn on Red				Yes								
Satd. Flow (RTOR)		10										
Headway Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	
Link Speed (mph)		30				30				30		
Link Distance (ft)		825				268				542		
Travel Time (s)		18.8				6.1				12.3		
Volume (vph)	82	48	61	38	5	23	24	169	95	22	20	
Confl. Peds. (#/hr)	16											
Confl. Bikes (#/hr)							16					
Peak Hour Factor	0.90	0.90	0.90	0.90	0.84	0.84	0.84	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	1%	1%	1%	1%	0%	0%	0%	2%	2%	2%	2%	
Adj. Flow (vph)	91	53	68	42	6	27	29	184	103	24	22	
Lane Group Flow (vph)	91	163	0	0	0	62	0	184	0	149	0	
Turn Type	Perm				Perm			custom	Perm			
Protected Phases		4				10		9		14		11
Permitted Phases	4				10			9	14			
Detector Phases	4	4			10	10		9	14	14		
Minimum Initial (s)	6.0	6.0			4.0	4.0		4.0	6.0	6.0		2.0
Minimum Split (s)	11.0	11.0			11.0	11.0		9.0	11.0	11.0		20.0
Total Split (s)	33.0	33.0	0.0	0.0	19.0	19.0	0.0	20.0	39.0	39.0	0.0	20.0
Total Split (%)	22%	22%	0%	0%	13%	13%	0%	13%	26%	26%	0%	13%
Maximum Green (s)	28.0	28.0			14.0	14.0		15.0	34.0	34.0		16.0
Yellow Time (s)	4.0	4.0			4.0	4.0		4.0	4.0	4.0		3.0
All-Red Time (s)	1.0	1.0			1.0	1.0		1.0	1.0	1.0		1.0
Lead/Lag					Lag	Lag		Lead				
Lead-Lag Optimize?					Yes	Yes		Yes				
Vehicle Extension (s)	2.0	2.0			2.0	2.0		3.0	2.0	2.0		3.0
Recall Mode	None	None			None	None		None	None	None		None
Walk Time (s)												5.0
Flash Dont Walk (s)												11.0
Pedestrian Calls (#/hr)												5
Act Effct Green (s)	29.1	29.1				13.3		20.0		35.1		
Actuated g/C Ratio	0.22	0.22				0.10		0.15		0.26		
v/c Ratio	1.25	0.48				0.42		0.78		1.01		

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR2	NBL	NBT	NBR	NBR2
Uniform Delay, d1	40.1	52.1		0.0		61.1	59.3			52.6		
Delay	40.7	126.4		0.0		101.0	181.2			119.2		
LOS	D	F		A		F	F			F		
Approach Delay		119.1					148.9			119.2		
Approach LOS		F					F			F		
Queue Length 50th (ft)	21	~476		0		155	~291			~299		
Queue Length 95th (ft)	57	#834		0		#361	#556			#519		
Internal Link Dist (ft)		141					599			268		
50th Up Block Time (%)		55%								15%		
95th Up Block Time (%)		69%								61%		
Turn Bay Length (ft)												
50th Bay Block Time %												
95th Bay Block Time %												
Queuing Penalty (veh)		300										

Intersection Summary

Area Type: CBD

Cycle Length: 150

Actuated Cycle Length: 134

Natural Cycle: 150

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.35

Intersection Signal Delay: 117.6 Intersection LOS: F

Intersection Capacity Utilization 109.3% ICU Level of Service F

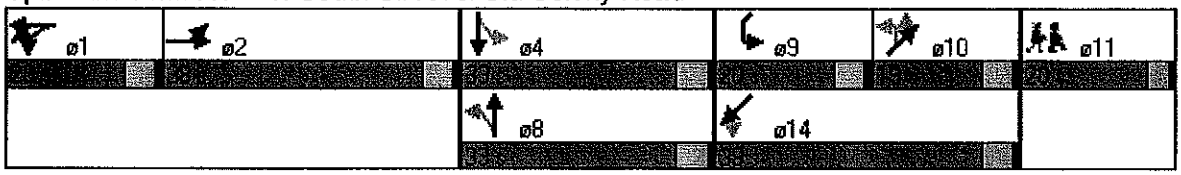
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: South Street & Old Colony Road



Lane Group	SBL	SBT	SBR	SBR2	NEL2	NET	NER	SWL2	SWL	SWT	SWR	ø11
Uniform Delay, d1	54.5	45.0				60.0		57.2		51.0		
Delay	174.6	44.9				58.1		97.5		108.1		
LOS	F	D				E		F		F		
Approach Delay		91.4				58.1				102.2		
Approach LOS		F				E				F		
Queue Length 50th (ft)	~94	113				49		156		125		
Queue Length 95th (ft)	#241	216				101		#363		#316		
Internal Link Dist (ft)		745				188				462		
50th Up Block Time (%)												
95th Up Block Time (%)												
Turn Bay Length (ft)	200							200				
50th Bay Block Time %												
95th Bay Block Time %	20%	10%						48%		40%		
Queuing Penalty (veh)	16	4						35		36		

Intersection Summary

Appendix D

Travel Time Calculations

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PROJECT # 2001215 SHEET # 1 OF: PAGE # OF:
MADE BY: KP DATE: 12/17/01
PROJECT: BARNSTABLE - HYANNIS TRAFFIC CHKD BY: DATE: __/__/__
SUBJECT: AVERAGE TRAVEL TIMES REVISED BY: DATE: __/__/__

MAIN ST - 4,241 FT
SOUTH ST - 3,706 FT

EXISTING

FROM SIMULATION OUTPUT

MAIN ST - 9 mph = 13 fps AVG SPEED

4241/13 = 326 sec = 5.4 min

SOUTH ST - 15 mph = 22 fps AVG SPEED

3706/22 = 168 sec = 2.8 min

---

base travel time @ 25 mph
Main St - 115 sec
South St - 100 sec

add int delays -

Main St	115 sec
Old Colony	41
Barnstable	14
High School	18
Sea	12
Sherman Sq	9
	209 sec = 3.5 min

South St	100 sec
Sherman Sq	9
Sea	15
High School	1
Old Colony	32
	157 sec = 2.6 min

assume 8 secs delay for emerg veh. @ intersections
⇒
Main - 155 sec = 2.6 min South = 125 sec = 2.1 min

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PROJECT # 2001215 SHEET # 1 OF: PAGE # OF:
MADE BY: KP DATE: 12/11/01
PROJECT: BARNSTABLE - HYANNIS TRAFFIC CHKD BY: DATE: __/__/__
SUBJECT: AVERAGE TRAVEL TIMES REVISED BY: DATE: __/__/__

MAIN ST - 4,241 FT
SOUTH ST - 3,706 FT
> OLD COLONY RD TO SHERMAN SQUARE

ALT 1 - TRAFFIC CALMING

FROM SIMULATION OUTPUT (ATTACHED)

MAIN ST - 9 mph = 13 fps AVG SPEED

4241 ft / 13 = 326 sec = 5.4 min

SOUTH ST - 12 mph = 18 fps AVG SPEED

3706 ft / 18 = 206 sec = 3.4 min

ALT 2 - 2 WAY CIRCULATION

MAIN ST

EB (from link info - simulation output)

@ Old Colony	5 mph
@ Barnstable Rd	5 mph
@ HS Road	8 mph
@ Sea St	10 mph
@ Sherman Square	10 mph

8 mph avg speed = 12 fps

$\frac{4241 \text{ ft}}{12 \text{ fps}}$ = 353 sec = 5.9 min

ALT 2 CONT'D

MAIN ST

WB (from link info - simulation output)

@ Old Colony	2 mph
@ Barnstable	2 mph
@ High School	7 mph
@ Sea St	8 mph
@ Sherman Sq	4 mph

23/5 = 5 mph = 7 fps

4241 ft / 7 fps = 606 sec
= 10.1 min

SOUTH ST

EB

@ Sherman Sq	7 mph
@ Sea St	11 mph
@ High School	21 mph
@ Old Colony	2 mph

41/4 = 10 mph = 15 fps

3706/15 = 247 sec = 4.1 min

WB

@ Sherman Sq	3 mph
@ Sea St	18 mph
@ High School	22 mph
@ Old Colony	1 mph

44 mph/4 = 11 mph = 16 fps

3706/16 = 232 sec = 3.9 min

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PROJECT # 2001215 SHEET # 1 OF: PAGE # OF:
MADE BY: KP DATE: 12/11/01
PROJECT: BARNSTABLE TRAFFIC STUDY CHKD BY: DATE: /__/__
SUBJECT: AVERAGE TRAVEL TIMES REVISED BY: DATE: /__/__

Main St – Sherman Sq. to Old Colony – 4,241 ft
South St – Sherman Sq to Old Colony – 3,706 ft

@ 25 mph w/ no control or other delays
(37 fps)

Main St
$\frac{(4241\ ft)}{(37\ fps)}$ = 115 seconds base travel time

South St
$\frac{3706\ ft}{37\ fps}$ = 100 seconds base travel time

Alt 1 (traffic calming)

assume 20 mph speed
⇒ Main St = 146 sec } base travel time
South St = 128 sec

add intersection lane group delays from capacity analysis of intersections

Main St –

base	146 sec
Old Colony	60
Barnstable	10
H.S. Rd	18
Sea St	12
Sherman Sq	9
	255 sec
	= 4.25 min

South St –

base	128
Sherman Sq	9
Sea St	15
H.S. Rd	2
Old Colony	55
	209 sec
	= 3.5 min

ALT 1 CONT.

FOR EMERGENCY VEHICLES, ASSUME ONLY 10 SEC DELAY @ CONGESTED INTERSECTIONS (THEY WOULD NOT WAIT IN QUEUE), & RE-CALC

MAIN ST –

base	146 sec
Old Colony	10
Barnstable	10
H.S. Rd	10
Sea St	10
Sherman Sq	9
	195 sec
	= 3.25 min

SOUTH ST –

base	128
Sherman Sq	9
Sea St	10
H.S. Rd	2
Old Colony	10
	159 sec
	= 2.7 min

ALT 2 – 2 WAY CIRCULATION

MAIN ST EB (@20 mph)

base	146 sec
Old Colony	19 sec
Barnstable	12 sec
High School	3 sec
Sea	11 sec
Sherman Sq	23 sec
	214 sec
	= 3.6 min

MAIN ST WB (@20 mph)

base	146 sec
Old Colony	26 sec
Barnstable	51 sec
High School	98 sec
Sea	26 sec
Sherman Sq	42 sec
	389 sec
	= 6.5 min

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PROJECT # 2001215 SHEET # 3 OF: PAGE # OF:
MADE BY: KP DATE: 12/11/01
PROJECT: BARNSTABLE TRAFFIC STUDY CHKD BY: DATE: /_/_
SUBJECT: AVERAGE TRAVEL TIMES REVISED BY: DATE: /_/_

ALT 2 CONT.

SOUTH ST EB (@20mph)

base	128 sec
Sherman Sq	14 sec
Sea	15 sec
High School	2 sec
Old Colony	126 sec
	285 sec
	= 4.75 min

SOUTH ST WB (@20mph)

base	128
Sherman Sq	47
Sea	12
High School	0
Old Colony	181
	368 sec
	= 6.1 min

FOR EMERGENCY VEHICLES, ASSUME ONLY 15 SEC DELAY @ CONGESTED INTERSECTIONS & RE-CALC

MAIN ST EB

base	146
Old Colony	15
Barnstable	10
High School	15
Sea	12
Sherman Sq	9
	207 sec = 3.5 min

MAIN ST WB

base	146
Old Colony	15
Barnstable	15
High School	15
Sea	15
Sherman Sq	15
	221 sec
	= 3.7 min

SOUTH ST EB

base	128
Old Colony	15
High School	2
Sea	15
Sherman Sq	14
	174 sec =
	2.9 min

SOUTH ST WB

base	128
Old Colony	15
High School	0
Sea	12
Sherman Sq	15
	170 sec
	= 2.8 min

Summary of Entire Run	
Start Time	3:45
End Time	5:00
Total Time (min)	75
Time Recorded (min)	60
# of Intervals	2
# of Recorded Intvls	1
Vehs Entered	4824
Vehs Exited	4827
Starting Vehs	211
Ending Vehs	208
Denied Entry Before	3
Denied Entry After	16
Travel Distance (mi)	2394
Travel Time (hr)	242.4
Total Delay (hr)	105.7
Total Stops	9335
Fuel Used (gal)	241.9

Interval #0 Information Seeding	
Start Time	3:45
End Time	4:00
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors, Anti PHF.	
No data recorded this interval.	

Interval #1 Information Recording	
Start Time	4:00
End Time	5:00
Total Time (min)	60
Volumes adjusted by PHF, Growth Factors, Anti PHF.	
Vehs Entered	4824
Vehs Exited	4827
Starting Vehs	211
Ending Vehs	208
Denied Entry Before	3
Denied Entry After	16
Travel Distance (mi)	2394
Travel Time (hr)	242.4
Total Delay (hr)	105.7
Total Stops	9335
Fuel Used (gal)	241.9

1: South Street & Old Colony Road Intersection Performance

	EB	NB	SB	NE	Total
Total Delay (hr)	9.0	2.3	8.5	0.6	20.4
Delay / Veh (s)	32.0	26.6	55.3	34.6	37.8
Total Stops	694	259	527	59	1539
Travel Dist (mi)	36.7	17.2	85.7	2.6	142.0
Travel Time (hr)	10.7	3.2	11.7	0.8	26.3
Avg Speed (mph)	3	5	7	3	5
Fuel Used (gal)	7.6	2.6	12.6	0.5	23.4
HC Emissions (g)	20	8	35	2	65
CO Emissions (g)	370	215	1188	33	1806
NOx Emissions (g)	51	24	105	5	185
Vehicles Entered	1014	307	549	65	1935
Vehicles Exited	1017	308	553	66	1944
Hourly Exit Rate	1017	308	553	66	1944
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

3: South Street & High School Road Intersection Performance

	EB	NB	SB	Total
Total Delay (hr)	1.1	0.1	0.9	2.1
Delay / Veh (s)	4.1	12.1	14.7	6.3
Total Stops	7	40	194	241
Travel Dist (mi)	229.1	2.5	22.3	253.9
Travel Time (hr)	10.5	0.2	1.7	12.5
Avg Speed (mph)	22	11	13	20
Fuel Used (gal)	14.2	0.2	2.8	17.2
HC Emissions (g)	34	0	8	43
CO Emissions (g)	1017	10	345	1372
NOx Emissions (g)	98	1	29	128
Vehicles Entered	941	40	218	1199
Vehicles Exited	930	40	219	1189
Hourly Exit Rate	930	40	219	1189
Denied Entry Before	0	0	0	0
Denied Entry After	1	0	0	1

5: South Street & Sea Street Intersection Performance

	EB	NB	SB	Total
Total Delay (hr)	3.1	0.6	1.5	5.2
Delay / Veh (s)	14.8	8.7	15.2	13.9
Total Stops	501	110	205	816
Travel Dist (mi)	71.2	16.4	27.1	114.6
Travel Time (hr)	6.1	1.2	2.6	9.9
Avg Speed (mph)	12	14	11	12
Fuel Used (gal)	5.7	1.6	3.4	10.7
HC Emissions (g)	13	5	11	30
CO Emissions (g)	230	197	443	870
NOx Emissions (g)	32	16	43	90
Vehicles Entered	759	236	352	1347
Vehicles Exited	760	234	347	1341
Hourly Exit Rate	760	234	347	1341
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

7: Main Street & Stevens St Intersection Performance

	EB	WB	NB	SB	Total
Total Delay (hr)	1.2	0.5	0.4	0.3	2.3
Delay / Veh (s)	5.5	2.0	59.4	18.9	4.9
Total Stops	17	28	22	50	117
Travel Dist (mi)	43.7	22.9	0.6	8.0	75.3
Travel Time (hr)	3.8	1.7	0.4	0.6	6.4
Avg Speed (mph)	12	14	2	14	12
Fuel Used (gal)	3.4	1.4	0.2	0.5	5.6
HC Emissions (g)	10	3	0	2	15
CO Emissions (g)	207	57	6	56	326
NOx Emissions (g)	24	6	1	5	36
Vehicles Entered	777	829	22	50	1678
Vehicles Exited	777	829	22	49	1677
Hourly Exit Rate	777	829	22	49	1677
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

9: Main Street & Sea Street Intersection Performance

	WB	NB	SB	Total
Total Delay (hr)	3.9	4.2	1.1	9.2
Delay / Veh (s)	14.8	50.9	21.6	23.2
Total Stops	492	319	135	946
Travel Dist (mi)	120.4	20.7	26.2	167.2
Travel Time (hr)	10.2	5.0	2.1	17.3
Avg Speed (mph)	12	4	13	10
Fuel Used (gal)	10.4	4.0	2.1	16.5
HC Emissions (g)	26	11	7	43
CO Emissions (g)	583	258	273	1113
NOx Emissions (g)	79	29	19	127
Vehicles Entered	943	301	185	1429
Vehicles Exited	948	298	186	1432
Hourly Exit Rate	948	298	186	1432
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

14: Main Street & Intersection Performance

	WB	Total
Total Delay (hr)	3.4	3.4
Delay / Veh (s)	10.8	10.8
Total Stops	684	684
Travel Dist (mi)	98.1	98.1
Travel Time (hr)	13.0	13.0
Avg Speed (mph)	8	8
Fuel Used (gal)	9.5	9.5
HC Emissions (g)	23	23
CO Emissions (g)	331	331
NOx Emissions (g)	38	38
Vehicles Entered	1131	1131
Vehicles Exited	1138	1138
Hourly Exit Rate	1138	1138
Denied Entry Before	0	0
Denied Entry After	0	0

18: Main Street & Intersection Performance

	WB	Total
Total Delay (hr)	1.5	1.5
Delay / Veh (s)	5.6	5.6
Total Stops	232	232
Travel Dist (mi)	63.4	63.4
Travel Time (hr)	7.9	7.9
Avg Speed (mph)	8	8
Fuel Used (gal)	5.7	5.7
HC Emissions (g)	13	13
CO Emissions (g)	180	180
NOx Emissions (g)	19	19
Vehicles Entered	987	987
Vehicles Exited	985	985
Hourly Exit Rate	985	985
Denied Entry Before	0	0
Denied Entry After	0	0

19: Bassett Lane & Main Street Intersection Performance

	SB	SW	Total
Total Delay (hr)	0.3	1.1	1.4
Delay / Veh (s)	9.1	4.5	5.0
Total Stops	114	110	224
Travel Dist (mi)	12.9	112.8	125.7
Travel Time (hr)	0.8	12.3	13.1
Avg Speed (mph)	16	9	10
Fuel Used (gal)	0.8	8.9	9.8
HC Emissions (g)	3	20	23
CO Emissions (g)	91	277	368
NOx Emissions (g)	6	26	32
Vehicles Entered	114	920	1034
Vehicles Exited	113	914	1027
Hourly Exit Rate	113	914	1027
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

22: Main Street & High School Road Intersection Performance

	WB	NB	SB	Total
Total Delay (hr)	4.2	0.9	1.1	6.2
Delay / Veh (s)	14.8	30.1	18.0	16.5
Total Stops	360	84	148	592
Travel Dist (mi)	81.7	11.0	18.8	111.4
Travel Time (hr)	12.4	1.4	1.8	15.5
Avg Speed (mph)	7	8	11	7
Fuel Used (gal)	8.7	1.5	2.2	12.4
HC Emissions (g)	21	6	6	32
CO Emissions (g)	290	263	223	777
NOx Emissions (g)	34	18	20	71
Vehicles Entered	1031	108	208	1347
Vehicles Exited	1030	111	211	1352
Hourly Exit Rate	1030	111	211	1352
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

23: Main Street & Intersection Performance

	WB	Total
Total Delay (hr)	2.8	2.8
Delay / Veh (s)	10.9	10.9
Total Stops	269	269
Travel Dist (mi)	98.6	98.6
Travel Time (hr)	12.8	12.8
Avg Speed (mph)	8	8
Fuel Used (gal)	8.8	8.8
HC Emissions (g)	20	20
CO Emissions (g)	266	266
NOx Emissions (g)	25	25
Vehicles Entered	936	936
Vehicles Exited	934	934
Hourly Exit Rate	934	934
Denied Entry Before	0	0
Denied Entry After	0	0

24: Main Street & Winter Street Intersection Performance

	WB	SB	Total
Total Delay (hr)	2.6	0.2	2.9
Delay / Veh (s)	9.1	7.4	8.9
Total Stops	271	51	322
Travel Dist (mi)	37.8	9.4	47.1
Travel Time (hr)	6.4	0.7	7.1
Avg Speed (mph)	6	14	7
Fuel Used (gal)	4.6	1.1	5.7
HC Emissions (g)	11	3	14
CO Emissions (g)	161	127	288
NOx Emissions (g)	21	10	31
Vehicles Entered	1034	122	1156
Vehicles Exited	1036	120	1156
Hourly Exit Rate	1036	120	1156
Denied Entry Before	3	0	3
Denied Entry After	0	0	0

29: Main Street & Barnstable Road Intersection Performance

	WB	SB	Total
Total Delay (hr)	3.5	3.1	6.6
Delay / Veh (s)	10.6	21.1	13.8
Total Stops	394	426	820
Travel Dist (mi)	43.1	29.5	72.7
Travel Time (hr)	7.8	4.4	12.2
Avg Speed (mph)	6	7	6
Fuel Used (gal)	5.6	4.5	10.1
HC Emissions (g)	14	13	27
CO Emissions (g)	199	388	587
NOx Emissions (g)	25	45	70
Vehicles Entered	1199	527	1726
Vehicles Exited	1201	524	1725
Hourly Exit Rate	1201	524	1725
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

32: Main Street & Center Street Intersection Performance

	WB	NB	SB	Total
Total Delay (hr)	8.6	2.5	25.0	36.0
Delay / Veh (s)	24.4	12.5	209.1	53.8
Total Stops	1109	428	632	2169
Travel Dist (mi)	97.7	146.5	21.1	265.3
Travel Time (hr)	13.9	8.5	25.9	48.3
Avg Speed (mph)	7	17	2	8
Fuel Used (gal)	11.2	12.3	14.2	37.6
HC Emissions (g)	29	42	39	109
CO Emissions (g)	571	1863	478	2913
NOx Emissions (g)	76	130	59	264
Vehicles Entered	1259	718	432	2409
Vehicles Exited	1261	719	429	2409
Hourly Exit Rate	1261	719	429	2409
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	15	15

South Street Arterial Performance

	All
Total Delay (hr)	16.8
Delay / Veh (s)	14.1
Total Stops	1529
Travel Dist (mi)	713.9
Travel Time (hr)	47.4
Avg Speed (mph)	15
Fuel Used (gal)	55.0
HC Emissions (g)	140
CO Emissions (g)	4078
NOx Emissions (g)	403
Vehicles Entered	4284
Vehicles Exited	4280
Hourly Exit Rate	4280
Denied Entry Before	0
Denied Entry After	1

Main Street Arterial Performance

	All
Total Delay (hr)	34.7
Delay / Veh (s)	26.3
Total Stops	4002
Travel Dist (mi)	1008.4
Travel Time (hr)	113.5
Avg Speed (mph)	9
Fuel Used (gal)	91.4
HC Emissions (g)	223
CO Emissions (g)	4132
NOx Emissions (g)	479
Vehicles Entered	4741
Vehicles Exited	4751
Hourly Exit Rate	4751
Denied Entry Before	3
Denied Entry After	0

Total Network Performance

	All
Total Delay (hr)	105.7
Delay / Veh (s)	78.8
Total Stops	9335
Travel Dist (mi)	2394.1
Travel Time (hr)	242.4
Avg Speed (mph)	11
Fuel Used (gal)	241.9
HC Emissions (g)	654
CO Emissions (g)	19717
NOx Emissions (g)	1787
Vehicles Entered	4824
Vehicles Exited	4827
Hourly Exit Rate	4827
Denied Entry Before	3
Denied Entry After	16

Intersection: 1: South Street & Old Colony Road

Movement	EB	EB	EB	B6	B6	NB	SB	SB	NE
Directions Served	LT	TR	>	T	T	R>	<L	TR	TR
Maximum Queue (ft)	201	196	140	333	319	225	351	283	74
Average Queue (ft)	188	181	9	102	91	143	165	167	28
95th Queue (ft)	216	222	62	235	228	216	315	273	61
Link Distance (ft)	124	124	124	694	694	294	762	762	189
Upstream Blk Time (%)	0.47	0.32	0.00						
Queuing Penalty (veh)	158	107	0						
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 3: South Street & High School Road

Movement	EB	NB	SB
Directions Served	LT	TR	LT
Maximum Queue (ft)	69	52	145
Average Queue (ft)	4	25	75
95th Queue (ft)	28	50	122
Link Distance (ft)	1340	334	512
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: South Street & Sea Street

Movement	EB	EB	NB	SB
Directions Served	LT	TR	TR	LT
Maximum Queue (ft)	180	185	107	206
Average Queue (ft)	109	123	58	95
95th Queue (ft)	151	175	100	170
Link Distance (ft)	436	436	362	369
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: Bend #6

Movement	
Directions Served	
Maximum Queue (ft)	
Average Queue (ft)	
95th Queue (ft)	
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Main Street & Stevens St

Movement	EB	EB	WB	B8	NB	NB	SB
Directions Served	L	R>	LTR	T	LT	>	LTR
Maximum Queue (ft)	28	21	166	57	67	49	63
Average Queue (ft)	9	5	21	3	16	9	27
95th Queue (ft)	30	19	98	23	46	36	52
Link Distance (ft)		295	98	467	146		837
Upstream Blk Time (%)			0	02			
Queuing Penalty (veh)			15				
Storage Bay Dist (ft)	25					25	
Storage Blk Time (%)	0.02	0.00			0.25	0.02	
Queuing Penalty (veh)	15	0			1	0	

Intersection: 9: Main Street & Sea Street

Movement	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR
Maximum Queue (ft)	223	298	383	161
Average Queue (ft)	119	161	169	75
95th Queue (ft)	212	252	285	128
Link Distance (ft)	627	627	369	741
Upstream Blk Time (%)			0	00
Queuing Penalty (veh)			1	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: Main Street &

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	303	360
Average Queue (ft)	162	165
95th Queue (ft)	272	281
Link Distance (ft)	383	383
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: Main Street &

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	359	244
Average Queue (ft)	109	114
95th Queue (ft)	219	191
Link Distance (ft)	284	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 19: Bassett Lane & Main Street

Movement	SB	SW	SW
Directions Served	R	T	TR
Maximum Queue (ft)	88	401	392
Average Queue (ft)	45	41	50
95th Queue (ft)	73	202	210
Link Distance (ft)	596	585	585
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 22: Main Street & High School Road

Movement	WB	WB	NB	SB	SB
Directions Served	<L	LR	LT	T	R
Maximum Queue (ft)	382	396	170	166	70
Average Queue (ft)	153	209	55	69	21
95th Queue (ft)	267	333	111	123	51
Link Distance (ft)	375	375	512	472	472
Upstream Blk Time (%)	0.00	0.01			
Queuing Penalty (veh)	1	3			
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 23: Main Street &

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	212	245
Average Queue (ft)	133	147
95th Queue (ft)	207	230
Link Distance (ft)	524	524
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 24: Main Street & Winter Street

Movement	WB	WB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	226	215	83
Average Queue (ft)	133	156	24
95th Queue (ft)	217	227	60
Link Distance (ft)	178	178	399
Upstream Blk Time (%)	0.02	0.04	
Queuing Penalty (veh)	8	21	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 29: Main Street & Barnstable Road

Movement	WB	WB	SB	SB
Directions Served	LT	TR	T	R
Maximum Queue (ft)	207	202	268	113
Average Queue (ft)	154	164	131	59
95th Queue (ft)	218	221	210	99
Link Distance (ft)	167	167	295	295
Upstream Blk Time (%)	0.08	0.11		
Queuing Penalty (veh)	45	62		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 32: Main Street & Center Street

Movement	WB	WB	WB	NB	NB	NB	SB
Directions Served	T	T	R	L	T	R	LR
Maximum Queue (ft)	421	421	145	126	116	48	290
Average Queue (ft)	215	242	109	77	54	23	252
95th Queue (ft)	388	423	171	126	97	43	332
Link Distance (ft)	406	406		979	979	979	256
Upstream Blk Time (%)	0.01	0.03					0.62
Queuing Penalty (veh)	0	0					0
Storage Bay Dist (ft)			100				
Storage Blk Time (%)		0.29	0.00				
Queuing Penalty (veh)		145	1				

Nework Summary

Network wide Queuing Penalty: 583

Intersection: 14: Main Street &

Phase	6	8
Movement(s) Served	WBT	Ped
Maximum Green (s)	31.0	22.0
Minimum Green (s)	5.0	5.0
Recall	None	Ped
Avg. Green (s)	25.5	10.4
g/C Ratio	0.59	0.24
Cycles Skipped (%)	0	0
Cycles @ Minimum (%)	0	0
Cycles Maxed Out (%)	63	0
Cycles with Peds (%)	0	100

Controller Summary:

Average Cycle Length (s): 42.8
Number of Complete Cycles : 83

Intersection: 18: Main Street &

Phase	6	8
Movement(s) Served	WBT	Ped
Maximum Green (s)	31.0	21.0
Minimum Green (s)	5.0	5.0
Recall	None	Ped
Avg. Green (s)	22.9	11.4
g/C Ratio	0.54	0.27
Cycles Skipped (%)	0	0
Cycles @ Minimum (%)	0	0
Cycles Maxed Out (%)	42	0
Cycles with Peds (%)	0	100

Controller Summary:

Average Cycle Length (s): 42.4
Number of Complete Cycles : 84

Intersection: 23: Main Street &

Phase	6	8
Movement(s) Served	WBT	Ped
Maximum Green (s)	31.0	21.0
Minimum Green (s)	4.0	4.0
Recall	None	Ped
Avg. Green (s)	21.7	10.9
g/C Ratio	0.53	0.27
Cycles Skipped (%)	0	0
Cycles @ Minimum (%)	0	0
Cycles Maxed Out (%)	25	0
Cycles with Peds (%)	0	100

Controller Summary

Average Cycle Length (s): 40.7
Number of Complete Cycles : 88

Intersection: 24: Main Street & Winter Street

Phase	6	8
Movement(s) Served	WBT	Ped
Maximum Green (s)	16.0	11.0
Minimum Green (s)	5.0	5.0
Recall	Max	Ped
Avg. Green (s)	16.0	10.0
g/C Ratio	0.47	0.29
Cycles Skipped (%)	0	0
Cycles @ Minimum (%)	0	0
Cycles Maxed Out (%)	100	0
Cycles with Peds (%)	0	100

Controller Summary

Average Cycle Length (s): 34.0
Number of Complete Cycles : 105

Summary of Entire Run	
Start Time	3:45
End Time	5:00
Total Time (min)	75
Time Recorded (min)	60
# of Intervals	2
# of Recorded Intvls	1
Vehs Entered	4659
Vehs Exited	4646
Starting Vehs	227
Ending Vehs	240
Denied Entry Before	69
Denied Entry After	252
Travel Distance (mi)	2307
Travel Time (hr)	412.1
Total Delay (hr)	276.6
Total Stops	8607
Fuel Used (gal)	312.8

Interval #0 Information Seeding	
Start Time	3:45
End Time	4:00
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors, Anti PHF.	

No data recorded this interval.

Interval #1 Information Recording	
Start Time	4:00
End Time	5:00
Total Time (min)	60
Volumes adjusted by PHF, Growth Factors, Anti PHF.	
Vehs Entered	4659
Vehs Exited	4646
Starting Vehs	227
Ending Vehs	240
Denied Entry Before	69
Denied Entry After	252
Travel Distance (mi)	2307
Travel Time (hr)	412.1
Total Delay (hr)	276.6
Total Stops	8607
Fuel Used (gal)	312.8

1: South Street & Old Colony Road Intersection Performance

	EB	NB	SB	NE	SW	Total
Total Delay (hr)	10.1	6.0	11.6	0.8	8.3	36.7
Delay / Veh (s)	34.6	69.4	175.0	54.7	69.7	63.7
Total Stops	404	287	295	38	445	1469
Travel Dist (mi)	37.4	17.6	33.3	1.9	42.0	132.2
Travel Time (hr)	12.1	6.9	12.8	0.9	9.9	42.6
Avg Speed (mph)	3	3	3	2	4	3
Fuel Used (gal)	7.9	4.4	8.5	0.5	6.3	27.7
HC Emissions (g)	20	12	24	1	18	75
CO Emissions (g)	295	221	562	26	269	1373
NOx Emissions (g)	42	29	62	3	41	177
Vehicles Entered	1041	314	235	49	428	2067
Vehicles Exited	1051	305	240	51	431	2078
Hourly Exit Rate	1051	305	240	51	431	2078
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0

3: South Street & High School Road Intersection Performance

	EB	NB	SB	Total
Total Delay (hr)	1.2	0.1	0.7	2.0
Delay / Veh (s)	4.4	9.8	12.1	6.0
Total Stops	23	44	185	252
Travel Dist (mi)	228.4	2.8	21.9	253.1
Travel Time (hr)	13.2	0.2	1.6	15.0
Avg Speed (mph)	17	12	14	17
Fuel Used (gal)	12.8	0.2	3.1	16.1
HC Emissions (g)	29	1	8	37
CO Emissions (g)	619	21	336	976
NOx Emissions (g)	66	2	28	96
Vehicles Entered	940	44	216	1200
Vehicles Exited	942	44	218	1204
Hourly Exit Rate	942	44	218	1204
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

5: South Street & Sea Street Intersection Performance

	EB	NB	SB	Total
Total Delay (hr)	3.4	0.6	1.6	5.7
Delay / Veh (s)	16.8	9.8	17.7	15.7
Total Stops	520	114	216	850
Travel Dist (mi)	69.2	16.3	25.0	110.6
Travel Time (hr)	7.1	1.3	2.6	11.0
Avg Speed (mph)	10	13	10	10
Fuel Used (gal)	5.6	1.8	3.2	10.7
HC Emissions (g)	13	5	10	29
CO Emissions (g)	227	188	388	803
NOx Emissions (g)	30	16	37	83
Vehicles Entered	737	236	327	1300
Vehicles Exited	740	234	326	1300
Hourly Exit Rate	740	234	326	1300
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

7: Main Street & Stevens St Intersection Performance

	EB	WB	NB	SB	Total
Total Delay (hr)	1.2	0.3	0.0	0.2	1.7
Delay / Veh (s)	5.5	1.4	17.6	11.1	3.9
Total Stops	19	8	9	54	90
Travel Dist (mi)	42.3	20.0	0.3	8.7	71.4
Travel Time (hr)	3.7	1.3	0.1	0.5	5.6
Avg Speed (mph)	12	15	4	17	13
Fuel Used (gal)	3.4	1.2	0.0	0.5	5.1
HC Emissions (g)	9	3	0	1	13
CO Emissions (g)	202	46	2	38	288
NOx Emissions (g)	23	5	1	3	31
Vehicles Entered	753	724	9	56	1542
Vehicles Exited	751	722	9	54	1536
Hourly Exit Rate	751	722	9	54	1536
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

9: Main Street & Sea Street Intersection Performance

	WB	NB	SB	Total
Total Delay (hr)	3.4	2.5	0.9	6.8
Delay / Veh (s)	14.1	31.6	19.4	18.6
Total Stops	473	249	105	827
Travel Dist (mi)	111.1	19.9	22.7	153.7
Travel Time (hr)	9.4	3.3	1.7	14.3
Avg Speed (mph)	12	6	14	11
Fuel Used (gal)	9.6	3.1	1.7	14.4
HC Emissions (g)	24	9	5	39
CO Emissions (g)	559	280	192	1031
NOx Emissions (g)	73	30	15	119
Vehicles Entered	879	288	160	1327
Vehicles Exited	873	287	160	1320
Hourly Exit Rate	873	287	160	1320
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

14: Main Street & Intersection Performance

	WB	Total
Total Delay (hr)	1.3	1.3
Delay / Veh (s)	5.7	5.7
Total Stops	423	423
Travel Dist (mi)	67.7	67.7
Travel Time (hr)	7.9	7.9
Avg Speed (mph)	9	9
Fuel Used (gal)	5.8	5.8
HC Emissions (g)	14	14
CO Emissions (g)	206	206
NOx Emissions (g)	23	23
Vehicles Entered	818	818
Vehicles Exited	821	821
Hourly Exit Rate	821	821
Denied Entry Before	0	0
Denied Entry After	0	0

18: Main Street & Intersection Performance

	WB	Total
Total Delay (hr)	1.6	1.6
Delay / Veh (s)	6.2	6.2
Total Stops	233	233
Travel Dist (mi)	58.0	58.0
Travel Time (hr)	7.4	7.4
Avg Speed (mph)	8	8
Fuel Used (gal)	5.4	5.4
HC Emissions (g)	13	13
CO Emissions (g)	179	179
NOx Emissions (g)	20	20
Vehicles Entered	910	910
Vehicles Exited	910	910
Hourly Exit Rate	910	910
Denied Entry Before	0	0
Denied Entry After	0	0

19: Bassett Lane & Main Street Intersection Performance

	SB	SW	Total
Total Delay (hr)	0.3	1.0	1.2
Delay / Veh (s)	8.1	4.1	4.6
Total Stops	118	78	196
Travel Dist (mi)	13.4	103.0	116.4
Travel Time (hr)	0.8	11.4	12.2
Avg Speed (mph)	16	9	10
Fuel Used (gal)	0.9	8.3	9.1
HC Emissions (g)	3	19	22
CO Emissions (g)	117	254	371
NOx Emissions (g)	7	23	30
Vehicles Entered	119	834	953
Vehicles Exited	119	835	954
Hourly Exit Rate	119	835	954
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

22: Main Street & High School Road Intersection Performance

	WB	NB	SB	Total
Total Delay (hr)	3.2	0.7	1.1	5.0
Delay / Veh (s)	11.9	23.3	18.0	13.8
Total Stops	281	83	144	508
Travel Dist (mi)	76.6	10.5	19.1	106.1
Travel Time (hr)	11.0	1.1	1.8	13.9
Avg Speed (mph)	7	10	11	8
Fuel Used (gal)	7.9	1.6	2.4	11.9
HC Emissions (g)	18	6	7	31
CO Emissions (g)	257	268	254	779
NOx Emissions (g)	28	19	20	67
Vehicles Entered	986	106	214	1306
Vehicles Exited	984	104	210	1298
Hourly Exit Rate	984	104	210	1298
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

23: Main Street & Intersection Performance

	WB	Total
Total Delay (hr)	2.3	2.3
Delay / Veh (s)	9.8	9.8
Total Stops	235	235
Travel Dist (mi)	91.0	91.0
Travel Time (hr)	11.5	11.5
Avg Speed (mph)	8	8
Fuel Used (gal)	8.1	8.1
HC Emissions (g)	18	18
CO Emissions (g)	246	246
NOx Emissions (g)	23	23
Vehicles Entered	860	860
Vehicles Exited	858	858
Hourly Exit Rate	858	858
Denied Entry Before	0	0
Denied Entry After	0	0

24: Main Street & Winter Street Intersection Performance

	WB	SB	Total
Total Delay (hr)	2.2	0.3	2.5
Delay / Veh (s)	8.4	8.8	8.5
Total Stops	230	73	303
Travel Dist (mi)	34.6	9.4	44.1
Travel Time (hr)	5.7	0.7	6.4
Avg Speed (mph)	6	13	7
Fuel Used (gal)	4.1	1.2	5.3
HC Emissions (g)	10	4	13
CO Emissions (g)	141	140	281
NOx Emissions (g)	18	12	29
Vehicles Entered	950	122	1072
Vehicles Exited	944	123	1067
Hourly Exit Rate	944	123	1067
Denied Entry Before	0	0	0
Denied Entry After	1	0	1

29: Main Street & Barnstable Road Intersection Performance

	WB	SB	Total
Total Delay (hr)	2.1	1.8	3.9
Delay / Veh (s)	8.8	15.6	10.9
Total Stops	301	306	607
Travel Dist (mi)	30.9	22.8	53.8
Travel Time (hr)	5.2	2.8	8.1
Avg Speed (mph)	6	8	7
Fuel Used (gal)	3.8	2.9	6.7
HC Emissions (g)	9	9	18
CO Emissions (g)	135	293	429
NOx Emissions (g)	17	32	49
Vehicles Entered	875	408	1283
Vehicles Exited	881	407	1288
Hourly Exit Rate	881	407	1288
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

32: Main Street & Center Street Intersection Performance

	WB	NB	SB	Total
Total Delay (hr)	177.5	6.3	11.6	195.4
Delay / Veh (s)	630.8	32.3	69.8	303.8
Total Stops	880	527	643	2050
Travel Dist (mi)	79.3	71.1	29.9	180.3
Travel Time (hr)	181.8	9.1	13.0	203.8
Avg Speed (mph)	5	8	2	5
Fuel Used (gal)	89.3	6.8	8.6	104.7
HC Emissions (g)	238	18	24	280
CO Emissions (g)	2530	316	400	3247
NOx Emissions (g)	266	38	57	361
Vehicles Entered	1016	704	600	2320
Vehicles Exited	1011	704	597	2312
Hourly Exit Rate	1011	704	597	2312
Denied Entry Before	69	0	0	69
Denied Entry After	247	0	4	251

South Street Arterial Performance

	All
Total Delay (hr)	23.0
Delay / Veh (s)	18.6
Total Stops	1501
Travel Dist (mi)	738.0
Travel Time (hr)	61.5
Avg Speed (mph)	12
Fuel Used (gal)	56.2
HC Emissions (g)	137
CO Emissions (g)	3175
NOx Emissions (g)	339
Vehicles Entered	4457
Vehicles Exited	4483
Hourly Exit Rate	4483
Denied Entry Before	0
Denied Entry After	0

Main Street Arterial Performance

	All
Total Delay (hr)	197.2
Delay / Veh (s)	164.3
Total Stops	3171
Travel Dist (mi)	876.9
Travel Time (hr)	266.0
Avg Speed (mph)	9
Fuel Used (gal)	158.0
HC Emissions (g)	404
CO Emissions (g)	5603
NOx Emissions (g)	605
Vehicles Entered	4332
Vehicles Exited	4308
Hourly Exit Rate	4308
Denied Entry Before	69
Denied Entry After	248

Total Network Performance

	All
Total Delay (hr)	276.6
Delay / Veh (s)	214.0
Total Stops	8607
Travel Dist (mi)	2306.9
Travel Time (hr)	412.1
Avg Speed (mph)	9
Fuel Used (gal)	312.8
HC Emissions (g)	834
CO Emissions (g)	20082
NOx Emissions (g)	1878
Vehicles Entered	4659
Vehicles Exited	4646
Hourly Exit Rate	4646
Denied Entry Before	69
Denied Entry After	252

Intersection: 1: South Street & Old Colony Road

Movement	EB	EB	EB	B6	B6	NB	SB	SB	NE	SW	SW
Directions Served	LT	TR	>	T	T	R>	<L	TR	TR	<	LT
Maximum Queue (ft)	205	192	134	478	442	308	472	142	72	326	382
Average Queue (ft)	184	181	15	261	251	245	239	53	24	136	212
95th Queue (ft)	219	217	79	410	393	338	457	128	58	222	330
Link Distance (ft)	120	120	120	694	694	293	743	743	184	464	464
Upstream Blk Time (%)	0.53	0.44	0.00			0.09					
Queuing Penalty (veh)	178	147	0			0					
Storage Bay Dist (ft)											
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 3: South Street & High School Road

Movement	EB	EB	NB	SB
Directions Served	LT	TR	TR	LT
Maximum Queue (ft)	111	86	51	152
Average Queue (ft)	11	5	25	64
95th Queue (ft)	58	33	54	109
Link Distance (ft)	1340	1340	334	512
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: South Street & Sea Street

Movement	EB	EB	NB	SB
Directions Served	LT	TR	TR	LT
Maximum Queue (ft)	196	205	146	277
Average Queue (ft)	116	130	60	112
95th Queue (ft)	177	195	106	197
Link Distance (ft)	436	436	362	369
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: Bend #6

Movement	
Directions Served	
Maximum Queue (ft)	
Average Queue (ft)	
95th Queue (ft)	
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Main Street & Stevens St

Movement	EB	EB	WB	B8	NB	NB	SB
Directions Served	L	R>	LTR	T	LT	>	LTR
Maximum Queue (ft)	28	45	166	33	26	28	47
Average Queue (ft)	12	4	6	1	4	3	29
95th Queue (ft)	33	21	56	11	17	17	46
Link Distance (ft)		295	98	467	146		837
Upstream Blk Time (%)			0.00				
Queuing Penalty (veh)			4				
Storage Bay Dist (ft)	25					25	
Storage Blk Time (%)	0.02	0.00			0.03	0.01	
Queuing Penalty (veh)	16	0			0	0	

Intersection: 9: Main Street & Sea Street

Movement	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR
Maximum Queue (ft)	254	262	223	122
Average Queue (ft)	102	147	132	61
95th Queue (ft)	176	228	218	107
Link Distance (ft)	627	627	369	741
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: Main Street &

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	151	163
Average Queue (ft)	89	105
95th Queue (ft)	141	154
Link Distance (ft)	375	375
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: Main Street &

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	259	227
Average Queue (ft)	103	115
95th Queue (ft)	182	196
Link Distance (ft)	284	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 19: Bassett Lane & Main Street

Movement	SB	SW	SW
Directions Served	R	T	TR
Maximum Queue (ft)	83	60	273
Average Queue (ft)	42	3	38
95th Queue (ft)	65	22	134
Link Distance (ft)	596	595	595
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 22: Main Street & High School Road

Movement	WB	WB	NB	SB
Directions Served	<L	LR	LT	TR
Maximum Queue (ft)	250	381	108	169
Average Queue (ft)	137	192	55	79
95th Queue (ft)	232	305	100	131
Link Distance (ft)	375	375	512	471
Upstream Blk Time (%)		0.00		
Queuing Penalty (veh)		1		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 23: Main Street &

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	251	260
Average Queue (ft)	117	139
95th Queue (ft)	216	233
Link Distance (ft)	524	524
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 24: Main Street & Winter Street

Movement	WB	WB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	180	198	83
Average Queue (ft)	114	142	31
95th Queue (ft)	191	195	69
Link Distance (ft)	178	178	399
Upstream Blk Time (%)	0.00	0.02	
Queuing Penalty (veh)	1	8	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 29: Main Street & Barnstable Road

Movement	WB	WB	SB	SB
Directions Served	LT	TR	T	R
Maximum Queue (ft)	204	188	202	147
Average Queue (ft)	112	142	65	74
95th Queue (ft)	172	191	127	130
Link Distance (ft)	167	167	295	295
Upstream Blk Time (%)	0.00	0.03		
Queuing Penalty (veh)	1	15		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 32: Main Street & Center Street

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	125	445	145	374	272	154	293	296
Average Queue (ft)	66	427	97	159	106	47	207	249
95th Queue (ft)	137	434	156	295	201	103	328	328
Link Distance (ft)		411		468	468	468	262	262
Upstream Blk Time (%)		0.41					0.14	0.32
Queuing Penalty (veh)		0					0	0
Storage Bay Dist (ft)	100		100					
Storage Blk Time (%)	0.05	0.41	0.04					
Queuing Penalty (veh)	50	281	34					

Nework Summary

Network wide Queuing Penalty: 736

Intersection: 1: South Street & Old Colony Road

Phase	1	2	4	5	6	8	9
Movement(s) Served	SBL	NBR	NET	SWL	SBTL	SWTL	EBTL
Maximum Green (s)	6.0	52.0	42.0	7.0	63.0	42.0	62.0
Minimum Green (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Recall	Min	Min	None	None	Min	None	Min
Avg. Green (s)	6.0	42.6	33.7	7.0	53.6	33.7	59.7
g/C Ratio	0.03	0.25	0.19	0.04	0.31	0.19	0.34
Cycles Skipped (%)	0	0	0	0	0	0	0
Cycles @ Minimum (%)	100	0	0	0	0	0	0
Cycles Maxed Out (%)	100	30	24	100	30	24	67
Cycles with Peds (%)	0	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 173.7
Number of Complete Cycles : 20

Intersection: 14: Main Street &

Phase	6	8
Movement(s) Served	WBT	Ped
Maximum Green (s)	31.0	22.0
Minimum Green (s)	5.0	5.0
Recall	None	Ped
Avg. Green (s)	21.2	10.1
g/C Ratio	0.55	0.26
Cycles Skipped (%)	0	0
Cycles @ Minimum (%)	0	0
Cycles Maxed Out (%)	28	0
Cycles with Peds (%)	0	100

Controller Summary

Average Cycle Length (s): 38.3
Number of Complete Cycles : 93

Intersection: 18: Main Street &

Phase	6	8
Movement(s) Served	WBT	Ped
Maximum Green (s)	31.0	21.0
Minimum Green (s)	5.0	5.0
Recall	None	Ped
Avg. Green (s)	22.7	11.9
g/C Ratio	0.53	0.28
Cycles Skipped (%)	0	0
Cycles @ Minimum (%)	0	0
Cycles Maxed Out (%)	40	0
Cycles with Peds (%)	0	100

Controller Summary

Average Cycle Length (s): 42.6
Number of Complete Cycles : 83

Intersection: 23: Main Street &

Phase	6	8
Movement(s) Served	WBT	Ped
Maximum Green (s)	31.0	21.0
Minimum Green (s)	4.0	4.0
Recall	None	Ped
Avg. Green (s)	20.6	11.2
g/C Ratio	0.52	0.28
Cycles Skipped (%)	0	0
Cycles @ Minimum (%)	0	0
Cycles Maxed Out (%)	27	0
Cycles with Peds (%)	0	100

Controller Summary

Average Cycle Length (s): 39.6
Number of Complete Cycles : 89

Intersection: 24: Main Street & Winter Street

Phase	6	8
Movement(s) Served	WBT	Ped
Maximum Green (s)	16.0	11.0
Minimum Green (s)	5.0	5.0
Recall	Max	Ped
Avg. Green (s)	16.0	10.0
g/C Ratio	0.47	0.29
Cycles Skipped (%)	0	0
Cycles @ Minimum (%)	0	0
Cycles Maxed Out (%)	100	0
Cycles with Peds (%)	0	100

Controller Summary

Average Cycle Length (s): 34.0
Number of Complete Cycles : 105

Intersection: 32: Main Street & Center Street

Phase	1	3	4	7	8	9
Movement(s) Served	WBTL	NBL	SBTL	SBL	NBTL	Ped
Maximum Green (s)	58.0	17.0	30.0	18.0	29.0	23.0
Minimum Green (s)	6.0	6.0	6.0	6.0	6.0	6.0
Recall	None	None	Min	None	Min	None
Avg. Green (s)	58.0	15.6	29.5	14.5	31.0	16.0
g/C Ratio	0.47	0.13	0.24	0.12	0.25	0.03
Cycles Skipped (%)	0	0	0	0	0	75
Cycles @ Minimum (%)	0	3	0	3	0	0
Cycles Maxed Out (%)	100	67	83	40	66	0
Cycles with Peds (%)	0	0	0	0	0	25

Controller Summary

Average Cycle Length (s): 123.4
Number of Complete Cycles : 28

Summary of Entire Run	
Start Time	3:45
End Time	5:00
Total Time (min)	75
Time Recorded (min)	60
# of Intervals	2
# of Recorded Intvls	1
Vehs Entered	4012
Vehs Exited	3883
Starting Vehs	331
Ending Vehs	460
Denied Entry Before	45
Denied Entry After	1116
Travel Distance (mi)	1912
Travel Time (hr)	960.0
Total Delay (hr)	849.1
Total Stops	11996
Fuel Used (gal)	560.8

Interval #0 Information Seeding	
Start Time	3:45
End Time	4:00
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors, Anti PHF.	
No data recorded this interval.	

Interval #1 Information Recording	
Start Time	4:00
End Time	5:00
Total Time (min)	60
Volumes adjusted by PHF, Growth Factors, Anti PHF.	
Vehs Entered	4012
Vehs Exited	3883
Starting Vehs	331
Ending Vehs	460
Denied Entry Before	45
Denied Entry After	1116
Travel Distance (mi)	1912
Travel Time (hr)	960.0
Total Delay (hr)	849.1
Total Stops	11996
Fuel Used (gal)	560.8

1: South Street & Old Colony Road Intersection Performance

	EB	WB	NB	SB	NE	SW	Total
Total Delay (hr)	7.9	79.5	73.7	19.7	1.2	2.4	184.4
Delay / Veh (s)	60.8	792.6	1300.3	358.1	74.5	51.1	454.7
Total Stops	268	1001	348	221	56	153	2047
Travel Dist (mi)	16.5	42.2	11.7	27.3	2.2	16.4	116.2
Travel Time (hr)	8.7	81.3	74.3	20.7	1.3	3.1	189.3
Avg Speed (mph)	2	1	1	1	2	5	1
Fuel Used (gal)	5.0	41.2	35.6	12.2	0.8	2.0	97.0
HC Emissions (g)	14	107	93	34	2	6	256
CO Emissions (g)	189	1187	971	629	45	94	3115
NOx Emissions (g)	26	142	106	62	11	15	364
Vehicles Entered	469	365	205	202	55	176	1472
Vehicles Exited	470	357	203	194	56	168	1448
Hourly Exit Rate	470	357	203	194	56	168	1448
Denied Entry Before	0	0	13	0	0	0	13
Denied Entry After	0	121	147	0	0	0	268

3: South Street & High School Road Intersection Performance

	EB	WB	NB	SB	Total
Total Delay (hr)	0.6	0.2	0.1	0.8	1.8
Delay / Veh (s)	5.2	2.3	10.8	14.8	6.7
Total Stops	45	3	48	176	272
Travel Dist (mi)	103.9	29.2	3.2	20.1	156.3
Travel Time (hr)	4.9	1.4	0.3	1.6	8.2
Avg Speed (mph)	21	22	11	13	19
Fuel Used (gal)	6.1	1.4	0.2	2.3	10.1
HC Emissions (g)	16	3	1	7	27
CO Emissions (g)	468	48	23	305	844
NOx Emissions (g)	45	5	2	27	79
Vehicles Entered	427	270	49	199	945
Vehicles Exited	425	268	48	200	941
Hourly Exit Rate	425	268	48	200	941
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

5: South Street & Sea Street Intersection Performance

	EB	WB	NB	SB	Total
Total Delay (hr)	1.5	1.0	0.8	1.4	4.6
Delay / Veh (s)	15.1	12.7	13.9	19.9	15.4
Total Stops	285	151	164	181	781
Travel Dist (mi)	32.9	67.8	14.1	18.0	132.7
Travel Time (hr)	2.9	3.7	1.3	2.1	10.1
Avg Speed (mph)	11	18	11	9	13
Fuel Used (gal)	2.7	3.8	1.5	2.5	10.5
HC Emissions (g)	6	8	5	8	28
CO Emissions (g)	135	173	160	311	779
NOx Emissions (g)	15	19	15	31	80
Vehicles Entered	356	274	197	254	1081
Vehicles Exited	351	274	193	244	1062
Hourly Exit Rate	351	274	193	244	1062
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

7: Main Street & Stevens St Intersection Performance

	EB	WB	NB	SB	NW	Total
Total Delay (hr)	4.0	2.1	0.3	0.5	2.8	9.8
Delay / Veh (s)	19.3	14.9	34.9	34.1	37.0	21.7
Total Stops	453	204	25	56	225	963
Travel Dist (mi)	42.5	10.9	0.7	9.2	8.2	71.6
Travel Time (hr)	6.4	2.7	0.3	0.9	3.2	13.5
Avg Speed (mph)	7	4	3	10	3	5
Fuel Used (gal)	5.4	1.9	0.2	1.0	2.1	10.6
HC Emissions (g)	14	5	1	2	5	27
CO Emissions (g)	305	68	11	69	77	530
NOx Emissions (g)	40	11	4	7	13	74
Vehicles Entered	756	514	26	57	277	1630
Vehicles Exited	755	510	26	58	272	1621
Hourly Exit Rate	755	510	26	58	272	1621
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0

9: Main Street & Sea Street Intersection Performance

	EB	WB	NB	SB	Total
Total Delay (hr)	2.1	5.2	2.5	1.7	11.5
Delay / Veh (s)	18.7	30.7	44.0	35.2	29.7
Total Stops	194	579	170	153	1096
Travel Dist (mi)	39.4	76.5	12.4	24.5	152.8
Travel Time (hr)	4.1	9.3	3.0	2.6	19.0
Avg Speed (mph)	10	8	4	9	8
Fuel Used (gal)	3.1	8.1	2.8	2.4	16.4
HC Emissions (g)	7	20	8	8	43
CO Emissions (g)	108	391	231	275	1005
NOx Emissions (g)	13	58	28	20	120
Vehicles Entered	400	611	198	172	1381
Vehicles Exited	402	611	204	175	1392
Hourly Exit Rate	402	611	204	175	1392
Denied Entry Before	0	0	2	0	2
Denied Entry After	0	0	0	0	0

14: Main Street & Intersection Performance

	EB	WB	Total
Total Delay (hr)	0.7	14.2	14.9
Delay / Veh (s)	8.3	161.5	88.0
Total Stops	49	401	450
Travel Dist (mi)	12.9	27.4	40.3
Travel Time (hr)	2.0	16.9	18.8
Avg Speed (mph)	7	2	2
Fuel Used (gal)	1.4	9.8	11.2
HC Emissions (g)	3	24	27
CO Emissions (g)	47	316	363
NOx Emissions (g)	6	43	48
Vehicles Entered	292	320	612
Vehicles Exited	291	315	606
Hourly Exit Rate	291	315	606
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

18: Main Street & Intersection Performance

	EB	WB	Total
Total Delay (hr)	1.0	8.1	9.0
Delay / Veh (s)	9.4	57.2	37.2
Total Stops	63	267	330
Travel Dist (mi)	37.3	32.9	70.1
Travel Time (hr)	4.7	11.4	16.1
Avg Speed (mph)	8	3	4
Fuel Used (gal)	3.2	7.3	10.5
HC Emissions (g)	7	18	25
CO Emissions (g)	90	247	337
NOx Emissions (g)	7	32	39
Vehicles Entered	364	505	869
Vehicles Exited	368	512	880
Hourly Exit Rate	368	512	880
Denied Entry Before	0	0	0
Denied Entry After	0	3	3

19: Main Street & Bassett Lane Intersection Performance

	EB	WB	SB	Total
Total Delay (hr)	0.5	1.0	0.3	1.7
Delay / Veh (s)	4.2	6.3	9.7	5.9
Total Stops	20	7	114	141
Travel Dist (mi)	51.8	66.6	12.8	131.3
Travel Time (hr)	3.1	7.7	0.8	11.7
Avg Speed (mph)	16	9	15	11
Fuel Used (gal)	2.9	5.2	0.9	8.9
HC Emissions (g)	7	11	3	21
CO Emissions (g)	133	143	115	391
NOx Emissions (g)	14	10	8	32
Vehicles Entered	395	554	112	1061
Vehicles Exited	393	552	114	1059
Hourly Exit Rate	393	552	114	1059
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

22: Main Street & High School Road Intersection Performance

	EB	WB	NB	SB	Total
Total Delay (hr)	1.5	1.9	4.6	3.4	11.5
Delay / Veh (s)	13.8	11.7	148.7	53.3	31.4
Total Stops	137	143	128	264	672
Travel Dist (mi)	47.3	44.4	11.2	20.1	122.9
Travel Time (hr)	6.2	6.3	5.1	4.3	21.9
Avg Speed (mph)	8	7	2	5	6
Fuel Used (gal)	4.1	4.4	3.5	3.6	15.6
HC Emissions (g)	9	10	11	11	41
CO Emissions (g)	117	135	293	376	921
NOx Emissions (g)	10	14	28	32	85
Vehicles Entered	398	568	113	226	1305
Vehicles Exited	403	570	112	237	1322
Hourly Exit Rate	403	570	112	237	1322
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

23: Main Street & Intersection Performance

	EB	WB	Total
Total Delay (hr)	0.6	16.6	17.2
Delay / Veh (s)	5.9	118.0	71.1
Total Stops	55	411	466
Travel Dist (mi)	16.0	51.4	67.4
Travel Time (hr)	2.2	21.8	24.0
Avg Speed (mph)	7	2	3
Fuel Used (gal)	1.6	13.7	15.3
HC Emissions (g)	4	33	37
CO Emissions (g)	55	469	523
NOx Emissions (g)	7	60	66
Vehicles Entered	365	508	873
Vehicles Exited	364	507	871
Hourly Exit Rate	364	507	871
Denied Entry Before	0	0	0
Denied Entry After	0	0	0

24: Main Street & Winter Street Intersection Performance

	EB	WB	SB	Total
Total Delay (hr)	3.3	12.3	0.4	16.0
Delay / Veh (s)	31.1	85.0	10.1	55.7
Total Stops	371	271	119	761
Travel Dist (mi)	31.1	18.5	10.1	59.7
Travel Time (hr)	6.4	14.2	0.8	21.4
Avg Speed (mph)	5	3	12	4
Fuel Used (gal)	4.3	8.0	0.9	13.2
HC Emissions (g)	10	20	3	33
CO Emissions (g)	144	257	107	508
NOx Emissions (g)	18	33	9	60
Vehicles Entered	384	522	130	1036
Vehicles Exited	382	522	130	1034
Hourly Exit Rate	382	522	130	1034
Denied Entry Before	0	0	0	0
Denied Entry After	0	8	0	8

29: Main Street & Barnstable Road Intersection Performance

	EB	WB	SB	Total
Total Delay (hr)	1.9	35.8	55.4	93.1
Delay / Veh (s)	20.1	324.1	545.9	304.1
Total Stops	108	168	597	873
Travel Dist (mi)	20.7	13.2	20.0	53.9
Travel Time (hr)	4.0	37.2	56.2	97.3
Avg Speed (mph)	5	2	1	2
Fuel Used (gal)	2.6	18.6	28.1	49.3
HC Emissions (g)	6	52	75	133
CO Emissions (g)	91	552	834	1477
NOx Emissions (g)	14	61	92	167
Vehicles Entered	344	400	364	1108
Vehicles Exited	335	397	365	1097
Hourly Exit Rate	335	397	365	1097
Denied Entry Before	0	1	2	3
Denied Entry After	0	65	66	131

32: Main Street & Center Street Intersection Performance

	EB	WB	NB	SB	Total
Total Delay (hr)	2.0	150.1	32.5	241.7	426.3
Delay / Veh (s)	23.6	966.8	656.5	3494.9	1185.2
Total Stops	115	985	197	399	1696
Travel Dist (mi)	22.4	43.5	16.7	12.6	95.3
Travel Time (hr)	4.3	152.5	33.1	242.2	432.1
Avg Speed (mph)	5	2	1	1	2
Fuel Used (gal)	2.8	74.5	16.9	115.6	209.7
HC Emissions (g)	7	191	47	304	549
CO Emissions (g)	90	2011	538	3134	5773
NOx Emissions (g)	11	216	59	325	612
Vehicles Entered	307	559	192	250	1308
Vehicles Exited	311	559	164	248	1282
Hourly Exit Rate	311	559	164	248	1282
Denied Entry Before	0	12	0	15	27
Denied Entry After	0	268	28	410	706

South Street Arterial Performance

	All
Total Delay (hr)	123.0
Delay / Veh (s)	125.2
Total Stops	3186
Travel Dist (mi)	592.2
Travel Time (hr)	148.3
Avg Speed (mph)	6
Fuel Used (gal)	97.9
HC Emissions (g)	252
CO Emissions (g)	4487
NOx Emissions (g)	496
Vehicles Entered	3567
Vehicles Exited	3512
Hourly Exit Rate	3512
Denied Entry Before	0
Denied Entry After	121

Main Street Arterial Performance

	All
Total Delay (hr)	267.2
Delay / Veh (s)	261.4
Total Stops	5135
Travel Dist (mi)	859.5
Travel Time (hr)	333.9
Avg Speed (mph)	5
Fuel Used (gal)	194.0
HC Emissions (g)	488
CO Emissions (g)	6550
NOx Emissions (g)	763
Vehicles Entered	3682
Vehicles Exited	3679
Hourly Exit Rate	3679
Denied Entry Before	13
Denied Entry After	344

Total Network Performance

	All
Total Delay (hr)	849.1
Delay / Veh (s)	774.5
Total Stops	11996
Travel Dist (mi)	1912.2
Travel Time (hr)	960.0
Avg Speed (mph)	5
Fuel Used (gal)	560.8
HC Emissions (g)	1477
CO Emissions (g)	24781
NOx Emissions (g)	2500
Vehicles Entered	4012
Vehicles Exited	3883
Hourly Exit Rate	3883
Denied Entry Before	45
Denied Entry After	1116

Intersection: 1: South Street & Old Colony Road

Movement	EB	EB	B6	B2	WB	WB	NB	NB	SB	SB	NE	SW
Directions Served	L	TR>	T	T	<L	T>	L	R>	L	TR>	TR	<
Maximum Queue (ft)	43	201	764	555	175	651	75	306	585	282	116	125
Average Queue (ft)	13	196	688	204	148	632	10	304	349	94	45	73
95th Queue (ft)	38	209	885	585	222	641	36	309	576	195	87	123
Link Distance (ft)	128	128	694	539		617		291	735	735	201	456
Upstream Blk Time (%)		0.74	0.36	0.03		0.78		0.89				
Queuing Penalty (veh)		202	199	18		0		0				
Storage Bay Dist (ft)					150		50					
Storage Blk Time (%)					0.09	0.75		0.89				
Queuing Penalty (veh)					24	138		26				

Intersection: 1: South Street & Old Colony Road

Movement	SW	B30
Directions Served	LTR	T
Maximum Queue (ft)	145	556
Average Queue (ft)	54	19
95th Queue (ft)	113	183
Link Distance (ft)	456	441
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: Bend #2

Movement	
Directions Served	
Maximum Queue (ft)	
Average Queue (ft)	
95th Queue (ft)	
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: South Street & High School Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	91	32	89	126
Average Queue (ft)	29	3	27	70
95th Queue (ft)	80	19	56	109
Link Distance (ft)	1339	539	346	491
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: South Street & Sea Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	314	199	147	162
Average Queue (ft)	111	84	63	88
95th Queue (ft)	205	159	113	154
Link Distance (ft)	432	1339	374	340
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: Bend #6

Movement	
Directions Served	
Maximum Queue (ft)	
Average Queue (ft)	
95th Queue (ft)	
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Main Street & Stevens St

Movement	EB	EB	WB	WB	BB	NB	SB	NW	B13
Directions Served	LT	R>	L	TR	T	LTR>	LTR	<LR>	T
Maximum Queue (ft)	308	308	9	91	269	46	66	174	90
Average Queue (ft)	155	141	0	88	92	17	36	131	16
95th Queue (ft)	282	272	3	106	208	45	62	191	61
Link Distance (ft)	293	293		22	464	146	838	102	432
Upstream Blk Time (%)	0.04	0.02	0.00	0.37				0.28	
Queuing Penalty (veh)	0	0	0	216				96	
Storage Bay Dist (ft)			50						
Storage Blk Time (%)			0.00	0.37					
Queuing Penalty (veh)			0	1					

Intersection: 9: Main Street & Sea Street

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	76	495	76	397	196	179
Average Queue (ft)	10	127	51	270	103	93
95th Queue (ft)	39	283	93	408	178	158
Link Distance (ft)		464		634	340	748
Upstream Blk Time (%)		0.00				
Queuing Penalty (veh)		1				
Storage Bay Dist (ft)	50		50			
Storage Blk Time (%)	0.00	0.34	0.10	0.40		
Queuing Penalty (veh)	1	3	60	48		

Intersection: 14: Main Street &

Movement	EB	WB
Directions Served	T	T
Maximum Queue (ft)	190	406
Average Queue (ft)	93	395
95th Queue (ft)	166	405
Link Distance (ft)	165	357
Upstream Blk Time (%)	0.01	0.69
Queuing Penalty (veh)	3	379
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: Main Street &

Movement	EB	WB
Directions Served	T	T
Maximum Queue (ft)	185	316
Average Queue (ft)	92	302
95th Queue (ft)	165	314
Link Distance (ft)	522	282
Upstream Blk Time (%)		0
Queuing Penalty (veh)		290
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 19: Main Street & Bassett Lane

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	143	73	86
Average Queue (ft)	18	10	40
95th Queue (ft)	85	41	64
Link Distance (ft)	634	579	602
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 22: Main Street & High School Road

Movement	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	LT	R
Maximum Queue (ft)	49	205	76	339	90	226	284	67
Average Queue (ft)	10	83	21	171	39	137	126	35
95th Queue (ft)	34	180	64	277	94	228	206	61
Link Distance (ft)		579		378		491	463	463
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		50		50			
Storage Blk Time (%)		0.08	0.02	0.26	0.01			
Queuing Penalty (veh)		1	13	45	6			

Intersection: 23: Main Street &

Movement	EB	WB
Directions Served	T	T
Maximum Queue (ft)	115	570
Average Queue (ft)	85	549
95th Queue (ft)	130	567
Link Distance (ft)	173	522
Upstream Blk Time (%)		0.49
Queuing Penalty (veh)		362
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 24: Main Street & Winter Street

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	76	420	224	85
Average Queue (ft)	19	187	201	43
95th Queue (ft)	61	351	220	73
Link Distance (ft)		378	173	405
Upstream Blk Time (%)		0.02	0.50	
Queuing Penalty (veh)		8	343	
Storage Bay Dist (ft)	50			
Storage Blk Time (%)	0.02	0.47		
Queuing Penalty (veh)	6	5		

Intersection: 29: Main Street & Barnstable Road

Movement	EB	EB	WB	WB	SB	SB
Directions Served	L	TR	LT	R	LT	R
Maximum Queue (ft)	89	285	198	76	323	95
Average Queue (ft)	47	103	176	40	304	74
95th Queue (ft)	84	207	191	98	311	94
Link Distance (ft)	282	282	165		289	
Upstream Blk Time (%)		0.00	0.57		0.81	
Queuing Penalty (veh)		0	311		0	
Storage Bay Dist (ft)				50		50
Storage Blk Time (%)			0.78	0.00	0.62	0.54
Queuing Penalty (veh)			107	3	118	122

Intersection: Bend #30

Movement	
Directions Served	
Maximum Queue (ft)	
Average Queue (ft)	
95th Queue (ft)	
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 32: Main Street & Center Street

Movement	EB	EB	WB	WB	WB	NB	NB	NB	B30	B30	SB	SB
Directions Served	L	TR	L	T	R	L	T	R	T	T	L	TR
Maximum Queue (ft)	75	245	114	445	145	513	513	54	474	471	294	296
Average Queue (ft)	40	105	8	428	112	380	262	9	168	175	217	278
95th Queue (ft)	86	208	45	437	180	612	651	35	493	508	391	286
Link Distance (ft)		357		411		441	441		456	456		262
Upstream Blk Time (%)				0.68		0.50	0.47		0.14	0.13	0.06	0.91
Queuing Penalty (veh)				0		80	76		23	21	0	0
Storage Bay Dist (ft)	50		100		100			250			250	
Storage Blk Time (%)	0.12	0.29	0.00	0.72	0.04		0.00				0.00	0.92
Queuing Penalty (veh)	28	19	0	337	16		0				0	199

Nework Summary

Network wide Queuing Penalty: 3954

Intersection: 1: South Street & Old Colony Road

Phase	1	2	4	8	9	10	11	14
Movement(s) Served	WBTL	EBTL	SBTL	NBL	SWL	NET	Ped	SWTL
Maximum Green (s)	17.0	36.0	22.0	22.0	21.0	9.0	16.0	35.0
Minimum Green (s)	6.0	6.0	6.0	6.0	4.0	4.0	2.0	6.0
Recall	None	None	None	None	None	None	None	None
Avg. Green (s)	17.0	35.9	22.0	22.0	14.9	8.5	16.0	26.1
g/C Ratio	0.13	0.27	0.16	0.16	0.10	0.06	0.08	0.19
Cycles Skipped (%)	0	0	0	0	15	4	30	4
Cycles @ Minimum (%)	0	0	0	0	0	0	0	0
Cycles Maxed Out (%)	100	96	100	100	7	63	70	7
Cycles with Peds (%)	0	0	0	0	0	0	70	0

Controller Summary

Average Cycle Length (s): 133.6
Number of Complete Cycles : 26

Intersection: 5: South Street & Sea Street

Phase	2	4	6	8	9
Movement(s) Served	EBTL	SBTL	WBTL	NBTL	Ped
Maximum Green (s)	17.0	13.0	17.0	13.0	16.0
Minimum Green (s)	6.0	4.0	6.0	4.0	4.0
Recall	Min	None	Min	None	None
Avg. Green (s)	14.3	10.8	14.3	10.8	16.0
g/C Ratio	0.36	0.24	0.36	0.24	0.13
Cycles Skipped (%)	0	9	0	9	67
Cycles @ Minimum (%)	6	1	6	1	0
Cycles Maxed Out (%)	48	44	48	44	33
Cycles with Peds (%)	0	0	0	0	33

Controller Summary

Average Cycle Length (s): 40.2
Number of Complete Cycles : 89

Intersection: 7: Main Street & Stevens St

Phase	2	4	6	8	9	11
Movement(s) Served	EBTL	SBTL	WBTL	NBTL	NWL	Ped
Maximum Green (s)	33.0	5.0	33.0	5.0	17.0	16.0
Minimum Green (s)	6.0	4.0	6.0	4.0	4.0	4.0
Recall	Coord	None	Coord	None	None	None
Avg. Green (s)	24.9	5.0	24.9	5.0	15.5	16.0
g/C Ratio	0.28	0.04	0.28	0.04	0.16	0.08
Cycles Skipped (%)	0	25	0	25	5	56
Cycles @ Minimum (%)	0	3	0	3	0	0
Cycles Maxed Out (%)	100	73	100	73	49	21
Cycles with Peds (%)	0	0	0	0	0	44

Controller Summary

Average Cycle Length (s): 90.0
Number of Complete Cycles : 39

Intersection: 9: Main Street & Sea Street

Phase	2	4	6	8	9
Movement(s) Served	EBTL	SBTL	WBTL	NBTL	Ped
Maximum Green (s)	40.0	20.0	40.0	20.0	16.0
Minimum Green (s)	6.0	4.0	6.0	4.0	4.0
Recall	Coord	None	Coord	None	None
Avg. Green (s)	21.1	17.7	21.1	17.7	16.0
g/C Ratio	0.23	0.20	0.23	0.20	0.18
Cycles Skipped (%)	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0
Cycles Maxed Out (%)	100	64	100	64	65
Cycles with Peds (%)	0	0	0	0	100

Controller Summary

Average Cycle Length (s): 90.0
Number of Complete Cycles : 39

Intersection: 14: Main Street &

Phase	2	6	8
Movement(s) Served	EBT	WBT	Ped
Maximum Green (s)	31.0	31.0	21.0
Minimum Green (s)	4.0	5.0	5.0
Recall	None	None	Ped
Avg. Green (s)	31.0	31.0	16.0
g/C Ratio	0.56	0.56	0.29
Cycles Skipped (%)	0	0	0
Cycles @ Minimum (%)	0	0	0
Cycles Maxed Out (%)	100	100	0
Cycles with Peds (%)	0	0	100

Controller Summary

Average Cycle Length (s): 55.0
Number of Complete Cycles : 65

Intersection: 18: Main Street &

Phase	2	6	8
Movement(s) Served	EBT	WBT	Ped
Maximum Green (s)	31.0	31.0	21.0
Minimum Green (s)	5.0	5.0	5.0
Recall	None	None	Ped
Avg. Green (s)	31.0	31.0	10.0
g/C Ratio	0.63	0.63	0.20
Cycles Skipped (%)	0	0	0
Cycles @ Minimum (%)	0	0	0
Cycles Maxed Out (%)	100	100	0
Cycles with Peds (%)	0	0	100

Controller Summary

Average Cycle Length (s): 49.0
Number of Complete Cycles : 72

Intersection: 22: Main Street & High School Road

Phase	2	4	6	8	9
Movement(s) Served	EBTL	SBTL	WBTL	NBTL	Ped
Maximum Green (s)	50.0	10.0	50.0	10.0	16.0
Minimum Green (s)	6.0	6.0	6.0	6.0	4.0
Recall	Coord	None	Coord	None	None
Avg. Green (s)	27.5	10.0	27.5	10.0	11.0
g/C Ratio	0.31	0.11	0.31	0.11	0.12
Cycles Skipped (%)	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0
Cycles Maxed Out (%)	100	98	100	98	0
Cycles with Peds (%)	0	0	0	0	100

Controller Summary

Average Cycle Length (s): 90.0
Number of Complete Cycles : 39

Intersection: 23: Main Street &

Phase	2	6	8
Movement(s) Served	EBT	WBT	Ped
Maximum Green (s)	31.0	31.0	21.0
Minimum Green (s)	4.0	4.0	4.0
Recall	None	None	Ped
Avg. Green (s)	31.0	31.0	10.0
g/C Ratio	0.63	0.63	0.20
Cycles Skipped (%)	0	0	0
Cycles @ Minimum (%)	0	0	0
Cycles Maxed Out (%)	100	100	0
Cycles with Peds (%)	0	0	100

Controller Summary

Average Cycle Length (s): 49.0
Number of Complete Cycles : 73

Intersection: 24: Main Street & Winter Street

Phase	2	4	6	9
Movement(s) Served	EBTL	SBL	WBT	Ped
Maximum Green (s)	9.0	3.0	9.0	21.0
Minimum Green (s)	3.0	3.0	4.0	5.0
Recall	Max	Max	Max	Ped
Avg. Green (s)	9.0	3.0	9.0	10.0
g/C Ratio	0.26	0.09	0.26	0.29
Cycles Skipped (%)	0	0	0	0
Cycles @ Minimum (%)	0	100	0	0
Cycles Maxed Out (%)	100	100	100	0
Cycles with Peds (%)	0	0	0	100

Controller Summary
Average Cycle Length (s): 34.0

Number of Complete Cycles : 105

Intersection: 29: Main Street & Barnstable Road

Phase	2	4	6	9
Movement(s) Served	EBTL	SBTL	WBTL	Ped
Maximum Green (s)	42.0	18.0	42.0	15.0
Minimum Green (s)	6.0	4.0	6.0	4.0
Recall	Coord	None	Coord	None
Avg. Green (s)	23.0	18.0	23.0	11.0
g/C Ratio	0.26	0.20	0.26	0.12
Cycles Skipped (%)	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0
Cycles Maxed Out (%)	100	100	100	0
Cycles with Peds (%)	0	0	0	100

Controller Summary
Average Cycle Length (s): 90.0

Number of Complete Cycles : 39

Intersection: 32: Main Street & Center Street

Phase	2	3	4	6	7	8	9
Movement(s) Served	EBTL	NBL	SBTL	WBTL	SBL	NBTL	Ped
Maximum Green (s)	28.0	4.0	23.0	28.0	13.0	14.0	15.0
Minimum Green (s)	6.0	4.0	6.0	6.0	4.0	6.0	5.0
Recall	Coord	None	None	Coord	None	None	None
Avg. Green (s)	19.2	4.0	23.0	19.2	19.9	23.0	10.0
g/C Ratio	0.21	0.04	0.26	0.21	0.16	0.18	0.07
Cycles Skipped (%)	0	0	0	0	28	31	38
Cycles @ Minimum (%)	0	100	0	0	0	0	0
Cycles Maxed Out (%)	100	100	100	100	43	69	0
Cycles with Peds (%)	0	0	0	0	0	0	63

Controller Summary

Average Cycle Length (s): 90.0
Number of Complete Cycles : 39

Appendix E

Order-of-Magnitude Cost Estimate

Alternative One

Cost Estimate for Barnstable (Traffic Calming w/o decorative pavement)

			Traffic Calming					
			Main Street		South Street		TOTAL	
Item	Unit	Unit Cost ($)	Qty.	Cost ($)	Qty.	Cost ($)	Qty.	Cost ($)
Raised Intersection	SF	5.82	93,000	541,260.00	22,000	128,040.00	115,000	669,300.00
Cold Plane & Overlay	SF	0.91			74,500	67,795.00	74,500	67,795.00
Full Depth Reconstruction	SF	5.82	110,000	640,200.00		-	110,000	640,200.00
Sidewalk/Curbing	LF	29.03	8,500	246,755.00	7,400	214,822.00	15,900	461,577.00
Pavement Markings	LF	0.50	11,500	5,750.00	10,000	5,000.00	21,500	10,750.00
Signal Equipment				-		-	-	-
Reconstruction - Main St/Old Colony Road	LS	75,000.00	1	75,000.00		-	1	75,000.00
Reconstruction - Main St/Barnstable Rd	LS	75,000.00	1	75,000.00		-	1	75,000.00
Reconstruction - Main St/High School Road	LS	75,000.00	1	75,000.00		-	1	75,000.00
Reconstruction - Main St/Sea Street	LS	75,000.00	1	75,000.00		-	1	75,000.00
Reconstruction - South Street/Old Colony Road	LS	75,000.00		-	1	75,000.00	1	75,000.00
Reconstruction - South Street/Sea St	LS	75,000.00		-	1	75,000.00	1	75,000.00
SUBTOTAL				1,733,965.00		565,657.00		2,299,622.00
Drainage	10%			54,126.00		12,804.00		66,930.00
SUBTOTAL				1,788,091.00		948,283.00		2,366,552.00
Landscaping	10%			54,126.00		12,804.00		66,930.00
SUBTOTAL				1,842,217.00		961,087.00		2,433,482.00
Contingency	25%			460,554.25		240,271.75		700,826.00
TOTAL				2,302,771.25		1,201,358.75		3,134,308.00
SAY				**2,300,000.00**		**1,200,000.00**		**3,125,000.00**

Note: Unit prices based on 2000 statewide bid prices are escalated 3% per year for three years, assuming 2003 construction.

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Cost Estimate for Barnstable (Traffic Calming with decorative pavement)

			Traffic Calming					
			Main Street		South Street		TOTAL	
Item	Unit	Unit Cost ($)	Qty.	Cost ($)	Qty.	Cost ($)	Qty.	Cost ($)
Raised Intersection	SF	24.04	93,000	2,235,720.00	22,000	528,880.00	115,000	2,764,600.00
Cold Plane & Overlay	SF	0.91			74,500	67,795.00	74,500	67,795.00
Full Depth Reconstruction	SF	5.82	110,000	640,200.00		-	110,000	640,200.00
Sidewalk/Curbing	LF	29.03	8,500	246,755.00	7,400	214,822.00	15,900	461,577.00
Pavement Markings	LF	0.50	11,500	5,750.00	10,000	5,000.00	21,500	10,750.00
Signal Equipment				-		-	-	-
Reconstruction - Main St/Old Colony Road	LS	75,000.00	1	75,000.00		-	1	75,000.00
Reconstruction - Main St/Barnstable Rd	LS	75,000.00	1	75,000.00		-	1	75,000.00
Reconstruction - Main St/High School Road	LS	75,000.00	1	75,000.00		-	1	75,000.00
Reconstruction - Main St/Sea Street	LS	75,000.00	1	75,000.00		-	1	75,000.00
Reconstruction - South Street/Old Colony Road	LS	75,000.00		-	1	75,000.00	1	75,000.00
Reconstruction - South Street/Sea St	LS	75,000.00		-	1	75,000.00	1	75,000.00
SUBTOTAL				3,428,425.00		966,497.00		4,394,922.00
Drainage	10%			223,572.00		-		223,572.00
SUBTOTAL				3,651,997.00		1,336,319.00		4,618,494.00
Landscaping	10%			223,572.00		-		223,572.00
SUBTOTAL				3,875,569.00		1,336,319.00		4,842,066.00
Contingency	25%			968,892.25		334,079.75		1,302,972.00
TOTAL				4,844,461.25		1,670,398.75		6,145,038.00
SAY				**4,850,000.00**		**1,675,000.00**		**6,150,000.00**

Note: Unit prices based on 2000 statewide bid prices are escalated 3% per year for three years, assuming 2003 construction.

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Alternative Two

Cost Estimate for Barnstable (two-way)

Two-Way Conversion

Item	Unit	Unit Cost ($)	Main Street		South Street		Main St to Barnstable		South St to Old Colony		Main St at High School		TOTAL	
			Qty.	Cost ($)	Qty.	Cost ($)	Qty.	Cost ($)	Qty.	Cost ($)	Qty.	Cost ($)	Qty.	Cost ($)
Cold Planing + Overlay	SF	0.91		-		-		-		-		-	-	-
Full Depth Reconstruction	SF	5.82	203,000	1,181,460.00		-		-		-		-	203,000	1,181,460.00
Sidewalk/Curbing	LF	29.03	8,500	246,755.00	7,400	214,822.00		-		-		-	15,900	461,577.00
Widening	SF	5.82		-		-	1,800	10,476.00	6,000	34,920.00	1,800	10,476.00	7,800	55,872.00
Pavement Markings	LF	0.50	17,500	8,750.00	14,500	7,250.00		-		-		-	32,000	16,000.00
Signal Equipment				-		-		-		-		-	-	-
Reconstruction - Main St/Old Colony Road	LS	100,000.00	1	100,000.00		-		-		-		-	1	100,000.00
Reconstruction - Main St/Barnstable Rd	LS	180,000.00		-		-	1	180,000.00		-		-	-	180,000.00
Reconstruction - Main St/High School Road	LS	180,000.00		-		-		-		-	1	180,000.00	1	180,000.00
Reconstruction - Main St/Sea Street	LS	180,000.00	1	180,000.00		-		-		-		-	1	180,000.00
Reconstruction - South Street/Old Colony Road	LS	75,000.00		-		-		-	1	75,000.00		-	1	75,000.00
Reconstruction - South Street/Sea St	LS	75,000.00		-	1	75,000.00		-		-		-	1	75,000.00
New - Sherman Sqaure	LS	200,000.00	1	200,000.00		-		-		-		-	1	200,000.00
SUBTOTAL				1,916,965.00		297,072.00		190,476.00		109,920.00		190,476.00		2,704,909.00
Drainage	10%			-		-		19,047.60		10,992.00		19,047.60		49,087.20
SUBTOTAL				1,916,965.00		594,144.00		209,523.60		120,912.00		209,523.60		2,753,996.20
Landscaping	10%			-		-		19,047.60		10,992.00		19,047.60		49,087.20
SUBTOTAL				1,916,965.00		973,466.00		228,571.20		131,904.00		228,571.20		2,803,083.40
Traffic Calming	25%			61,688.75		53,705.50		52,380.90		30,228.00		52,380.90		250,384.05
SUBTOTAL				1,916,965.00		594,144.00		228,571.20		131,904.00		228,571.20		3,053,467.45
Contingency	25%			479,241.25		148,536.00		57,142.80		32,976.00		57,142.80		775,038.85
TOTAL				2,396,206.25		742,680.00		285,714.00		164,880.00		285,714.00		3,828,506.30
SAY				**2,400,000.00**		**750,000.00**		**275,000.00**		**175,000.00**		**275,000.00**		**3,825,000.00**

Note: Unit prices based on 2000 statewide bid prices are escalated 3% per year for three years, assuming 2003 construction.