

Old Colony Planning Council



Jeanmarie Kent Joyce
President

70 School Street
Brockton, MA 02301-4097

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Executive Director

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December 2, 2009

Mr. Charlie Seelig, Town Administrator
Town of Halifax
499 Plymouth Street
Halifax, MA 02338

Dear Mr. Seelig:

Per your request, the Old Colony Planning Council (OCPC) has completed the data collection and analysis (traffic counts and pedestrian crossings) for Plymouth Street (Route 106). Automatic traffic recorder (ATR) counts were conducted at four locations along Plymouth Street (Route 106) during the week of September 21-25, 2009. Additionally, OCPC staff counted the number of pedestrians crossing at the Police Station / Post Office crosswalk, the Hemlock Lane crosswalk, and the Indian Path Road crosswalk during the morning and afternoon peak periods on September 24th, 2009. The following tables summarize the traffic data collected along the roadway on September 23rd and 24th, 2009.

Plymouth Street, east of Carver Street

	Total	Eastbound	Westbound
Average Daily Traffic	13,183	6,554	6,629
Average Speed	37 MPH	38 MPH	36 MPH
85th Percentile Speed	43 MPH	44 MPH	41 MPH
10 MPH Pace Speed	36-45 MPH	36-45 MPH	31-40 MPH
% Heavy Vehicles	8.40%	10.00%	6.70%

Plymouth Street, east of Hemlock Lane

	Total	Eastbound	Westbound
Average Daily Traffic	14,682	7,240	7,442
Average Speed	30 MPH	30 MPH	29 MPH
85th Percentile Speed	36 MPH	37 MPH	36 MPH
10 MPH Pace Speed	26-35 MPH	26-35 MPH	26-35 MPH
% Heavy Vehicles	5.00%	4.90%	5.20%

Plymouth Street, west of Indian Path Road

	Total	Eastbound	Westbound
Average Daily Traffic	15,036	7,528	7,508
Average Speed	35 MPH	34 MPH	36 MPH
85th Percentile Speed	41 MPH	40 MPH	42 MPH
10 MPH Pace Speed	31-40 MPH	31-40 MPH	31-40 MPH
% Heavy Vehicles	6.10%	6.50%	5.80%

Plymouth Street, east of Indian Path Road

	Total	Eastbound	Westbound
Average Daily Traffic	14,986	7,505	7,481
Average Speed	35 MPH	34 MPH	35 MPH
85th Percentile Speed	40 MPH	40 MPH	41 MPH
10 MPH Pace Speed	31-40 MPH	31-40 MPH	31-40 MPH
% Heavy Vehicles	5.20%	5.00%	5.30%

The figures (Figures 1-4) on the following pages summarize the total number of pedestrian crossings during the morning (6:00-10:00 AM) and afternoon (2:00-6:00 PM) periods that data was collected. Please note that these volumes did not satisfy the USDOT MUTCD minimum warrants for the installation of a pedestrian signal.

Old Colony Planning Council recommends the following actions and improvements to improve safety for motorists and pedestrians through the corridor:

- Strict enforcement by law enforcement of existing speed limits and crosswalk regulations along Route 106
- MUTCD Compliant (size, retro-reflectivity, etc) Signage on both sides of roadway, in each direction, for each crosswalk
- Maintenance of highly visible crosswalks
- Participation by Halifax Public Schools in the Safe Routes To School Program, to educate school-aged children on safe walking and cycling habits, and to become eligible for potential infrastructure funding
- Installation of ADA compliant sidewalk on the north side of Route 106 to Route 58
- Resolution of the conflict between the crosswalk and passing zone in the vicinity of the Police Station and Post Office
- Continued coordination with MassDOT
- Continued monitoring by Old Colony Planning Council of traffic conditions through the corridor

Figure 1: Morning (6:00-10:00 AM) Pedestrian Crossings on Plymouth Street (Route 106) in Halifax

*Morning (6:00-10:00 AM) Pedestrian Crossings
West of Crosswalks, In Crosswalks, and East of Crosswalks*

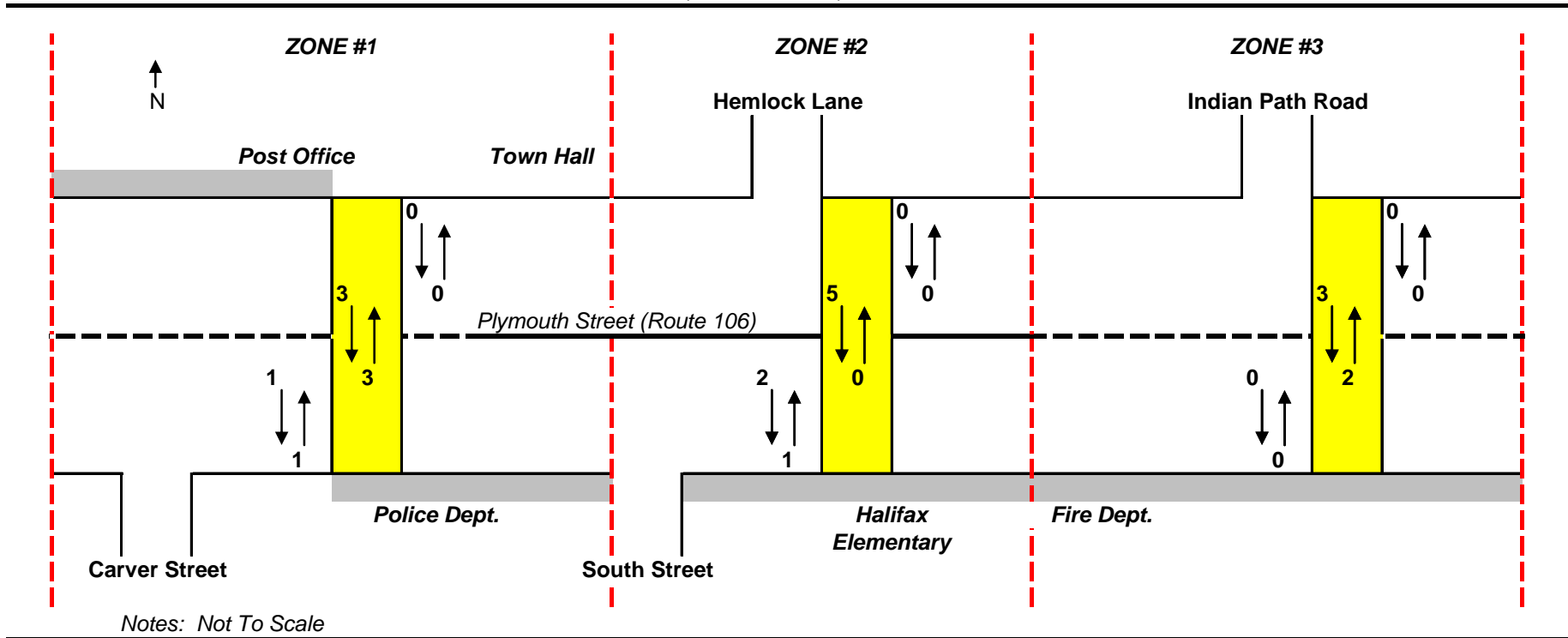


Figure 2: Afternoon (2:00-6:00 PM) Pedestrian Crossings on Plymouth (Route 106) in Halifax

*Afternoon (2:00-6:00 PM) Pedestrian Crossings
West of Crosswalks, In Crosswalks, and East of Crosswalks*

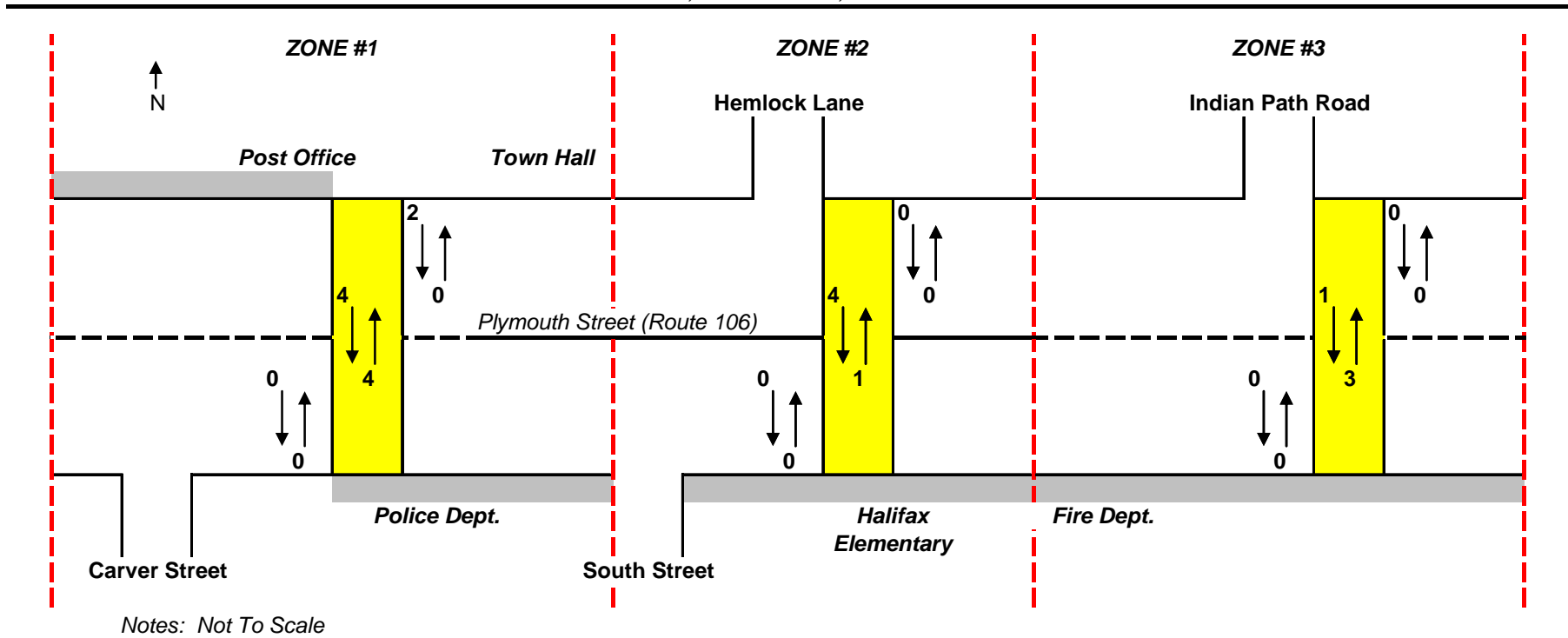


Figure 3: Morning (6:00-10:00 AM) Bicycle Crossings on Plymouth Street (Route 106) in Halifax

*Morning (6:00-10:00 AM) Bicycle Crossings
West of Crosswalks, In Crosswalks, and East of Crosswalks*

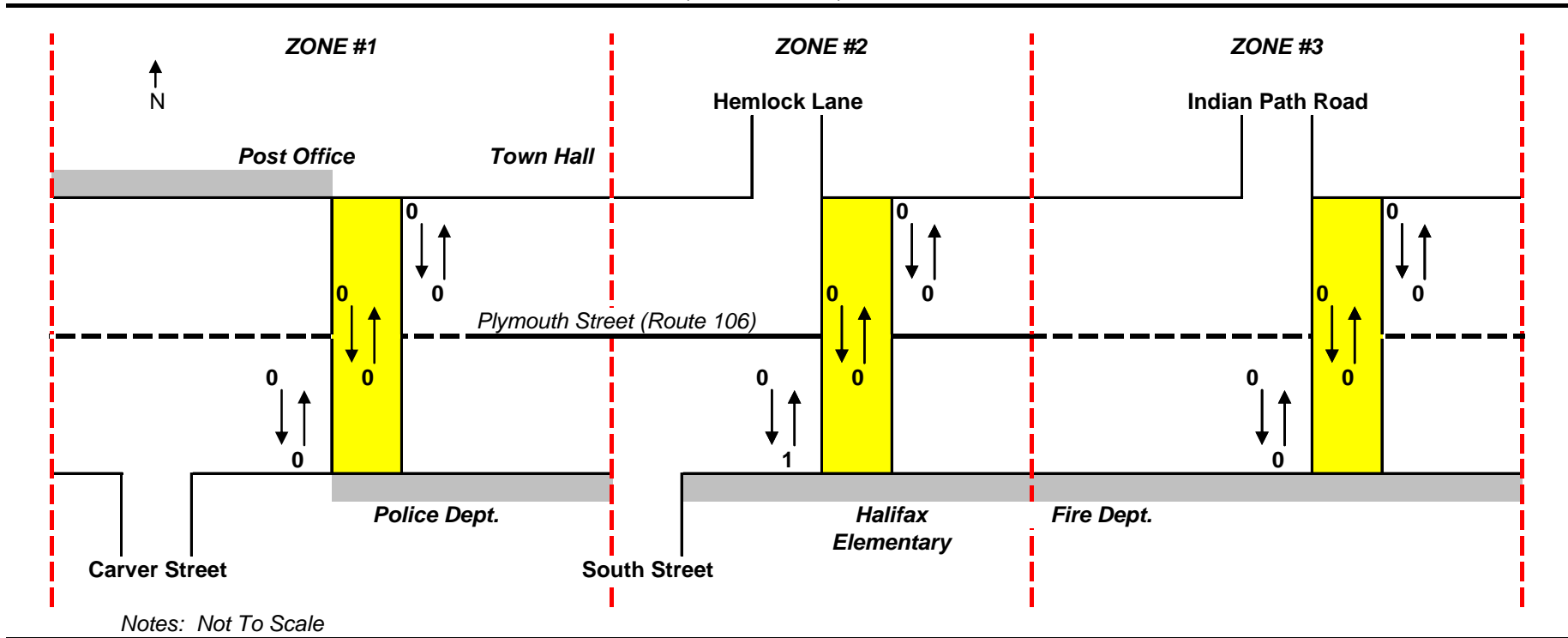
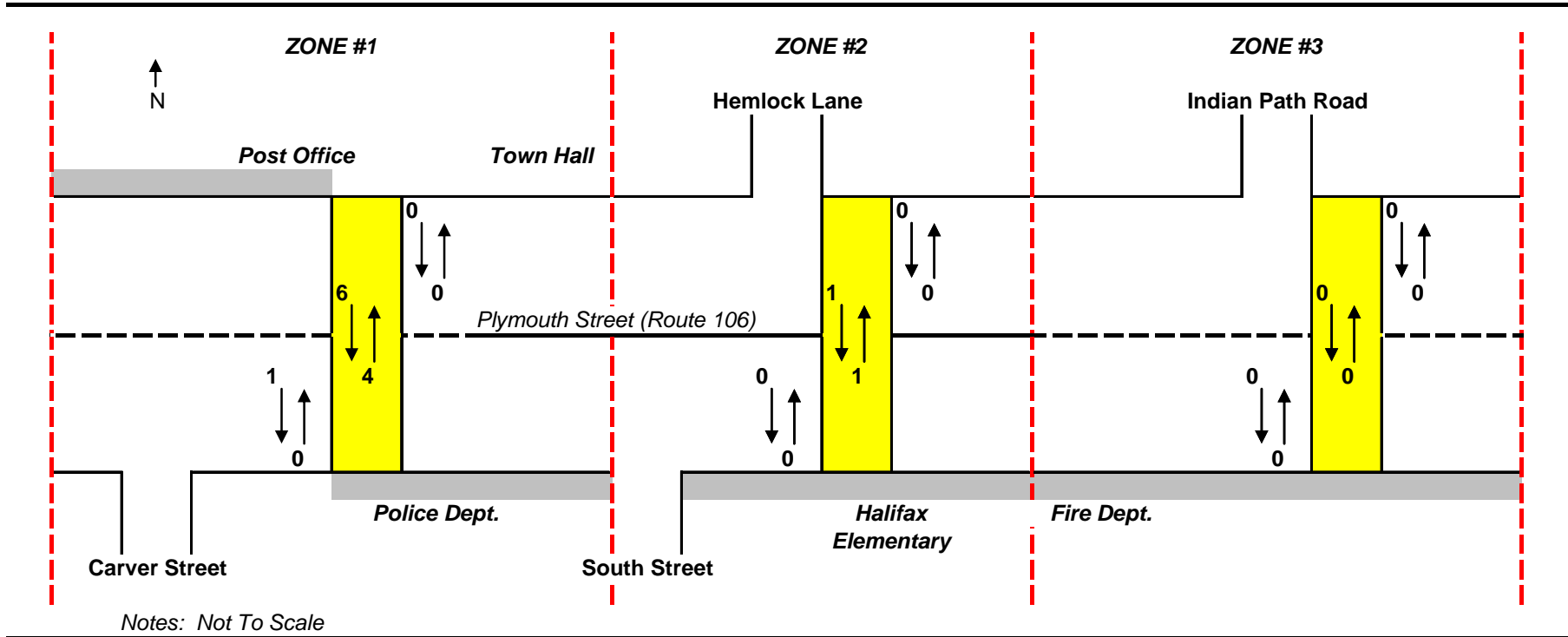


Figure 4: Afternoon (2:00-6:00 PM) Bicycle Crossings on Plymouth (Route 106) in Halifax

*Afternoon (2:00-6:00 PM) Bicycle Crossings
West of Crosswalks, In Crosswalks, and East of Crosswalks*



The following are examples of signage and visibility enhancements. Figure 5 shows the MUTCD standard signs, regulatory and warning, used in conjunction with crosswalks. Figure 6 shows MUTCD standards for the placement of the R1-5 sign, and the yield markings. Further enhancements for crosswalks include a textured crosswalk and bump outs that would block vehicles from using the shoulder to go around vehicles in front of them that are stopped for pedestrians. Figure 7 shows signs from the MUTCD to encourage crosswalk use and discourage jay-walking.

Figure 5 Pedestrian crosswalk signs (MUTCD)

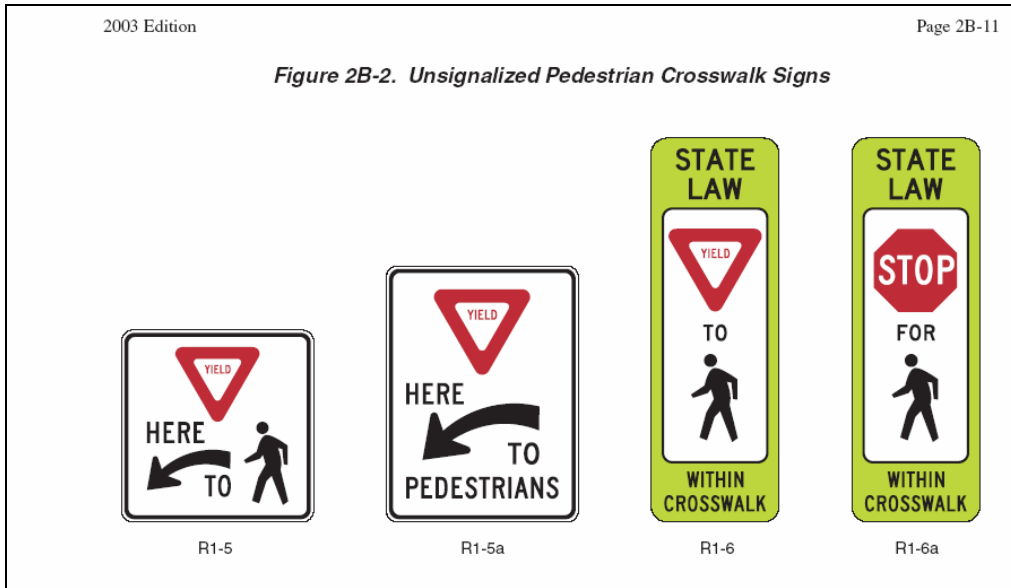


Figure 6 Crosswalk with yield signs and sign placement (MUTCD)

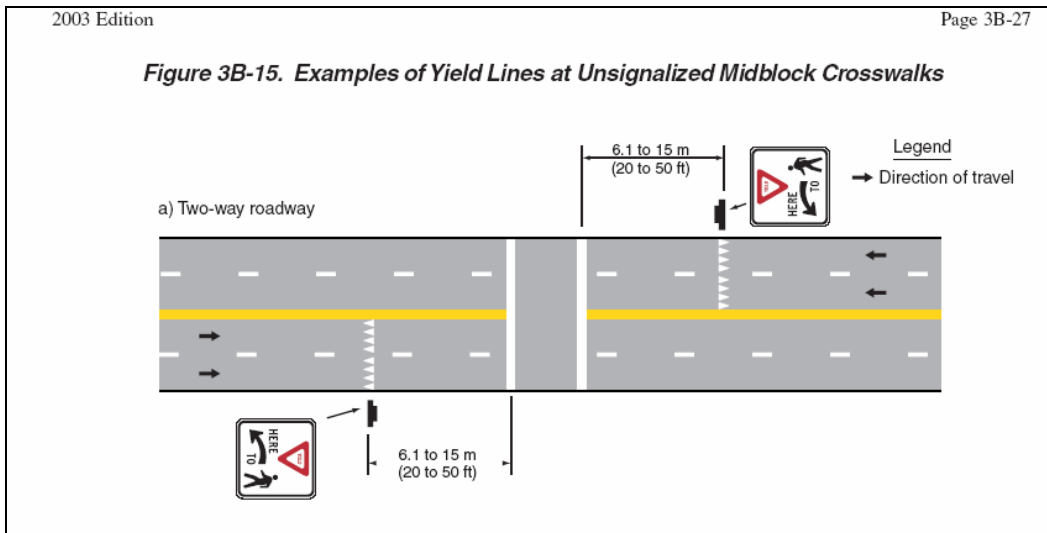


Figure 7 MUTCD signs to encourage crosswalk use (MUTCD)

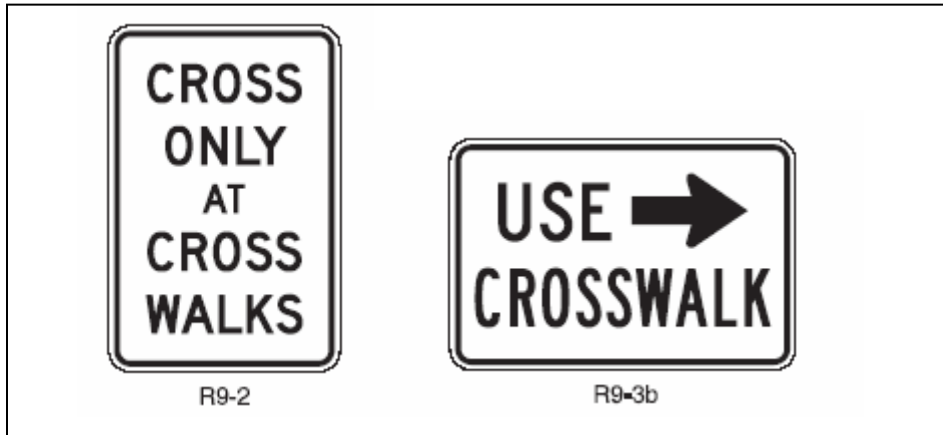


Figure 8: Another pedestrian button actuated flashing sign (W11 MUTCD) Rectangular Rapid Flashing Beacons – RRFB

Rectangular Rapid Flashing Beacons (RRFB) are flashing lights on pedestrian crossing signs at crosswalks that are actuated by the pedestrian via a push button. These flashing lights bring better visibility to the motorists that pedestrians are using the crosswalk.

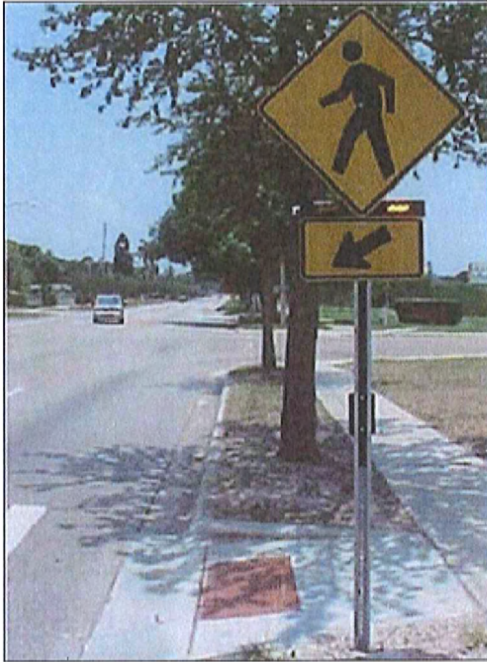


Figure 9: Flashing lights on the W-11 sign (Rectangular Rapid Flashing Beacons - RRFB), used in conjunction with a crosswalk. These lights are pedestrian push-button actuated.

Furthermore, please find enclosed material from MassHighway's Massachusetts Traffic Safety Toolbox that offers suggestions for improving roadways safety.

Should you have any questions about this report, please contact Project Manager Bill McNulty at (508) 583-1833 or wmcnulty@ocpcrpa.org.

Sincerely,

Charles Kilmer
Transportation Program Manager

Cc:

Mr. John Bruno, Chairman, Halifax Board of Selectmen
Mr. Robert Badore, Halifax Highway Department
Chief Michael Manoogian, Halifax Police Department
Mr. Troy Garron, Board of Selectmen, OCPC Alternate, and JTC Delegate
Mr. John G. Mather, OCPC Delegate
Ms. Pamela Haznar, P.E., MassDOT District 5
Mr. Paul Maloney, P.E., FHWA
Mr. Trey Wadsworth, MassDOT

Enclosures:

Locus Map / Aerial Photography of Study Area

ATR Traffic Data – Plymouth Street east of Carver Street

ATR Traffic Data – Plymouth Street east of Hemlock Lane

ATR Traffic Data – Plymouth Street West of Indian Path Road

ATR Traffic Data – Plymouth Street east of Indian Path Road

Massachusetts Traffic Safety Toolbox: Crosswalks

Massachusetts Traffic Safety Toolbox: Low-Cost Non-Intersection Safety Improvements

Massachusetts Traffic Safety Toolbox: Sight-Distance

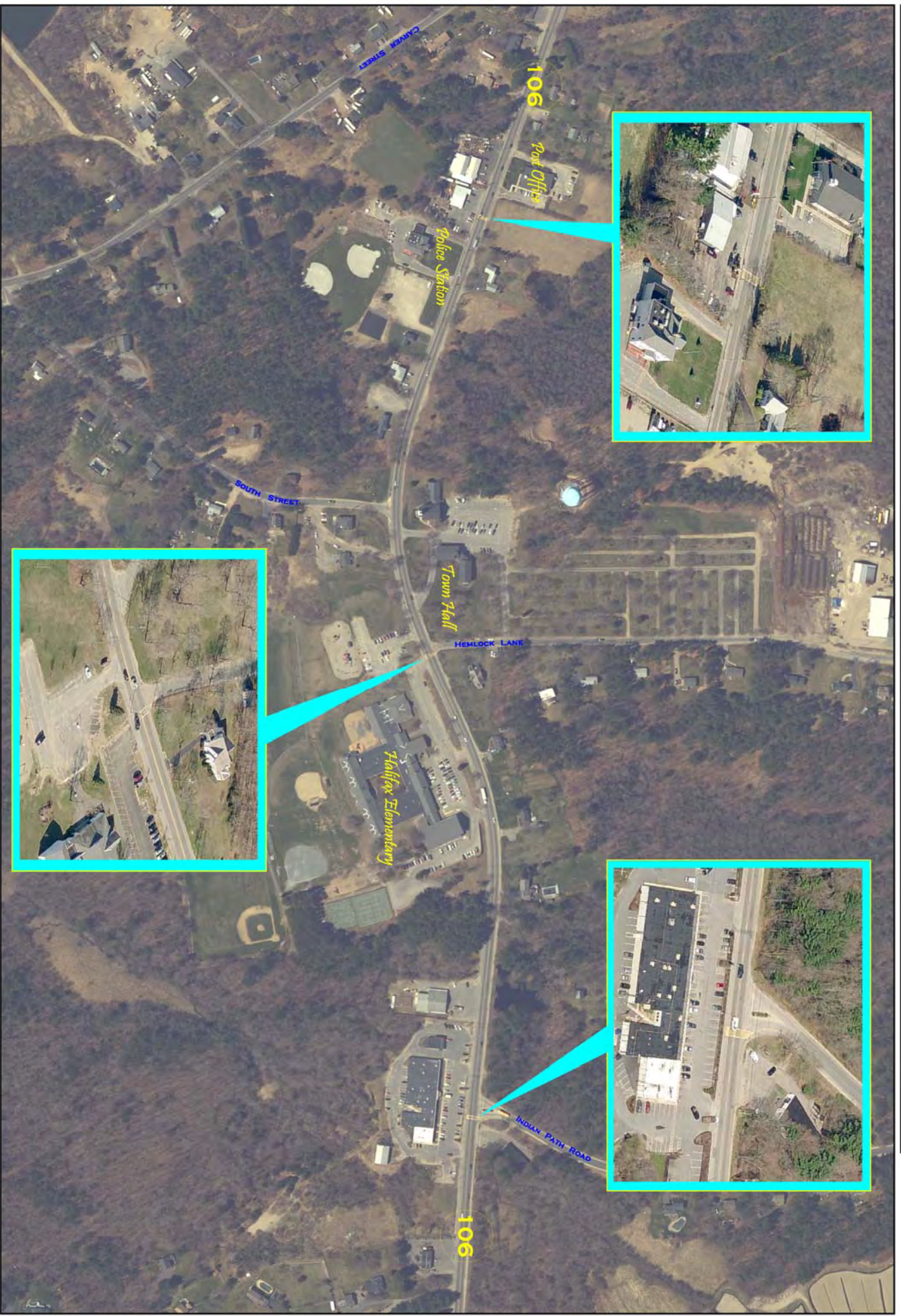
Massachusetts Traffic Safety Toolbox: Retroreflectivity

MassRides Safe Routes To School Program

“Individuals’ Abilities and Behaviors Current Technologies in Intersection Crosswalks” by Michelle F. Heller, PH.D., et al (ITE Journal, 12/2008)

HALIFAX PEDESTRIAN CROSSING STUDY

PLYMOUTH STREET,
ROUTE 106



OLD COLONY PLANNING COUNCIL, 70 SCHOOL STREET, BROCKTON, MA 02301
GIS DATA SOURCES: EOTPW, MASSGIS, ORTHO PHOTO FLOWN IN 2005

SEPTEMBER, 16, 2009

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #16
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

Start Time	21-Sep-09		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	*	*	34	19	34	23	*	*	*	*	*	*	34	21
01:00	*	*	*	*	15	14	17	18	*	*	*	*	*	*	16	16
02:00	*	*	*	*	9	10	19	12	*	*	*	*	*	*	14	11
03:00	*	*	*	*	13	11	8	13	*	*	*	*	*	*	10	12
04:00	*	*	*	*	21	61	31	53	*	*	*	*	*	*	26	57
05:00	*	*	*	*	72	141	75	144	*	*	*	*	*	*	74	142
06:00	*	*	*	*	258	284	268	279	*	*	*	*	*	*	263	282
07:00	*	*	*	*	418	579	400	596	*	*	*	*	*	*	409	588
08:00	*	*	*	*	407	511	429	457	*	*	*	*	*	*	418	484
09:00	*	*	*	*	339	316	355	391	*	*	*	*	*	*	347	354
10:00	*	*	*	*	343	336	329	343	*	*	*	*	*	*	336	340
11:00	*	*	*	*	329	334	346	319	*	*	*	*	*	*	338	326
12:00 PM	*	*	*	*	375	351	412	376	*	*	*	*	*	*	394	364
01:00	*	*	*	*	379	356	380	371	*	*	*	*	*	*	380	364
02:00	*	*	*	*	411	456	465	419	*	*	*	*	*	*	438	438
03:00	*	*	*	*	586	465	517	505	*	*	*	*	*	*	552	485
04:00	*	*	*	*	567	514	660	547	*	*	*	*	*	*	614	530
05:00	*	*	*	*	610	561	641	534	*	*	*	*	*	*	626	548
06:00	*	*	*	*	493	445	463	418	*	*	*	*	*	*	478	432
07:00	*	*	*	*	306	262	274	325	*	*	*	*	*	*	290	294
08:00	*	*	*	*	210	218	183	214	*	*	*	*	*	*	196	216
09:00	*	*	*	*	152	170	178	148	*	*	*	*	*	*	165	159
10:00	*	*	*	*	90	103	77	106	*	*	*	*	*	*	84	104
11:00	*	*	*	*	49	54	54	69	*	*	*	*	*	*	52	62
Total	0	0	0	0	6486	6571	6615	6680	0	0	0	0	0	0	6554	6629
Day	0	0	0	0	13057		13295		0	0	0	0	0	0	13183	
AM Peak					07:00	07:00	08:00	07:00							08:00	07:00
Vol.					418	579	429	596							418	588
PM Peak					17:00	17:00	16:00	16:00							17:00	17:00
Vol.					610	561	660	547							626	548

Comb. Total 0 0 13057 13295 0 0 0 13183

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Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #16
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

Start Time	21-Sep-09 Mon	22-Sep-09 Tue	23-Sep-09 Wed	24-Sep-09 Thu	25-Sep-09 Fri	26-Sep-09 Sat	27-Sep-09 Sun	Week Average
12:00 AM	*	*	53	57	*	*	*	55
01:00	*	*	29	35	*	*	*	32
02:00	*	*	19	31	*	*	*	25
03:00	*	*	24	21	*	*	*	22
04:00	*	*	82	84	*	*	*	83
05:00	*	*	213	219	*	*	*	216
06:00	*	*	542	547	*	*	*	544
07:00	*	*	997	996	*	*	*	996
08:00	*	*	918	886	*	*	*	902
09:00	*	*	655	746	*	*	*	700
10:00	*	*	679	672	*	*	*	676
11:00	*	*	663	665	*	*	*	664
12:00 PM	*	*	726	788	*	*	*	757
01:00	*	*	735	751	*	*	*	743
02:00	*	*	867	884	*	*	*	876
03:00	*	*	1051	1022	*	*	*	1036
04:00	*	*	1081	1207	*	*	*	1144
05:00	*	*	1171	1175	*	*	*	1173
06:00	*	*	938	881	*	*	*	910
07:00	*	*	568	599	*	*	*	584
08:00	*	*	428	397	*	*	*	412
09:00	*	*	322	326	*	*	*	324
10:00	*	*	193	183	*	*	*	188
11:00	*	*	103	123	*	*	*	113
Total	0	0	13057	13295	0	0	0	13175
Percentage	0.0%	0.0%	99.1%	100.9%	0.0%	0.0%	0.0%	
AM Peak			07:00	07:00				07:00
Vol.			997	996				996
PM Peak			17:00	16:00				17:00
Vol.			1171	1207				1173

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 Brockton, MA 02301
 508-583-1833

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 Recorder #: Jamar #16
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
09/23/09	0	0	0	4	3	14	9	4	0	0	0	0	0	0	34
01:00	0	0	0	0	1	4	3	6	1	0	0	0	0	0	15
02:00	0	0	0	0	1	4	3	1	0	0	0	0	0	0	9
03:00	0	0	0	0	2	4	6	1	0	0	0	0	0	0	13
04:00	0	0	0	0	0	12	6	2	1	0	0	0	0	0	21
05:00	2	2	0	4	4	29	25	5	0	1	0	0	0	0	72
06:00	10	1	2	4	40	110	80	10	1	0	0	0	0	0	258
07:00	22	0	1	7	37	214	122	15	0	0	0	0	0	0	418
08:00	25	2	2	22	62	161	111	20	2	0	0	0	0	0	407
09:00	14	1	7	22	51	120	98	25	1	0	0	0	0	0	339
10:00	14	1	4	23	57	134	94	13	3	0	0	0	0	0	343
11:00	8	1	3	17	46	112	123	17	2	0	0	0	0	0	329
12 PM	6	1	2	10	55	149	127	24	1	0	0	0	0	0	375
13:00	19	1	7	20	51	149	106	24	2	0	0	0	0	0	379
14:00	15	3	4	22	65	151	133	16	2	0	0	0	0	0	411
15:00	31	3	5	28	98	230	165	24	2	0	0	0	0	0	586
16:00	20	5	15	19	102	240	138	27	1	0	0	0	0	0	567
17:00	33	0	1	6	52	280	215	22	1	0	0	0	0	0	610
18:00	20	0	0	11	43	204	194	20	1	0	0	0	0	0	493
19:00	8	1	1	1	32	138	108	16	1	0	0	0	0	0	306
20:00	10	0	0	2	27	87	69	14	1	0	0	0	0	0	210
21:00	2	0	0	1	9	74	53	12	1	0	0	0	0	0	152
22:00	3	0	0	0	5	37	33	8	4	0	0	0	0	0	90
23:00	1	0	1	0	2	13	28	3	0	0	1	0	0	0	49
Total	263	22	55	223	845	2670	2049	329	28	1	1	0	0	0	6486

Daily
 15th Percentile : 33 MPH
 50th Percentile : 39 MPH
 85th Percentile : 44 MPH
 95th Percentile : 46 MPH

 Mean Speed(Average) : 38 MPH
 10 MPH Pace Speed : 36-45 MPH
 Number in Pace : 4719
 Percent in Pace : 72.8%
 Number of Vehicles > 35 MPH : 5078
 Percent of Vehicles > 35 MPH : 78.3%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #16
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
09/24/09	0	1	0	0	6	12	13	2	0	0	0	0	0	0	34
01:00	0	0	0	0	0	9	5	3	0	0	0	0	0	0	17
02:00	0	0	0	0	2	8	6	2	0	0	0	0	0	1	19
03:00	0	0	0	0	1	1	4	2	0	0	0	0	0	0	8
04:00	0	0	0	0	2	9	14	5	0	1	0	0	0	0	31
05:00	3	0	2	1	11	30	19	8	1	0	0	0	0	0	75
06:00	10	0	4	8	29	116	83	16	2	0	0	0	0	0	268
07:00	21	4	7	9	42	163	127	22	5	0	0	0	0	0	400
08:00	21	2	7	12	60	181	125	21	0	0	0	0	0	0	429
09:00	23	1	7	19	58	141	82	22	2	0	0	0	0	0	355
10:00	11	0	2	16	50	126	99	23	2	0	0	0	0	0	329
11:00	6	2	3	8	33	153	118	23	0	0	0	0	0	0	346
12 PM	15	2	5	21	60	145	131	32	1	0	0	0	0	0	412
13:00	16	0	10	15	61	118	142	16	1	1	0	0	0	0	380
14:00	18	5	10	25	103	183	96	22	1	1	1	0	0	0	465
15:00	34	5	15	24	92	227	105	14	1	0	0	0	0	0	517
16:00	47	11	18	27	150	285	120	2	0	0	0	0	0	0	660
17:00	27	0	1	15	75	308	193	21	1	0	0	0	0	0	641
18:00	14	0	3	7	51	194	181	12	1	0	0	0	0	0	463
19:00	10	0	0	2	36	136	82	7	1	0	0	0	0	0	274
20:00	3	0	0	0	23	70	70	17	0	0	0	0	0	0	183
21:00	2	1	0	1	14	76	71	12	1	0	0	0	0	0	178
22:00	1	0	1	1	3	23	38	9	1	0	0	0	0	0	77
23:00	0	0	0	1	2	25	20	6	0	0	0	0	0	0	54
Total	282	34	95	212	964	2739	1944	319	21	3	1	0	0	1	6615

Daily
 15th Percentile : 32 MPH
 50th Percentile : 39 MPH
 85th Percentile : 44 MPH
 95th Percentile : 46 MPH

 Mean Speed(Average) : 37 MPH
 10 MPH Pace Speed : 36-45 MPH
 Number in Pace : 4683
 Percent in Pace : 70.8%
 Number of Vehicles > 35 MPH : 5028
 Percent of Vehicles > 35 MPH : 76.0%

Grand Total	545	56	150	435	1809	5409	3993	648	49	4	2	0	0	1	13101
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Overall
 15th Percentile : 33 MPH
 50th Percentile : 39 MPH
 85th Percentile : 44 MPH
 95th Percentile : 46 MPH

 Mean Speed(Average) : 38 MPH
 10 MPH Pace Speed : 36-45 MPH
 Number in Pace : 9402
 Percent in Pace : 71.8%
 Number of Vehicles > 35 MPH : 10106
 Percent of Vehicles > 35 MPH : 77.1%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #16
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

WB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
09/23/09	0	0	0	0	2	9	6	2	0	0	0	0	0	0	19
01:00	0	0	0	1	2	6	4	1	0	0	0	0	0	0	14
02:00	0	0	0	1	0	6	2	0	1	0	0	0	0	0	10
03:00	0	0	0	0	2	5	1	1	0	1	1	0	0	0	11
04:00	0	0	1	0	7	26	23	3	1	0	0	0	0	0	61
05:00	2	0	1	2	22	59	48	6	1	0	0	0	0	0	141
06:00	8	3	6	2	82	148	32	2	1	0	0	0	0	0	284
07:00	29	0	0	12	146	300	89	3	0	0	0	0	0	0	579
08:00	27	0	5	47	117	237	73	5	0	0	0	0	0	0	511
09:00	9	1	1	22	84	142	52	5	0	0	0	0	0	0	316
10:00	14	1	2	17	69	170	61	2	0	0	0	0	0	0	336
11:00	16	0	1	18	86	153	57	1	2	0	0	0	0	0	334
12 PM	15	1	3	13	64	167	79	9	0	0	0	0	0	0	351
13:00	20	0	2	23	72	171	61	7	0	0	0	0	0	0	356
14:00	21	3	2	29	164	178	54	4	1	0	0	0	0	0	456
15:00	31	1	7	34	117	201	65	9	0	0	0	0	0	0	465
16:00	30	0	4	23	143	241	64	9	0	0	0	0	0	0	514
17:00	45	1	10	15	106	294	79	10	1	0	0	0	0	0	561
18:00	23	3	1	12	81	226	91	8	0	0	0	0	0	0	445
19:00	6	3	1	8	45	149	46	4	0	0	0	0	0	0	262
20:00	6	1	1	1	33	113	57	5	0	0	1	0	0	0	218
21:00	1	0	1	1	23	102	41	1	0	0	0	0	0	0	170
22:00	1	0	0	0	14	54	32	2	0	0	0	0	0	0	103
23:00	0	0	0	0	3	30	16	5	0	0	0	0	0	0	54
Total	304	18	49	281	1484	3187	1133	104	8	1	2	0	0	0	6571

Daily
 15th Percentile : 32 MPH
 50th Percentile : 37 MPH
 85th Percentile : 42 MPH
 95th Percentile : 45 MPH

 Mean Speed(Average) : 36 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 4671
 Percent in Pace : 71.1%
 Number of Vehicles > 35 MPH : 4435
 Percent of Vehicles > 35 MPH : 67.5%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #16
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
09/24/09	0	0	1	0	1	14	7	0	0	0	0	0	0	0	23
01:00	0	0	0	1	1	12	3	1	0	0	0	0	0	0	18
02:00	0	0	0	0	2	7	3	0	0	0	0	0	0	0	12
03:00	0	0	0	0	2	6	4	1	0	0	0	0	0	0	13
04:00	0	0	0	1	4	23	22	3	0	0	0	0	0	0	53
05:00	1	0	1	3	11	79	41	7	1	0	0	0	0	0	144
06:00	7	3	5	7	61	134	59	3	0	0	0	0	0	0	279
07:00	32	0	1	12	164	317	66	4	0	0	0	0	0	0	596
08:00	18	0	5	24	130	207	69	4	0	0	0	0	0	0	457
09:00	19	2	6	15	116	177	51	5	0	0	0	0	0	0	391
10:00	13	1	4	20	72	184	47	1	0	1	0	0	0	0	343
11:00	12	0	2	11	54	159	74	7	0	0	0	0	0	0	319
12 PM	13	1	6	12	100	168	69	6	1	0	0	0	0	0	376
13:00	25	1	3	15	119	153	49	6	0	0	0	0	0	0	371
14:00	26	1	10	53	141	152	34	2	0	0	0	0	0	0	419
15:00	33	1	2	21	182	228	30	7	1	0	0	0	0	0	505
16:00	43	0	10	35	166	249	43	1	0	0	0	0	0	0	547
17:00	41	0	3	13	159	255	56	7	0	0	0	0	0	0	534
18:00	23	1	3	16	92	200	79	4	0	0	0	0	0	0	418
19:00	13	0	1	7	89	163	47	4	1	0	0	0	0	0	325
20:00	4	0	0	1	47	107	52	3	0	0	0	0	0	0	214
21:00	2	0	0	1	18	74	50	3	0	0	0	0	0	0	148
22:00	3	0	1	1	10	54	31	4	1	1	0	0	0	0	106
23:00	0	1	0	3	8	28	25	4	0	0	0	0	0	0	69
Total	328	12	64	272	1749	3150	1011	87	5	2	0	0	0	0	6680

Daily
 15th Percentile : 31 MPH
 50th Percentile : 37 MPH
 85th Percentile : 41 MPH
 95th Percentile : 44 MPH
 Mean Speed(Average) : 36 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 4899
 Percent in Pace : 73.3%
 Number of Vehicles > 35 MPH : 4255
 Percent of Vehicles > 35 MPH : 63.7%

Grand Total	632	30	113	553	3233	6337	2144	191	13	3	2	0	0	0	13251
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Overall
 15th Percentile : 32 MPH
 50th Percentile : 37 MPH
 85th Percentile : 41 MPH
 95th Percentile : 44 MPH
 Mean Speed(Average) : 36 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 9570
 Percent in Pace : 72.2%
 Number of Vehicles > 35 MPH : 8690
 Percent of Vehicles > 35 MPH : 65.6%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #16
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

EB, WB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
09/23/09	0	0	0	4	5	23	15	6	0	0	0	0	0	0	53
01:00	0	0	0	1	3	10	7	7	1	0	0	0	0	0	29
02:00	0	0	0	1	1	10	5	1	1	0	0	0	0	0	19
03:00	0	0	0	0	4	9	7	2	0	1	1	0	0	0	24
04:00	0	0	1	0	7	38	29	5	2	0	0	0	0	0	82
05:00	4	2	1	6	26	88	73	11	1	1	0	0	0	0	213
06:00	18	4	8	6	122	258	112	12	2	0	0	0	0	0	542
07:00	51	0	1	19	183	514	211	18	0	0	0	0	0	0	997
08:00	52	2	7	69	179	398	184	25	2	0	0	0	0	0	918
09:00	23	2	8	44	135	262	150	30	1	0	0	0	0	0	655
10:00	28	2	6	40	126	304	155	15	3	0	0	0	0	0	679
11:00	24	1	4	35	132	265	180	18	4	0	0	0	0	0	663
12 PM	21	2	5	23	119	316	206	33	1	0	0	0	0	0	726
13:00	39	1	9	43	123	320	167	31	2	0	0	0	0	0	735
14:00	36	6	6	51	229	329	187	20	3	0	0	0	0	0	867
15:00	62	4	12	62	215	431	230	33	2	0	0	0	0	0	1051
16:00	50	5	19	42	245	481	202	36	1	0	0	0	0	0	1081
17:00	78	1	11	21	158	574	294	32	2	0	0	0	0	0	1171
18:00	43	3	1	23	124	430	285	28	1	0	0	0	0	0	938
19:00	14	4	2	9	77	287	154	20	1	0	0	0	0	0	568
20:00	16	1	1	3	60	200	126	19	1	0	1	0	0	0	428
21:00	3	0	1	2	32	176	94	13	1	0	0	0	0	0	322
22:00	4	0	0	0	19	91	65	10	4	0	0	0	0	0	193
23:00	1	0	1	0	5	43	44	8	0	0	1	0	0	0	103
Total	567	40	104	504	2329	5857	3182	433	36	2	3	0	0	0	13057

Daily
 15th Percentile : 32 MPH
 50th Percentile : 38 MPH
 85th Percentile : 43 MPH
 95th Percentile : 45 MPH

 Mean Speed(Average) : 37 MPH
 10 MPH Pace Speed : 36-45 MPH
 Number in Pace : 9039
 Percent in Pace : 69.2%
 Number of Vehicles > 35 MPH : 9513
 Percent of Vehicles > 35 MPH : 72.9%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #16
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

EB, WB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
09/24/09	0	1	1	0	7	26	20	2	0	0	0	0	0	0	57
01:00	0	0	0	1	1	21	8	4	0	0	0	0	0	0	35
02:00	0	0	0	0	4	15	9	2	0	0	0	0	0	1	31
03:00	0	0	0	0	3	7	8	3	0	0	0	0	0	0	21
04:00	0	0	0	1	6	32	36	8	0	1	0	0	0	0	84
05:00	4	0	3	4	22	109	60	15	2	0	0	0	0	0	219
06:00	17	3	9	15	90	250	142	19	2	0	0	0	0	0	547
07:00	53	4	8	21	206	480	193	26	5	0	0	0	0	0	996
08:00	39	2	12	36	190	388	194	25	0	0	0	0	0	0	886
09:00	42	3	13	34	174	318	133	27	2	0	0	0	0	0	746
10:00	24	1	6	36	122	310	146	24	2	1	0	0	0	0	672
11:00	18	2	5	19	87	312	192	30	0	0	0	0	0	0	665
12 PM	28	3	11	33	160	313	200	38	2	0	0	0	0	0	788
13:00	41	1	13	30	180	271	191	22	1	1	0	0	0	0	751
14:00	44	6	20	78	244	335	130	24	1	1	1	0	0	0	884
15:00	67	6	17	45	274	455	135	21	2	0	0	0	0	0	1022
16:00	90	11	28	62	316	534	163	3	0	0	0	0	0	0	1207
17:00	68	0	4	28	234	563	249	28	1	0	0	0	0	0	1175
18:00	37	1	6	23	143	394	260	16	1	0	0	0	0	0	881
19:00	23	0	1	9	125	299	129	11	2	0	0	0	0	0	599
20:00	7	0	0	1	70	177	122	20	0	0	0	0	0	0	397
21:00	4	1	0	2	32	150	121	15	1	0	0	0	0	0	326
22:00	4	0	2	2	13	77	69	13	2	1	0	0	0	0	183
23:00	0	1	0	4	10	53	45	10	0	0	0	0	0	0	123
Total	610	46	159	484	2713	5889	2955	406	26	5	1	0	0	1	13295

Daily
 15th Percentile : 32 MPH
 50th Percentile : 38 MPH
 85th Percentile : 43 MPH
 95th Percentile : 45 MPH
 Mean Speed(Average) : 36 MPH
 10 MPH Pace Speed : 36-45 MPH
 Number in Pace : 8844
 Percent in Pace : 66.5%
 Number of Vehicles > 35 MPH : 9283
 Percent of Vehicles > 35 MPH : 69.8%

Grand Total	1177	86	263	988	5042	11746	6137	839	62	7	4	0	0	1	26352
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Overall
 15th Percentile : 32 MPH
 50th Percentile : 38 MPH
 85th Percentile : 43 MPH
 95th Percentile : 45 MPH
 Mean Speed(Average) : 37 MPH
 10 MPH Pace Speed : 36-45 MPH
 Number in Pace : 17883
 Percent in Pace : 67.9%
 Number of Vehicles > 35 MPH : 18796
 Percent of Vehicles > 35 MPH : 71.3%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #16
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/23/09	0	22	9	1	2	0	0	0	0	0	0	0	0	34	3
01:00	1	9	5	0	0	0	0	0	0	0	0	0	0	15	0
02:00	0	5	3	0	1	0	0	0	0	0	0	0	0	9	1
03:00	0	6	5	0	2	0	0	0	0	0	0	0	0	13	2
04:00	0	11	5	1	4	0	0	0	0	0	0	0	0	21	5
05:00	0	43	18	3	6	1	0	0	1	0	0	0	0	72	11
06:00	3	149	72	4	23	1	0	3	3	0	0	0	0	258	34
07:00	4	226	125	8	36	6	1	5	6	0	0	0	0	417	62
08:00	4	218	139	6	32	3	1	1	1	1	0	0	0	406	45
09:00	4	211	93	2	21	1	0	3	4	0	0	0	0	339	31
10:00	2	201	97	3	34	2	0	4	0	0	0	0	0	343	43
11:00	1	200	94	1	24	1	0	6	2	0	0	0	0	329	34
12 PM	1	227	107	4	31	2	0	3	0	0	0	0	0	375	40
13:00	5	221	116	3	29	4	1	0	0	0	0	0	0	379	37
14:00	8	252	115	4	22	3	0	1	5	0	0	0	0	410	35
15:00	5	355	176	1	44	3	0	0	1	0	0	0	0	585	49
16:00	8	319	178	2	49	4	0	3	2	1	0	0	0	566	61
17:00	5	388	176	0	37	0	0	1	2	0	0	0	0	609	40
18:00	8	313	122	0	47	0	0	2	0	0	0	0	0	492	49
19:00	11	188	85	0	18	4	0	0	0	0	0	0	0	306	22
20:00	2	143	52	0	13	0	0	0	0	0	0	0	0	210	13
21:00	3	108	33	1	7	0	0	0	0	0	0	0	0	152	8
22:00	0	65	23	0	2	0	0	0	0	0	0	0	0	90	2
23:00	1	32	13	0	3	0	0	0	0	0	0	0	0	49	3
Total	76	3912	1861	44	487	35	3	32	27	2	0	0	0	6479	630
Percent	1.2%	60.4%	28.7%	0.7%	7.5%	0.5%	0.0%	0.5%	0.4%	0.0%	0.0%	0.0%	0.0%		9.7%
AM Peak	07:00	07:00	08:00	07:00	07:00	07:00	07:00	11:00	07:00	08:00				07:00	07:00
Vol.	4	226	139	8	36	6	1	6	6	1				417	62
PM Peak	19:00	17:00	16:00	12:00	16:00	13:00	13:00	12:00	14:00	16:00				17:00	16:00
Vol.	11	388	178	4	49	4	1	3	5	1				609	61

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #16
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/24/09	0	24	8	0	1	0	0	1	0	0	0	0	0	34	2
01:00	0	15	1	0	1	0	0	0	0	0	0	0	0	17	1
02:00	0	14	4	0	1	0	0	0	0	0	0	0	0	19	1
03:00	0	5	1	1	1	0	0	0	0	0	0	0	0	8	2
04:00	0	14	9	2	6	0	0	0	0	0	0	0	0	31	8
05:00	0	40	25	3	5	0	0	2	0	0	0	0	0	75	10
06:00	3	156	71	3	30	1	0	3	1	0	0	0	0	268	38
07:00	2	231	112	9	38	2	1	4	0	0	0	0	0	399	54
08:00	2	229	151	8	35	1	0	2	0	0	0	0	0	428	46
09:00	0	210	106	4	29	2	0	2	1	0	0	0	0	354	38
10:00	7	194	91	2	30	3	0	2	0	0	0	0	0	329	37
11:00	5	196	106	3	28	4	0	4	0	0	0	0	0	346	39
12 PM	10	225	134	3	27	5	0	4	3	0	0	0	0	411	42
13:00	7	240	97	2	28	3	0	2	0	0	1	0	0	380	36
14:00	2	269	141	9	37	0	0	5	1	0	0	0	0	464	52
15:00	4	309	147	4	42	3	0	5	2	0	0	0	0	516	56
16:00	4	413	182	5	51	2	0	0	2	0	0	0	0	659	60
17:00	7	395	180	3	49	3	0	1	1	1	0	0	0	640	58
18:00	7	282	122	1	47	2	0	1	1	0	0	0	0	463	52
19:00	5	170	82	0	15	1	0	1	0	0	0	0	0	274	17
20:00	1	113	58	0	10	0	0	1	0	0	0	0	0	183	11
21:00	0	113	53	0	11	0	0	1	0	0	0	0	0	178	12
22:00	0	54	15	0	7	0	0	0	1	0	0	0	0	77	8
23:00	1	39	9	0	5	0	0	0	0	0	0	0	0	54	5
Total	67	3950	1905	62	534	32	1	41	13	1	1	0	0	6607	685
Percent	1.0%	59.8%	28.8%	0.9%	8.1%	0.5%	0.0%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%		10.4%
AM Peak	10:00	07:00	08:00	07:00	07:00	11:00	07:00	07:00	06:00					08:00	07:00
Vol.	7	231	151	9	38	4	1	4	1					428	54
PM Peak	12:00	16:00	16:00	14:00	16:00	12:00		14:00	12:00	17:00	13:00			16:00	16:00
Vol.	10	413	182	9	51	5		5	3	1	1			659	60
Grand Total	143	7862	3766	106	1021	67	4	73	40	3	1	0	0	13086	1315
Percent	1.1%	60.1%	28.8%	0.8%	7.8%	0.5%	0.0%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%		10.0%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
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 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/23/09	0	12	7	0	0	0	0	0	0	0	0	0	0	19	0
01:00	0	10	4	0	0	0	0	0	0	0	0	0	0	14	0
02:00	0	7	3	0	0	0	0	0	0	0	0	0	0	10	0
03:00	0	6	4	0	1	0	0	0	0	0	0	0	0	11	1
04:00	0	31	25	1	4	0	0	0	0	0	0	0	0	61	5
05:00	2	77	50	1	10	0	0	1	0	0	0	0	0	141	12
06:00	3	172	84	4	19	1	1	0	0	0	0	0	0	284	25
07:00	5	399	137	5	26	2	0	4	0	0	0	0	0	578	37
08:00	3	347	128	5	20	4	0	2	1	0	0	0	0	510	32
09:00	2	219	71	6	12	3	0	1	2	0	0	0	0	316	24
10:00	2	216	92	2	19	1	0	2	2	0	0	0	0	336	26
11:00	0	201	97	4	23	3	0	4	1	0	0	0	0	333	35
12 PM	3	213	102	4	19	3	0	5	1	0	0	0	0	350	32
13:00	6	239	83	2	16	2	0	4	3	0	0	0	0	355	27
14:00	6	291	116	11	21	8	0	0	2	0	0	0	0	455	42
15:00	4	296	132	3	21	5	0	1	2	0	0	0	0	464	32
16:00	7	320	155	0	19	5	0	1	5	1	0	0	0	513	31
17:00	10	377	139	1	26	1	0	3	2	0	0	0	0	559	33
18:00	14	307	103	2	15	0	0	1	1	0	0	0	0	443	19
19:00	1	195	54	0	12	0	0	0	0	0	0	0	0	262	12
20:00	5	163	44	0	6	0	0	0	0	0	0	0	0	218	6
21:00	1	130	31	1	6	1	0	0	0	0	0	0	0	170	8
22:00	1	77	22	0	2	1	0	0	0	0	0	0	0	103	3
23:00	0	45	7	0	2	0	0	0	0	0	0	0	0	54	2
Total	75	4350	1690	52	299	40	1	29	22	1	0	0	0	6559	444
Percent	1.1%	66.3%	25.8%	0.8%	4.6%	0.6%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%		6.8%
AM Peak	07:00	07:00	07:00	09:00	07:00	08:00	06:00	07:00	09:00					07:00	07:00
Vol.	5	399	137	6	26	4	1	4	2					578	37
PM Peak	18:00	17:00	16:00	14:00	17:00	14:00		12:00	16:00	16:00				17:00	14:00
Vol.	14	377	155	11	26	8		5	5	1				559	42

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #16
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

WB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
	09/24/09	0	16	5	1	1	0	0	0	0	0	0	0	0	23	2
	01:00	0	17	1	0	0	0	0	0	0	0	0	0	0	18	0
	02:00	0	6	3	0	0	0	0	3	0	0	0	0	0	12	3
	03:00	0	10	2	0	1	0	0	0	0	0	0	0	0	13	1
	04:00	0	31	17	0	5	0	0	0	0	0	0	0	0	53	5
	05:00	0	75	56	2	10	1	0	0	0	0	0	0	0	144	13
	06:00	2	171	83	4	16	3	0	0	0	0	0	0	0	279	23
	07:00	7	418	139	5	18	2	0	4	1	1	0	0	0	595	31
	08:00	2	300	124	4	18	1	1	4	2	0	0	0	0	456	30
	09:00	1	267	94	6	15	5	0	0	2	0	0	0	0	390	28
	10:00	3	223	84	4	19	4	0	4	2	0	0	0	0	343	33
	11:00	3	211	71	1	28	3	0	1	1	0	0	0	0	319	34
	12 PM	2	239	110	1	17	3	0	3	1	0	0	0	0	376	25
	13:00	3	234	108	2	18	0	0	3	3	0	0	0	0	371	26
	14:00	5	274	106	11	18	3	0	2	0	0	0	0	0	419	34
	15:00	8	322	142	9	19	1	0	0	2	1	0	0	0	504	32
	16:00	2	368	142	3	28	2	0	0	1	0	0	0	0	546	34
	17:00	4	370	124	0	32	2	0	0	0	0	0	0	0	532	34
	18:00	0	287	111	2	14	1	0	1	0	0	0	0	0	416	18
	19:00	2	230	81	0	10	1	0	1	0	0	0	0	0	325	12
	20:00	1	155	54	0	2	2	0	0	0	0	0	0	0	214	4
	21:00	1	118	25	0	4	0	0	0	0	0	0	0	0	148	4
	22:00	0	70	28	0	8	0	0	0	0	0	0	0	0	106	8
	23:00	0	46	17	1	3	0	0	1	1	0	0	0	0	69	6
	Total	46	4458	1727	56	304	34	1	27	16	2	0	0	0	6671	440
	Percent	0.7%	66.8%	25.9%	0.8%	4.6%	0.5%	0.0%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%		6.6%
	AM Peak	07:00	07:00	07:00	09:00	11:00	09:00	08:00	07:00	08:00	07:00				07:00	11:00
	Vol.	7	418	139	6	28	5	1	4	2	1				595	34
	PM Peak	15:00	17:00	15:00	14:00	17:00	12:00		12:00	13:00	15:00				16:00	14:00
	Vol.	8	370	142	11	32	3		3	3	1				546	34
	Grand Total	121	8808	3417	108	603	74	2	56	38	3	0	0	0	13230	884
	Percent	0.9%	66.6%	25.8%	0.8%	4.6%	0.6%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%		6.7%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #16
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

EB, WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/23/09	0	34	16	1	2	0	0	0	0	0	0	0	0	53	3
01:00	1	19	9	0	0	0	0	0	0	0	0	0	0	29	0
02:00	0	12	6	0	1	0	0	0	0	0	0	0	0	19	1
03:00	0	12	9	0	3	0	0	0	0	0	0	0	0	24	3
04:00	0	42	30	2	8	0	0	0	0	0	0	0	0	82	10
05:00	2	120	68	4	16	1	0	1	1	0	0	0	0	213	23
06:00	6	321	156	8	42	2	1	3	3	0	0	0	0	542	59
07:00	9	625	262	13	62	8	1	9	6	0	0	0	0	995	99
08:00	7	565	267	11	52	7	1	3	2	1	0	0	0	916	77
09:00	6	430	164	8	33	4	0	4	6	0	0	0	0	655	55
10:00	4	417	189	5	53	3	0	6	2	0	0	0	0	679	69
11:00	1	401	191	5	47	4	0	10	3	0	0	0	0	662	69
12 PM	4	440	209	8	50	5	0	8	1	0	0	0	0	725	72
13:00	11	460	199	5	45	6	1	4	3	0	0	0	0	734	64
14:00	14	543	231	15	43	11	0	1	7	0	0	0	0	865	77
15:00	9	651	308	4	65	8	0	1	3	0	0	0	0	1049	81
16:00	15	639	333	2	68	9	0	4	7	2	0	0	0	1079	92
17:00	15	765	315	1	63	1	0	4	4	0	0	0	0	1168	73
18:00	22	620	225	2	62	0	0	3	1	0	0	0	0	935	68
19:00	12	383	139	0	30	4	0	0	0	0	0	0	0	568	34
20:00	7	306	96	0	19	0	0	0	0	0	0	0	0	428	19
21:00	4	238	64	2	13	1	0	0	0	0	0	0	0	322	16
22:00	1	142	45	0	4	1	0	0	0	0	0	0	0	193	5
23:00	1	77	20	0	5	0	0	0	0	0	0	0	0	103	5
Total	151	8262	3551	96	786	75	4	61	49	3	0	0	0	13038	1074
Percent	1.2%	63.4%	27.2%	0.7%	6.0%	0.6%	0.0%	0.5%	0.4%	0.0%	0.0%	0.0%	0.0%		8.2%
AM Peak	07:00	07:00	08:00	07:00	07:00	07:00	06:00	11:00	07:00	08:00				07:00	07:00
Vol.	9	625	267	13	62	8	1	10	6	1				995	99
PM Peak	18:00	17:00	16:00	14:00	16:00	14:00	13:00	12:00	14:00	16:00				17:00	16:00
Vol.	22	765	333	15	68	11	1	8	7	2				1168	92

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #16
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Carver St

EB, WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/24/09	0	40	13	1	2	0	0	1	0	0	0	0	0	57	4
01:00	0	32	2	0	1	0	0	0	0	0	0	0	0	35	1
02:00	0	20	7	0	1	0	0	3	0	0	0	0	0	31	4
03:00	0	15	3	1	2	0	0	0	0	0	0	0	0	21	3
04:00	0	45	26	2	11	0	0	0	0	0	0	0	0	84	13
05:00	0	115	81	5	15	1	0	2	0	0	0	0	0	219	23
06:00	5	327	154	7	46	4	0	3	1	0	0	0	0	547	61
07:00	9	649	251	14	56	4	1	8	1	1	0	0	0	994	85
08:00	4	529	275	12	53	2	1	6	2	0	0	0	0	884	76
09:00	1	477	200	10	44	7	0	2	3	0	0	0	0	744	66
10:00	10	417	175	6	49	7	0	6	2	0	0	0	0	672	70
11:00	8	407	177	4	56	7	0	5	1	0	0	0	0	665	73
12 PM	12	464	244	4	44	8	0	7	4	0	0	0	0	787	67
13:00	10	474	205	4	46	3	0	5	3	0	1	0	0	751	62
14:00	7	543	247	20	55	3	0	7	1	0	0	0	0	883	86
15:00	12	631	289	13	61	4	0	5	4	1	0	0	0	1020	88
16:00	6	781	324	8	79	4	0	0	3	0	0	0	0	1205	94
17:00	11	765	304	3	81	5	0	1	1	1	0	0	0	1172	92
18:00	7	569	233	3	61	3	0	2	1	0	0	0	0	879	70
19:00	7	400	163	0	25	2	0	2	0	0	0	0	0	599	29
20:00	2	268	112	0	12	2	0	1	0	0	0	0	0	397	15
21:00	1	231	78	0	15	0	0	1	0	0	0	0	0	326	16
22:00	0	124	43	0	15	0	0	0	1	0	0	0	0	183	16
23:00	1	85	26	1	8	0	0	1	1	0	0	0	0	123	11
Total	113	8408	3632	118	838	66	2	68	29	3	1	0	0	13278	1125
Percent	0.9%	63.3%	27.4%	0.9%	6.3%	0.5%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%		8.5%
AM Peak	10:00	07:00	08:00	07:00	07:00	09:00	07:00	07:00	09:00	07:00				07:00	07:00
Vol.	10	649	275	14	56	7	1	8	3	1				994	85
PM Peak	12:00	16:00	16:00	14:00	17:00	12:00		12:00	12:00	15:00	13:00			16:00	16:00
Vol.	12	781	324	20	81	8		7	4	1	1			1205	94
Grand Total	264	16670	7183	214	1624	141	6	129	78	6	1	0	0	26316	2199
Percent	1.0%	63.3%	27.3%	0.8%	6.2%	0.5%	0.0%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%		8.4%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

Start Time	21-Sep-09		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	*	*	21	39	29	37	*	*	*	*	*	*	25	38
01:00	*	*	*	*	16	17	18	20	*	*	*	*	*	*	17	18
02:00	*	*	*	*	12	10	13	20	*	*	*	*	*	*	12	15
03:00	*	*	*	*	13	15	16	9	*	*	*	*	*	*	14	12
04:00	*	*	*	*	63	24	53	35	*	*	*	*	*	*	58	30
05:00	*	*	*	*	146	87	147	91	*	*	*	*	*	*	146	89
06:00	*	*	*	*	306	288	298	290	*	*	*	*	*	*	302	289
07:00	*	*	*	*	619	451	621	454	*	*	*	*	*	*	620	452
08:00	*	*	*	*	566	415	495	439	*	*	*	*	*	*	530	427
09:00	*	*	*	*	372	386	445	402	*	*	*	*	*	*	408	394
10:00	*	*	*	*	374	382	414	402	*	*	*	*	*	*	394	392
11:00	*	*	*	*	385	392	366	403	*	*	*	*	*	*	376	398
12:00 PM	*	*	*	*	403	425	441	484	*	*	*	*	*	*	422	454
01:00	*	*	*	*	443	437	426	424	*	*	*	*	*	*	434	430
02:00	*	*	*	*	518	422	454	487	*	*	*	*	*	*	486	454
03:00	*	*	*	*	516	644	560	581	*	*	*	*	*	*	538	612
04:00	*	*	*	*	579	620	619	678	*	*	*	*	*	*	599	649
05:00	*	*	*	*	629	676	587	676	*	*	*	*	*	*	608	676
06:00	*	*	*	*	498	528	473	535	*	*	*	*	*	*	486	532
07:00	*	*	*	*	311	342	362	306	*	*	*	*	*	*	336	324
08:00	*	*	*	*	253	237	248	199	*	*	*	*	*	*	250	218
09:00	*	*	*	*	204	169	179	193	*	*	*	*	*	*	192	181
10:00	*	*	*	*	116	99	121	92	*	*	*	*	*	*	118	96
11:00	*	*	*	*	66	53	76	66	*	*	*	*	*	*	71	60
Total	0	0	0	0	7429	7158	7461	7323	0	0	0	0	0	0	7442	7240
Day	0	0	0	0	14587		14784		0	0	0	0	0	0	14682	
AM Peak					07:00	07:00	07:00	07:00							07:00	07:00
Vol.					619	451	621	454							620	452
PM Peak					17:00	17:00	16:00	16:00							17:00	17:00
Vol.					629	676	619	678							608	676

Comb. Total 0 0 14587 14784 0 0 0 14682

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

Start Time	21-Sep-09 Mon	22-Sep-09 Tue	23-Sep-09 Wed	24-Sep-09 Thu	25-Sep-09 Fri	26-Sep-09 Sat	27-Sep-09 Sun	Week Average
12:00 AM	*	*	60	66	*	*	*	63
01:00	*	*	33	38	*	*	*	36
02:00	*	*	22	33	*	*	*	28
03:00	*	*	28	25	*	*	*	26
04:00	*	*	87	88	*	*	*	88
05:00	*	*	233	238	*	*	*	236
06:00	*	*	594	588	*	*	*	591
07:00	*	*	1070	1075	*	*	*	1072
08:00	*	*	981	934	*	*	*	958
09:00	*	*	758	847	*	*	*	802
10:00	*	*	756	816	*	*	*	786
11:00	*	*	777	769	*	*	*	773
12:00 PM	*	*	828	925	*	*	*	876
01:00	*	*	880	850	*	*	*	865
02:00	*	*	940	941	*	*	*	940
03:00	*	*	1160	1141	*	*	*	1150
04:00	*	*	1199	1297	*	*	*	1248
05:00	*	*	1305	1263	*	*	*	1284
06:00	*	*	1026	1008	*	*	*	1017
07:00	*	*	653	668	*	*	*	660
08:00	*	*	490	447	*	*	*	468
09:00	*	*	373	372	*	*	*	372
10:00	*	*	215	213	*	*	*	214
11:00	*	*	119	142	*	*	*	130
Total	0	0	14587	14784	0	0	0	14683
Percentage	0.0%	0.0%	99.3%	100.7%	0.0%	0.0%	0.0%	
AM Peak			07:00	07:00				07:00
Vol.			1070	1075				1072
PM Peak			17:00	16:00				17:00
Vol.			1305	1297				1284

Old Colony Planning Council
 70 School Street
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 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
09/23/09	0	0	1	2	9	6	2	0	0	0	0	0	1	0	21
01:00	0	0	0	1	7	7	1	0	0	0	0	0	0	0	16
02:00	0	0	0	2	5	2	3	0	0	0	0	0	0	0	12
03:00	0	0	0	3	4	3	2	1	0	0	0	0	0	0	13
04:00	0	0	1	7	34	15	6	0	0	0	0	0	0	0	63
05:00	1	0	0	11	57	69	8	0	0	0	0	0	0	0	146
06:00	21	3	10	52	145	69	6	0	0	0	0	0	0	0	306
07:00	36	24	46	149	292	68	4	0	0	0	0	0	0	0	619
08:00	76	95	134	115	100	43	3	0	0	0	0	0	0	0	566
09:00	18	10	29	126	126	62	1	0	0	0	0	0	0	0	372
10:00	25	1	17	88	196	45	2	0	0	0	0	0	0	0	374
11:00	24	15	30	122	162	30	2	0	0	0	0	0	0	0	385
12 PM	16	8	32	114	166	60	7	0	0	0	0	0	0	0	403
13:00	32	17	38	107	194	53	2	0	0	0	0	0	0	0	443
14:00	84	92	105	106	107	22	2	0	0	0	0	0	0	0	518
15:00	48	12	43	156	216	39	2	0	0	0	0	0	0	0	516
16:00	74	38	56	126	227	54	4	0	0	0	0	0	0	0	579
17:00	48	24	59	192	241	64	1	0	0	0	0	0	0	0	629
18:00	33	13	51	148	199	52	2	0	0	0	0	0	0	0	498
19:00	13	1	19	112	127	36	3	0	0	0	0	0	0	0	311
20:00	7	0	6	43	153	39	5	0	0	0	0	0	0	0	253
21:00	4	0	6	37	97	52	7	0	1	0	0	0	0	0	204
22:00	0	0	1	15	57	39	4	0	0	0	0	0	0	0	116
23:00	0	0	2	4	27	29	3	0	1	0	0	0	0	0	66
Total	560	353	686	1838	2948	958	82	1	2	0	0	0	1	0	7429

Daily
 15th Percentile : 22 MPH
 50th Percentile : 31 MPH
 85th Percentile : 35 MPH
 95th Percentile : 39 MPH

 Mean Speed(Average) : 29 MPH
 10 MPH Pace Speed : 26-35 MPH
 Number in Pace : 4786
 Percent in Pace : 64.4%
 Number of Vehicles > 35 MPH : 1044
 Percent of Vehicles > 35 MPH : 14.1%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

WB

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	999	Total
	15	20	25	30	35	40	45	50	55	60	65	70	75	76		
09/24/09	0	0	0	4	11	12	2	0	0	0	0	0	0	0	0	29
01:00	0	0	0	3	10	5	0	0	0	0	0	0	0	0	0	18
02:00	0	0	0	3	6	4	0	0	0	0	0	0	0	0	0	13
03:00	0	0	0	1	7	4	3	0	0	0	1	0	0	0	0	16
04:00	1	1	0	5	15	28	2	1	0	0	0	0	0	0	0	53
05:00	2	0	1	11	67	61	4	1	0	0	0	0	0	0	0	147
06:00	20	9	7	58	138	61	4	1	0	0	0	0	0	0	0	298
07:00	25	23	50	160	281	79	3	0	0	0	0	0	0	0	0	621
08:00	71	88	99	95	106	34	2	0	0	0	0	0	0	0	0	495
09:00	26	15	47	116	161	74	6	0	0	0	0	0	0	0	0	445
10:00	46	21	22	121	144	53	7	0	0	0	0	0	0	0	0	414
11:00	20	9	23	63	166	74	11	0	0	0	0	0	0	0	0	366
12 PM	19	12	44	101	190	70	4	0	1	0	0	0	0	0	0	441
13:00	38	5	38	100	174	67	4	0	0	0	0	0	0	0	0	426
14:00	68	85	100	97	76	25	3	0	0	0	0	0	0	0	0	454
15:00	49	21	51	165	213	57	4	0	0	0	0	0	0	0	0	560
16:00	71	41	73	184	209	39	2	0	0	0	0	0	0	0	0	619
17:00	61	28	65	156	199	69	9	0	0	0	0	0	0	0	0	587
18:00	25	3	18	111	242	71	3	0	0	0	0	0	0	0	0	473
19:00	15	2	18	60	187	75	5	0	0	0	0	0	0	0	0	362
20:00	7	1	2	31	137	61	8	1	0	0	0	0	0	0	0	248
21:00	6	0	1	12	82	76	2	0	0	0	0	0	0	0	0	179
22:00	1	0	1	3	59	45	9	2	0	1	0	0	0	0	0	121
23:00	0	0	0	3	32	31	10	0	0	0	0	0	0	0	0	76
Total	571	364	660	1663	2912	1175	107	6	1	1	1	0	1	0	0	7461

Daily
 15th Percentile : 22 MPH
 50th Percentile : 31 MPH
 85th Percentile : 36 MPH
 95th Percentile : 39 MPH

 Mean Speed(Average) : 29 MPH
 10 MPH Pace Speed : 26-35 MPH
 Number in Pace : 4575
 Percent in Pace : 61.3%
 Number of Vehicles > 35 MPH : 1291
 Percent of Vehicles > 35 MPH : 17.3%

Grand Total	1131	717	1346	3501	5860	2133	189	7	3	1	1	0	1	0	14890
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Overall
 15th Percentile : 22 MPH
 50th Percentile : 31 MPH
 85th Percentile : 36 MPH
 95th Percentile : 39 MPH

 Mean Speed(Average) : 29 MPH
 10 MPH Pace Speed : 26-35 MPH
 Number in Pace : 9361
 Percent in Pace : 62.9%
 Number of Vehicles > 35 MPH : 2335
 Percent of Vehicles > 35 MPH : 15.7%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
09/23/09	0	0	0	3	17	11	8	0	0	0	0	0	0	0	39
01:00	0	0	0	1	5	6	4	1	0	0	0	0	0	0	17
02:00	0	0	0	1	6	2	1	0	0	0	0	0	0	0	10
03:00	0	0	0	2	5	5	3	0	0	0	0	0	0	0	15
04:00	0	0	0	2	12	8	1	1	0	0	0	0	0	0	24
05:00	2	0	1	1	44	30	7	2	0	0	0	0	0	0	87
06:00	12	3	4	32	155	75	6	1	0	0	0	0	0	0	288
07:00	28	1	14	91	231	78	8	0	0	0	0	0	0	0	451
08:00	29	48	106	103	97	29	2	1	0	0	0	0	0	0	415
09:00	20	1	21	74	170	90	9	0	1	0	0	0	0	0	386
10:00	16	2	15	68	193	82	6	0	0	0	0	0	0	0	382
11:00	20	8	23	88	156	89	8	0	0	0	0	0	0	0	392
12 PM	17	1	22	118	182	78	7	0	0	0	0	0	0	0	425
13:00	17	1	23	113	193	83	7	0	0	0	0	0	0	0	437
14:00	28	15	98	122	118	38	3	0	0	0	0	0	0	0	422
15:00	45	14	53	191	247	90	3	1	0	0	0	0	0	0	644
16:00	43	4	38	186	248	91	10	0	0	0	0	0	0	0	620
17:00	44	2	40	121	330	134	5	0	0	0	0	0	0	0	676
18:00	31	3	13	95	247	135	4	0	0	0	0	0	0	0	528
19:00	14	1	14	83	170	55	5	0	0	0	0	0	0	0	342
20:00	11	1	6	57	112	45	4	0	1	0	0	0	0	0	237
21:00	3	0	3	23	85	50	5	0	0	0	0	0	0	0	169
22:00	0	0	0	5	43	40	10	1	0	0	0	0	0	0	99
23:00	0	0	0	6	23	20	3	0	1	0	0	0	0	0	53
Total	380	105	494	1586	3089	1364	129	8	3	0	0	0	0	0	7158

Daily
 15th Percentile : 26 MPH
 50th Percentile : 32 MPH
 85th Percentile : 37 MPH
 95th Percentile : 40 MPH

 Mean Speed(Average) : 31 MPH
 10 MPH Pace Speed : 26-35 MPH
 Number in Pace : 4675
 Percent in Pace : 65.3%
 Number of Vehicles > 35 MPH : 1504
 Percent of Vehicles > 35 MPH : 21.0%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
09/24/09	0	0	0	2	19	13	3	0	0	0	0	0	0	0	37
01:00	1	0	0	0	11	7	1	0	0	0	0	0	0	0	20
02:00	0	0	0	0	7	8	3	0	0	0	0	2	0	0	20
03:00	0	0	0	0	4	3	2	0	0	0	0	0	0	0	9
04:00	1	0	0	1	11	16	5	0	1	0	0	0	0	0	35
05:00	5	0	1	5	40	33	6	1	0	0	0	0	0	0	91
06:00	18	2	13	34	146	69	8	0	0	0	0	0	0	0	290
07:00	40	15	21	109	194	73	2	0	0	0	0	0	0	0	454
08:00	31	70	134	110	76	18	0	0	0	0	0	0	0	0	439
09:00	19	3	22	146	164	45	3	0	0	0	0	0	0	0	402
10:00	20	4	34	83	187	68	6	0	0	0	0	0	0	0	402
11:00	18	1	18	74	195	89	8	0	0	0	0	0	0	0	403
12 PM	22	3	19	99	239	92	10	0	0	0	0	0	0	0	484
13:00	23	5	36	99	184	73	4	0	0	0	0	0	0	0	424
14:00	38	60	119	104	134	31	1	0	0	0	0	0	0	0	487
15:00	36	7	57	192	237	49	3	0	0	0	0	0	0	0	581
16:00	56	7	87	253	243	32	0	0	0	0	0	0	0	0	678
17:00	43	1	49	212	293	75	3	0	0	0	0	0	0	0	676
18:00	27	0	20	99	269	114	6	0	0	0	0	0	0	0	535
19:00	11	0	7	38	206	41	3	0	0	0	0	0	0	0	306
20:00	6	0	1	32	104	53	3	0	0	0	0	0	0	0	199
21:00	9	0	0	24	95	57	7	1	0	0	0	0	0	0	193
22:00	1	0	0	10	38	36	6	1	0	0	0	0	0	0	92
23:00	0	0	0	4	30	27	3	1	1	0	0	0	0	0	66
Total	425	178	638	1730	3126	1122	96	4	2	0	0	2	0	0	7323

Daily
 15th Percentile : 24 MPH
 50th Percentile : 32 MPH
 85th Percentile : 36 MPH
 95th Percentile : 39 MPH
 Mean Speed(Average) : 30 MPH
 10 MPH Pace Speed : 26-35 MPH
 Number in Pace : 4856
 Percent in Pace : 66.3%
 Number of Vehicles > 35 MPH : 1226
 Percent of Vehicles > 35 MPH : 16.7%

Grand Total	805	283	1132	3316	6215	2486	225	12	5	0	0	2	0	0	14481
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Overall
 15th Percentile : 25 MPH
 50th Percentile : 32 MPH
 85th Percentile : 37 MPH
 95th Percentile : 40 MPH
 Mean Speed(Average) : 30 MPH
 10 MPH Pace Speed : 26-35 MPH
 Number in Pace : 9531
 Percent in Pace : 65.8%
 Number of Vehicles > 35 MPH : 2730
 Percent of Vehicles > 35 MPH : 18.9%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

WB, EB

Start Time	15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
09/23/09	0	0	1	5	26	17	10	0	0	0	0	0	1	0	60
01:00	0	0	0	2	12	13	5	1	0	0	0	0	0	0	33
02:00	0	0	0	3	11	4	4	0	0	0	0	0	0	0	22
03:00	0	0	0	5	9	8	5	1	0	0	0	0	0	0	28
04:00	0	0	1	9	46	23	7	1	0	0	0	0	0	0	87
05:00	3	0	1	12	101	99	15	2	0	0	0	0	0	0	233
06:00	33	6	14	84	300	144	12	1	0	0	0	0	0	0	594
07:00	64	25	60	240	523	146	12	0	0	0	0	0	0	0	1070
08:00	105	143	240	218	197	72	5	1	0	0	0	0	0	0	981
09:00	38	11	50	200	296	152	10	0	1	0	0	0	0	0	758
10:00	41	3	32	156	389	127	8	0	0	0	0	0	0	0	756
11:00	44	23	53	210	318	119	10	0	0	0	0	0	0	0	777
12 PM	33	9	54	232	348	138	14	0	0	0	0	0	0	0	828
13:00	49	18	61	220	387	136	9	0	0	0	0	0	0	0	880
14:00	112	107	203	228	225	60	5	0	0	0	0	0	0	0	940
15:00	93	26	96	347	463	129	5	1	0	0	0	0	0	0	1160
16:00	117	42	94	312	475	145	14	0	0	0	0	0	0	0	1199
17:00	92	26	99	313	571	198	6	0	0	0	0	0	0	0	1305
18:00	64	16	64	243	446	187	6	0	0	0	0	0	0	0	1026
19:00	27	2	33	195	297	91	8	0	0	0	0	0	0	0	653
20:00	18	1	12	100	265	84	9	0	1	0	0	0	0	0	490
21:00	7	0	9	60	182	102	12	0	1	0	0	0	0	0	373
22:00	0	0	1	20	100	79	14	1	0	0	0	0	0	0	215
23:00	0	0	2	10	50	49	6	0	2	0	0	0	0	0	119
Total	940	458	1180	3424	6037	2322	211	9	5	0	0	0	1	0	14587

Daily
 15th Percentile : 24 MPH
 50th Percentile : 32 MPH
 85th Percentile : 36 MPH
 95th Percentile : 39 MPH

 Mean Speed(Average) : 30 MPH
 10 MPH Pace Speed : 26-35 MPH
 Number in Pace : 9461
 Percent in Pace : 64.9%
 Number of Vehicles > 35 MPH : 2548
 Percent of Vehicles > 35 MPH : 17.5%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

WB, EB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
09/24/09	0	0	0	6	30	25	5	0	0	0	0	0	0	0	66
01:00	1	0	0	3	21	12	1	0	0	0	0	0	0	0	38
02:00	0	0	0	3	13	12	3	0	0	0	0	2	0	0	33
03:00	0	0	0	1	11	7	5	0	0	0	1	0	0	0	25
04:00	2	1	0	6	26	44	7	1	1	0	0	0	0	0	88
05:00	7	0	2	16	107	94	10	2	0	0	0	0	0	0	238
06:00	38	11	20	92	284	130	12	1	0	0	0	0	0	0	588
07:00	65	38	71	269	475	152	5	0	0	0	0	0	0	0	1075
08:00	102	158	233	205	182	52	2	0	0	0	0	0	0	0	934
09:00	45	18	69	262	325	119	9	0	0	0	0	0	0	0	847
10:00	66	25	56	204	331	121	13	0	0	0	0	0	0	0	816
11:00	38	10	41	137	361	163	19	0	0	0	0	0	0	0	769
12 PM	41	15	63	200	429	162	14	0	1	0	0	0	0	0	925
13:00	61	10	74	199	358	140	8	0	0	0	0	0	0	0	850
14:00	106	145	219	201	210	56	4	0	0	0	0	0	0	0	941
15:00	85	28	108	357	450	106	7	0	0	0	0	0	0	0	1141
16:00	127	48	160	437	452	71	2	0	0	0	0	0	0	0	1297
17:00	104	29	114	368	492	144	12	0	0	0	0	0	0	0	1263
18:00	52	3	38	210	511	185	9	0	0	0	0	0	0	0	1008
19:00	26	2	25	98	393	116	8	0	0	0	0	0	0	0	668
20:00	13	1	3	63	241	114	11	1	0	0	0	0	0	0	447
21:00	15	0	1	36	177	133	9	1	0	0	0	0	0	0	372
22:00	2	0	1	13	97	81	15	3	0	1	0	0	0	0	213
23:00	0	0	0	7	62	58	13	1	1	0	0	0	0	0	142
Total	996	542	1298	3393	6038	2297	203	10	3	1	1	2	0	0	14784

Daily
 15th Percentile : 23 MPH
 50th Percentile : 31 MPH
 85th Percentile : 36 MPH
 95th Percentile : 39 MPH

 Mean Speed(Average) : 30 MPH
 10 MPH Pace Speed : 26-35 MPH
 Number in Pace : 9431
 Percent in Pace : 63.8%
 Number of Vehicles > 35 MPH : 2517
 Percent of Vehicles > 35 MPH : 17.0%

Grand Total	1936	1000	2478	6817	12075	4619	414	19	8	1	1	2	1	0	29371
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Overall
 15th Percentile : 23 MPH
 50th Percentile : 32 MPH
 85th Percentile : 36 MPH
 95th Percentile : 39 MPH

 Mean Speed(Average) : 30 MPH
 10 MPH Pace Speed : 26-35 MPH
 Number in Pace : 18892
 Percent in Pace : 64.3%
 Number of Vehicles > 35 MPH : 5065
 Percent of Vehicles > 35 MPH : 17.2%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/23/09	0	17	3	0	1	0	0	0	0	0	0	0	0	21	1
01:00	0	12	4	0	0	0	0	0	0	0	0	0	0	16	0
02:00	0	9	3	0	0	0	0	0	0	0	0	0	0	12	0
03:00	0	9	3	0	1	0	0	0	0	0	0	0	0	13	1
04:00	0	33	24	1	5	0	0	0	0	0	0	0	0	63	6
05:00	3	85	51	1	5	0	0	1	0	0	0	0	0	146	7
06:00	3	202	83	5	12	0	1	0	0	0	0	0	0	306	18
07:00	2	451	138	6	13	3	0	3	0	1	0	0	0	617	26
08:00	6	405	119	9	16	4	0	4	1	0	0	0	0	564	34
09:00	2	267	74	7	11	6	0	1	2	0	0	1	0	371	28
10:00	5	272	76	2	14	0	0	2	2	0	0	0	0	373	20
11:00	3	259	89	4	22	4	0	2	1	0	0	0	0	384	33
12 PM	3	262	108	5	11	8	0	4	1	0	0	0	0	402	29
13:00	9	312	93	2	14	3	0	6	3	0	0	0	0	442	28
14:00	7	360	104	16	17	9	0	1	2	0	0	0	0	516	45
15:00	9	359	122	2	12	3	0	4	3	0	0	0	0	514	24
16:00	13	400	142	1	12	6	0	3	3	0	0	0	0	580	25
17:00	14	461	130	1	15	1	0	3	2	0	0	0	0	627	22
18:00	15	360	102	2	12	3	0	2	1	0	0	0	0	497	20
19:00	3	246	50	0	11	0	0	1	0	0	0	0	0	311	12
20:00	4	207	37	0	4	1	0	0	0	0	0	0	0	253	5
21:00	1	165	36	0	0	2	0	0	0	0	0	0	0	204	2
22:00	1	93	21	0	1	0	0	0	0	0	0	0	0	116	1
23:00	0	56	9	0	1	0	0	0	0	0	0	0	0	66	1
Total	103	5302	1621	64	210	53	1	37	21	1	0	1	0	7414	388
Percent	1.4%	71.5%	21.9%	0.9%	2.8%	0.7%	0.0%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%		5.2%
AM Peak	08:00	07:00	07:00	08:00	11:00	09:00	06:00	08:00	09:00	07:00		09:00		07:00	08:00
Vol.	6	451	138	9	22	6	1	4	2	1		1		617	34
PM Peak	18:00	17:00	16:00	14:00	14:00	14:00		13:00	13:00					17:00	14:00
Vol.	15	461	142	16	17	9		6	3					627	45

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

WB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
	09/24/09	0	23	5	1	0	0	0	0	0	0	0	0	0	29	1
	01:00	0	15	3	0	0	0	0	0	0	0	0	0	0	18	0
	02:00	0	8	2	0	0	0	0	3	0	0	0	0	0	13	3
	03:00	0	12	3	0	1	0	0	0	0	0	0	0	0	16	1
	04:00	0	30	18	0	5	0	0	0	0	0	0	0	0	53	5
	05:00	0	83	53	1	6	2	0	1	0	0	0	0	0	146	10
	06:00	5	187	85	4	12	4	0	1	0	0	0	0	0	298	21
	07:00	8	450	132	7	15	4	0	2	2	0	0	0	0	620	30
	08:00	8	344	115	8	14	0	0	2	1	0	0	1	0	493	26
	09:00	7	320	86	6	19	6	0	0	1	0	0	0	0	445	32
	10:00	8	286	88	6	13	4	1	5	3	0	0	0	0	414	32
	11:00	8	255	81	1	17	1	0	1	1	0	0	0	0	365	21
	12 PM	8	304	104	0	16	4	0	3	1	0	0	0	0	440	24
	13:00	6	313	88	0	11	1	0	3	3	0	0	0	0	425	18
	14:00	9	307	96	18	7	9	0	5	0	1	0	0	0	452	40
	15:00	4	405	118	9	12	5	0	4	1	0	0	0	0	558	31
	16:00	7	442	137	2	21	4	0	0	4	0	0	0	0	617	31
	17:00	10	430	121	1	17	3	0	0	1	1	0	0	0	584	23
	18:00	5	349	106	1	9	2	0	1	0	0	0	0	0	473	13
	19:00	6	270	78	0	6	0	0	1	0	0	0	0	0	361	7
	20:00	2	185	56	0	3	2	0	0	0	0	0	0	0	248	5
	21:00	1	153	24	0	0	0	0	0	0	0	0	0	0	178	0
	22:00	1	83	33	0	4	0	0	0	0	0	0	0	0	121	4
	23:00	0	58	13	1	2	0	0	1	1	0	0	0	0	76	5
	Total	103	5312	1645	66	210	51	1	33	19	2	0	1	0	7443	383
	Percent	1.4%	71.4%	22.1%	0.9%	2.8%	0.7%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%		5.1%
	AM Peak	07:00	07:00	07:00	08:00	09:00	09:00	10:00	10:00	10:00			08:00		07:00	09:00
	Vol.	8	450	132	8	19	6	1	5	3			1		620	32
	PM Peak	17:00	16:00	16:00	14:00	16:00	14:00		14:00	16:00	14:00				16:00	14:00
	Vol.	10	442	137	18	21	9		5	4	1				617	40
	Grand Total	206	10614	3266	130	420	104	2	70	40	3	0	2	0	14857	771
	Percent	1.4%	71.4%	22.0%	0.9%	2.8%	0.7%	0.0%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%		5.2%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/23/09	0	27	11	1	0	0	0	0	0	0	0	0	0	39	1
01:00	1	13	3	0	0	0	0	0	0	0	0	0	0	17	0
02:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10	0
03:00	0	10	4	0	1	0	0	0	0	0	0	0	0	15	1
04:00	0	13	8	1	2	0	0	0	0	0	0	0	0	24	3
05:00	0	55	22	2	4	2	0	0	1	0	0	0	0	86	9
06:00	3	182	79	6	12	2	0	1	3	0	0	0	0	288	24
07:00	4	307	108	5	16	5	0	2	3	0	0	0	0	450	31
08:00	4	270	113	2	18	1	1	4	1	0	0	0	0	414	27
09:00	5	273	85	3	12	1	0	2	5	0	0	0	0	386	23
10:00	2	274	78	3	21	2	0	1	0	0	0	0	0	381	27
11:00	4	283	82	1	13	5	0	2	2	0	0	0	0	392	23
12 PM	4	293	104	3	17	3	0	1	0	0	0	0	0	425	24
13:00	10	291	110	4	16	4	0	0	2	0	0	0	0	437	26
14:00	5	310	86	1	10	2	0	3	4	0	0	0	0	421	20
15:00	10	464	144	2	18	3	0	0	1	0	0	0	0	642	24
16:00	12	446	133	2	21	1	0	1	2	0	0	0	0	618	27
17:00	5	512	140	0	13	2	0	0	2	0	0	0	0	674	17
18:00	10	382	116	0	16	2	0	1	0	0	0	0	0	527	19
19:00	13	265	57	0	6	0	0	0	0	0	0	0	0	341	6
20:00	2	179	49	0	7	0	0	0	0	0	0	0	0	237	7
21:00	3	133	31	0	2	0	0	0	0	0	0	0	0	169	2
22:00	0	82	17	0	0	0	0	0	0	0	0	0	0	99	0
23:00	1	42	10	0	0	0	0	0	0	0	0	0	0	53	0
Total	98	5114	1592	36	225	35	1	18	26	0	0	0	0	7145	341
Percent	1.4%	71.6%	22.3%	0.5%	3.1%	0.5%	0.0%	0.3%	0.4%	0.0%	0.0%	0.0%	0.0%		4.8%
AM Peak	09:00	07:00	08:00	06:00	10:00	07:00	08:00	08:00	09:00					07:00	07:00
Vol.	5	307	113	6	21	5	1	4	5					450	31
PM Peak	19:00	17:00	15:00	13:00	16:00	13:00		14:00	14:00					17:00	16:00
Vol.	13	512	144	4	21	4		3	4					674	27

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/24/09	0	32	4	0	0	0	0	1	0	0	0	0	0	37	1
01:00	0	18	1	0	1	0	0	0	0	0	0	0	0	20	1
02:00	0	16	4	0	0	0	0	0	0	0	0	0	0	20	0
03:00	0	6	1	1	1	0	0	0	0	0	0	0	0	9	2
04:00	0	22	7	2	4	0	0	0	0	0	0	0	0	35	6
05:00	1	55	26	3	4	1	0	1	0	0	0	0	0	91	9
06:00	3	189	79	3	11	2	0	2	1	0	0	0	0	290	19
07:00	2	309	112	7	19	1	0	1	1	0	0	0	0	452	29
08:00	5	294	110	1	18	6	0	4	0	0	0	0	0	438	29
09:00	3	271	96	5	22	1	0	2	1	0	0	0	0	401	31
10:00	7	273	94	1	20	5	0	1	0	0	0	0	0	401	27
11:00	9	292	81	3	12	3	0	3	0	0	0	0	0	403	21
12 PM	8	333	115	3	16	5	0	1	3	0	0	0	0	484	28
13:00	8	300	94	3	12	6	0	1	0	0	0	0	0	424	22
14:00	10	354	97	4	16	2	0	1	1	0	0	0	0	485	24
15:00	5	420	123	5	18	1	0	6	2	0	0	0	0	580	32
16:00	8	508	135	5	14	5	0	3	1	0	0	0	0	679	28
17:00	11	495	146	2	16	0	0	2	1	1	0	0	0	674	22
18:00	8	382	124	0	14	2	0	3	1	0	0	0	0	534	20
19:00	5	229	66	0	5	0	0	0	0	0	0	0	0	305	5
20:00	1	151	42	0	3	0	0	1	0	0	0	0	0	198	4
21:00	2	151	36	0	2	0	0	1	0	0	0	0	0	192	3
22:00	0	75	14	0	2	0	0	0	1	0	0	0	0	92	3
23:00	1	54	11	0	0	0	0	0	0	0	0	0	0	66	0
Total	97	5229	1618	48	230	40	0	34	13	1	0	0	0	7310	366
Percent	1.3%	71.5%	22.1%	0.7%	3.1%	0.5%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%		5.0%
AM Peak	11:00	07:00	07:00	07:00	09:00	08:00		08:00	06:00					07:00	09:00
Vol.	9	309	112	7	22	6		4	1					452	31
PM Peak	17:00	16:00	17:00	15:00	15:00	13:00		15:00	12:00	17:00				16:00	15:00
Vol.	11	508	146	5	18	6		6	3	1				679	32
Grand Total	195	10343	3210	84	455	75	1	52	39	1	0	0	0	14455	707
Percent	1.3%	71.6%	22.2%	0.6%	3.1%	0.5%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%		4.9%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

WB, EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/23/09	0	44	14	1	1	0	0	0	0	0	0	0	0	60	2
01:00	1	25	7	0	0	0	0	0	0	0	0	0	0	33	0
02:00	0	17	5	0	0	0	0	0	0	0	0	0	0	22	0
03:00	0	19	7	0	2	0	0	0	0	0	0	0	0	28	2
04:00	0	46	32	2	7	0	0	0	0	0	0	0	0	87	9
05:00	3	140	73	3	9	2	0	1	1	0	0	0	0	232	16
06:00	6	384	162	11	24	2	1	1	3	0	0	0	0	594	42
07:00	6	758	246	11	29	8	0	5	3	1	0	0	0	1067	57
08:00	10	675	232	11	34	5	1	8	2	0	0	0	0	978	61
09:00	7	540	159	10	23	7	0	3	7	0	0	1	0	757	51
10:00	7	546	154	5	35	2	0	3	2	0	0	0	0	754	47
11:00	7	542	171	5	35	9	0	4	3	0	0	0	0	776	56
12 PM	7	555	212	8	28	11	0	5	1	0	0	0	0	827	53
13:00	19	603	203	6	30	7	0	6	5	0	0	0	0	879	54
14:00	12	670	190	17	27	11	0	4	6	0	0	0	0	937	65
15:00	19	823	266	4	30	6	0	4	4	0	0	0	0	1156	48
16:00	25	846	275	3	33	7	0	4	5	0	0	0	0	1198	52
17:00	19	973	270	1	28	3	0	3	4	0	0	0	0	1301	39
18:00	25	742	218	2	28	5	0	3	1	0	0	0	0	1024	39
19:00	16	511	107	0	17	0	0	1	0	0	0	0	0	652	18
20:00	6	386	86	0	11	1	0	0	0	0	0	0	0	490	12
21:00	4	298	67	0	2	2	0	0	0	0	0	0	0	373	4
22:00	1	175	38	0	1	0	0	0	0	0	0	0	0	215	1
23:00	1	98	19	0	1	0	0	0	0	0	0	0	0	119	1
Total	201	10416	3213	100	435	88	2	55	47	1	0	1	0	14559	729
Percent	1.4%	71.5%	22.1%	0.7%	3.0%	0.6%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%		5.0%
AM Peak	08:00	07:00	07:00	06:00	10:00	11:00	06:00	08:00	09:00	07:00		09:00		07:00	08:00
Vol.	10	758	246	11	35	9	1	8	7	1		1		1067	61
PM Peak	16:00	17:00	16:00	14:00	16:00	12:00		13:00	14:00					17:00	14:00
Vol.	25	973	275	17	33	11		6	6					1301	65

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #15
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106), east of Hemlock Ln

WB, EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/24/09	0	55	9	1	0	0	0	1	0	0	0	0	0	66	2
01:00	0	33	4	0	1	0	0	0	0	0	0	0	0	38	1
02:00	0	24	6	0	0	0	0	3	0	0	0	0	0	33	3
03:00	0	18	4	1	2	0	0	0	0	0	0	0	0	25	3
04:00	0	52	25	2	9	0	0	0	0	0	0	0	0	88	11
05:00	1	138	79	4	10	3	0	2	0	0	0	0	0	237	19
06:00	8	376	164	7	23	6	0	3	1	0	0	0	0	588	40
07:00	10	759	244	14	34	5	0	3	3	0	0	0	0	1072	59
08:00	13	638	225	9	32	6	0	6	1	0	0	1	0	931	55
09:00	10	591	182	11	41	7	0	2	2	0	0	0	0	846	63
10:00	15	559	182	7	33	9	1	6	3	0	0	0	0	815	59
11:00	17	547	162	4	29	4	0	4	1	0	0	0	0	768	42
12 PM	16	637	219	3	32	9	0	4	4	0	0	0	0	924	52
13:00	14	613	182	3	23	7	0	4	3	0	0	0	0	849	40
14:00	19	661	193	22	23	11	0	6	1	1	0	0	0	937	64
15:00	9	825	241	14	30	6	0	10	3	0	0	0	0	1138	63
16:00	15	950	272	7	35	9	0	3	5	0	0	0	0	1296	59
17:00	21	925	267	3	33	3	0	2	2	2	0	0	0	1258	45
18:00	13	731	230	1	23	4	0	4	1	0	0	0	0	1007	33
19:00	11	499	144	0	11	0	0	1	0	0	0	0	0	666	12
20:00	3	336	98	0	6	2	0	1	0	0	0	0	0	446	9
21:00	3	304	60	0	2	0	0	1	0	0	0	0	0	370	3
22:00	1	158	47	0	6	0	0	0	1	0	0	0	0	213	7
23:00	1	112	24	1	2	0	0	1	1	0	0	0	0	142	5
Total	200	10541	3263	114	440	91	1	67	32	3	0	1	0	14753	749
Percent	1.4%	71.4%	22.1%	0.8%	3.0%	0.6%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%		5.1%
AM Peak	11:00	07:00	07:00	07:00	09:00	10:00	10:00	08:00	07:00			08:00		07:00	09:00
Vol.	17	759	244	14	41	9	1	6	3			1		1072	63
PM Peak	17:00	16:00	16:00	14:00	16:00	14:00		15:00	16:00	17:00				16:00	14:00
Vol.	21	950	272	22	35	11		10	5	2				1296	64
Grand Total	401	20957	6476	214	875	179	3	122	79	4	0	2	0	29312	1478
Percent	1.4%	71.5%	22.1%	0.7%	3.0%	0.6%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%		5.0%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #13
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),west of Indian Path Rd

Start Time	21-Sep-09		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	*	*	23	37	30	36	*	*	*	*	*	*	26	36
01:00	*	*	*	*	16	17	20	20	*	*	*	*	*	*	18	18
02:00	*	*	*	*	12	9	14	20	*	*	*	*	*	*	13	14
03:00	*	*	*	*	14	15	17	8	*	*	*	*	*	*	16	12
04:00	*	*	*	*	61	24	51	34	*	*	*	*	*	*	56	29
05:00	*	*	*	*	151	90	155	94	*	*	*	*	*	*	153	92
06:00	*	*	*	*	301	309	306	303	*	*	*	*	*	*	304	306
07:00	*	*	*	*	640	471	642	477	*	*	*	*	*	*	641	474
08:00	*	*	*	*	576	473	519	485	*	*	*	*	*	*	548	479
09:00	*	*	*	*	381	387	424	407	*	*	*	*	*	*	402	397
10:00	*	*	*	*	357	400	403	418	*	*	*	*	*	*	380	409
11:00	*	*	*	*	388	400	391	412	*	*	*	*	*	*	390	406
12:00 PM	*	*	*	*	413	434	429	489	*	*	*	*	*	*	421	462
01:00	*	*	*	*	450	451	419	428	*	*	*	*	*	*	434	440
02:00	*	*	*	*	517	491	495	529	*	*	*	*	*	*	506	510
03:00	*	*	*	*	517	664	546	617	*	*	*	*	*	*	532	640
04:00	*	*	*	*	575	660	640	706	*	*	*	*	*	*	608	683
05:00	*	*	*	*	634	689	578	699	*	*	*	*	*	*	606	694
06:00	*	*	*	*	499	542	482	537	*	*	*	*	*	*	490	540
07:00	*	*	*	*	329	339	358	317	*	*	*	*	*	*	344	328
08:00	*	*	*	*	256	233	250	203	*	*	*	*	*	*	253	218
09:00	*	*	*	*	190	190	175	192	*	*	*	*	*	*	182	191
10:00	*	*	*	*	117	93	119	88	*	*	*	*	*	*	118	90
11:00	*	*	*	*	61	53	73	68	*	*	*	*	*	*	67	60
Total	0	0	0	0	7478	7471	7536	7587	0	0	0	0	0	0	7508	7528
Day	0	0	0	0	14949		15123		0	0	0	0	0	0	15036	
AM Peak					07:00	08:00	07:00	08:00							07:00	08:00
Vol.					640	473	642	485							641	479
PM Peak					17:00	17:00	16:00	16:00							16:00	17:00
Vol.					634	689	640	706							608	694

Comb. Total 0 0 14949 15123 0 0 0 15036

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #13
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),west of Indian Path Rd

Start Time	21-Sep-09 Mon	22-Sep-09 Tue	23-Sep-09 Wed	24-Sep-09 Thu	25-Sep-09 Fri	26-Sep-09 Sat	27-Sep-09 Sun	Week Average
12:00 AM	*	*	60	66	*	*	*	63
01:00	*	*	33	40	*	*	*	36
02:00	*	*	21	34	*	*	*	28
03:00	*	*	29	25	*	*	*	27
04:00	*	*	85	85	*	*	*	85
05:00	*	*	241	249	*	*	*	245
06:00	*	*	610	609	*	*	*	610
07:00	*	*	1111	1119	*	*	*	1115
08:00	*	*	1049	1004	*	*	*	1026
09:00	*	*	768	831	*	*	*	800
10:00	*	*	757	821	*	*	*	789
11:00	*	*	788	803	*	*	*	796
12:00 PM	*	*	847	918	*	*	*	882
01:00	*	*	901	847	*	*	*	874
02:00	*	*	1008	1024	*	*	*	1016
03:00	*	*	1181	1163	*	*	*	1172
04:00	*	*	1235	1346	*	*	*	1290
05:00	*	*	1323	1277	*	*	*	1300
06:00	*	*	1041	1019	*	*	*	1030
07:00	*	*	668	675	*	*	*	672
08:00	*	*	489	453	*	*	*	471
09:00	*	*	380	367	*	*	*	374
10:00	*	*	210	207	*	*	*	208
11:00	*	*	114	141	*	*	*	128
Total	0	0	14949	15123	0	0	0	15037
Percentage	0.0%	0.0%	99.4%	100.6%	0.0%	0.0%	0.0%	
AM Peak			07:00	07:00				07:00
Vol.			1111	1119				1115
PM Peak			17:00	16:00				17:00
Vol.			1323	1346				1300

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #13
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),west of Indian Path Rd

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
09/23/09	0	0	0	1	3	10	7	1	0	0	0	1	0	0	23
01:00	0	0	1	0	5	4	6	0	0	0	0	0	0	0	16
02:00	0	0	0	0	3	5	1	2	1	0	0	0	0	0	12
03:00	0	0	0	0	2	5	6	0	1	0	0	0	0	0	14
04:00	0	0	0	0	6	27	22	5	1	0	0	0	0	0	61
05:00	0	0	0	4	19	72	50	6	0	0	0	0	0	0	151
06:00	14	0	0	6	56	169	48	8	0	0	0	0	0	0	301
07:00	27	7	6	41	185	266	105	3	0	0	0	0	0	0	640
08:00	20	2	12	38	168	239	91	6	0	0	0	0	0	0	576
09:00	19	1	6	28	92	164	66	5	0	0	0	0	0	0	381
10:00	14	0	5	14	99	156	64	5	0	0	0	0	0	0	357
11:00	16	0	3	19	100	185	60	3	2	0	0	0	0	0	388
12 PM	14	0	4	19	92	180	91	12	1	0	0	0	0	0	413
13:00	19	1	6	17	92	225	77	13	0	0	0	0	0	0	450
14:00	27	0	2	38	147	227	67	9	0	0	0	0	0	0	517
15:00	30	0	1	10	96	262	107	11	0	0	0	0	0	0	517
16:00	35	0	6	17	120	287	103	7	0	0	0	0	0	0	575
17:00	42	1	6	34	164	290	89	8	0	0	0	0	0	0	634
18:00	36	0	4	22	157	223	52	4	1	0	0	0	0	0	499
19:00	14	0	1	12	105	147	45	5	0	0	0	0	0	0	329
20:00	7	0	0	13	59	121	49	6	0	1	0	0	0	0	256
21:00	1	1	1	2	43	99	40	3	0	0	0	0	0	0	190
22:00	0	0	0	2	16	62	35	1	1	0	0	0	0	0	117
23:00	0	0	0	0	10	30	19	2	0	0	0	0	0	0	61
Total	335	13	64	337	1839	3455	1300	125	8	1	0	1	0	0	7478

Daily
 15th Percentile : 32 MPH
 50th Percentile : 37 MPH
 85th Percentile : 42 MPH
 95th Percentile : 45 MPH

 Mean Speed(Average) : 36 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 5294
 Percent in Pace : 70.8%
 Number of Vehicles > 35 MPH : 4890
 Percent of Vehicles > 35 MPH : 65.4%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #13
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),west of Indian Path Rd

WB

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	999	Total
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	76	999	Total
09/24/09	0	0	0	0	8	10	10	2	0	0	0	0	0	0	0	30
01:00	0	0	0	0	4	10	6	0	0	0	0	0	0	0	0	20
02:00	0	0	0	1	3	7	2	1	0	0	0	0	0	0	0	14
03:00	0	0	0	0	1	6	6	3	1	0	0	0	0	0	0	17
04:00	0	0	0	2	9	19	18	2	1	0	0	0	0	0	0	51
05:00	2	0	0	4	20	77	45	6	1	0	0	0	0	0	0	155
06:00	16	2	5	13	78	138	48	6	0	0	0	0	0	0	0	306
07:00	22	0	4	32	156	336	86	6	0	0	0	0	0	0	0	642
08:00	24	1	16	61	157	191	64	3	2	0	0	0	0	0	0	519
09:00	30	0	2	19	90	203	71	9	0	0	0	0	0	0	0	424
10:00	13	2	23	17	69	176	96	6	1	0	0	0	0	0	0	403
11:00	13	0	5	18	76	174	95	10	0	0	0	0	0	0	0	391
12 PM	16	0	0	15	101	189	93	14	1	0	0	0	0	0	0	429
13:00	25	1	12	26	72	179	97	7	0	0	0	0	0	0	0	419
14:00	29	0	13	49	143	201	54	6	0	0	0	0	0	0	0	495
15:00	36	0	2	39	133	245	90	1	0	0	0	0	0	0	0	546
16:00	55	7	10	38	194	257	72	7	0	0	0	0	0	0	0	640
17:00	45	4	2	33	148	244	91	11	0	0	0	0	0	0	0	578
18:00	26	0	2	31	112	221	82	6	2	0	0	0	0	0	0	482
19:00	9	0	6	15	93	180	49	6	0	0	0	0	0	0	0	358
20:00	5	0	1	7	49	128	49	10	1	0	0	0	0	0	0	250
21:00	3	0	1	4	37	84	40	6	0	0	0	0	0	0	0	175
22:00	0	0	0	0	11	61	33	9	4	0	0	1	0	0	0	119
23:00	0	0	0	3	8	37	18	7	0	0	0	0	0	0	0	73
Total	369	17	104	427	1772	3373	1315	144	14	0	0	1	0	0	0	7536

Daily
 15th Percentile : 31 MPH
 50th Percentile : 37 MPH
 85th Percentile : 42 MPH
 95th Percentile : 45 MPH
 Mean Speed(Average) : 36 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 5145
 Percent in Pace : 68.3%
 Number of Vehicles > 35 MPH : 4847
 Percent of Vehicles > 35 MPH : 64.3%

Grand Total	704	30	168	764	3611	6828	2615	269	22	1	0	2	0	0	0	15014
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Overall
 15th Percentile : 31 MPH
 50th Percentile : 37 MPH
 85th Percentile : 42 MPH
 95th Percentile : 45 MPH
 Mean Speed(Average) : 36 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 10439
 Percent in Pace : 69.5%
 Number of Vehicles > 35 MPH : 9737
 Percent of Vehicles > 35 MPH : 64.9%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #13
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),west of Indian Path Rd

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
09/23/09	0	0	1	1	6	18	9	2	0	0	0	0	0	0	37
01:00	0	0	0	2	3	6	5	1	0	0	0	0	0	0	17
02:00	0	0	0	0	2	3	3	1	0	0	0	0	0	0	9
03:00	0	0	0	0	3	6	2	2	2	0	0	0	0	0	15
04:00	0	0	0	0	6	14	3	1	0	0	0	0	0	0	24
05:00	2	0	0	6	20	47	14	1	0	0	0	0	0	0	90
06:00	11	0	3	10	100	152	32	1	0	0	0	0	0	0	309
07:00	32	0	2	10	134	257	34	1	1	0	0	0	0	0	471
08:00	26	0	2	35	165	208	37	0	0	0	0	0	0	0	473
09:00	16	1	3	16	97	201	47	5	1	0	0	0	0	0	387
10:00	25	1	4	11	105	205	45	4	0	0	0	0	0	0	400
11:00	20	1	11	21	101	191	50	5	0	0	0	0	0	0	400
12 PM	24	0	5	26	117	210	47	5	0	0	0	0	0	0	434
13:00	25	0	4	33	146	192	45	5	1	0	0	0	0	0	451
14:00	42	0	2	27	160	199	61	0	0	0	0	0	0	0	491
15:00	45	2	6	14	210	299	83	5	0	0	0	0	0	0	664
16:00	46	0	3	24	214	279	90	4	0	0	0	0	0	0	660
17:00	46	0	3	46	185	331	77	1	0	0	0	0	0	0	689
18:00	49	0	2	23	143	256	68	1	0	0	0	0	0	0	542
19:00	14	0	0	17	102	168	34	4	0	0	0	0	0	0	339
20:00	4	1	0	12	69	101	41	4	0	1	0	0	0	0	233
21:00	3	0	3	1	41	108	32	1	1	0	0	0	0	0	190
22:00	2	0	0	0	13	46	24	8	0	0	0	0	0	0	93
23:00	0	0	0	2	6	27	16	1	0	0	1	0	0	0	53
Total	432	6	54	337	2148	3524	899	63	6	1	1	0	0	0	7471

Daily
 15th Percentile : 31 MPH
 50th Percentile : 37 MPH
 85th Percentile : 40 MPH
 95th Percentile : 44 MPH

 Mean Speed(Average) : 35 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 5672
 Percent in Pace : 75.9%
 Number of Vehicles > 35 MPH : 4494
 Percent of Vehicles > 35 MPH : 60.2%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #13
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),west of Indian Path Rd

EB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
09/24/09	1	0	0	0	7	19	6	3	0	0	0	0	0	0	36
01:00	0	0	0	0	5	11	4	0	0	0	0	0	0	0	20
02:00	0	0	0	0	1	9	7	1	0	0	0	0	1	1	20
03:00	0	0	0	0	2	3	2	1	0	0	0	0	0	0	8
04:00	0	0	0	0	6	15	10	2	0	1	0	0	0	0	34
05:00	1	0	0	2	24	44	19	4	0	0	0	0	0	0	94
06:00	11	1	4	10	126	117	33	1	0	0	0	0	0	0	303
07:00	28	0	3	35	186	197	26	2	0	0	0	0	0	0	477
08:00	33	0	1	43	230	161	17	0	0	0	0	0	0	0	485
09:00	33	2	5	26	151	157	30	3	0	0	0	0	0	0	407
10:00	20	1	5	22	99	214	53	4	0	0	0	0	0	0	418
11:00	21	1	6	12	108	211	50	3	0	0	0	0	0	0	412
12 PM	31	0	2	32	119	236	65	3	1	0	0	0	0	0	489
13:00	24	1	5	25	131	204	37	1	0	0	0	0	0	0	428
14:00	36	2	16	66	210	174	22	3	0	0	0	0	0	0	529
15:00	52	0	1	47	274	216	27	0	0	0	0	0	0	0	617
16:00	56	5	5	57	349	222	12	0	0	0	0	0	0	0	706
17:00	55	2	5	53	315	246	22	1	0	0	0	0	0	0	699
18:00	31	0	3	19	155	281	48	0	0	0	0	0	0	0	537
19:00	17	1	3	9	108	155	24	0	0	0	0	0	0	0	317
20:00	8	1	2	10	58	91	31	2	0	0	0	0	0	0	203
21:00	4	1	1	5	56	93	29	2	1	0	0	0	0	0	192
22:00	0	0	1	1	16	49	20	0	0	1	0	0	0	0	88
23:00	0	0	0	2	6	38	19	3	0	0	0	0	0	0	68
Total	462	18	68	476	2742	3163	613	39	2	2	0	0	1	1	7587

Daily
 15th Percentile : 31 MPH
 50th Percentile : 36 MPH
 85th Percentile : 40 MPH
 95th Percentile : 43 MPH
 Mean Speed(Average) : 34 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 5905
 Percent in Pace : 77.8%
 Number of Vehicles > 35 MPH : 3821
 Percent of Vehicles > 35 MPH : 50.4%

Grand Total	894	24	122	813	4890	6687	1512	102	8	3	1	0	1	1	15058
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Overall
 15th Percentile : 31 MPH
 50th Percentile : 36 MPH
 85th Percentile : 40 MPH
 95th Percentile : 43 MPH
 Mean Speed(Average) : 34 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 11577
 Percent in Pace : 76.9%
 Number of Vehicles > 35 MPH : 8315
 Percent of Vehicles > 35 MPH : 55.2%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #13
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),west of Indian Path Rd

WB, EB

Start Time	15	16	20	21	25	26	30	31	35	36	40	41	45	46	50	51	55	56	60	61	65	66	70	71	75	76	999	Total
09/23/09	0	0	0	1	2	9	28	16	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	60	
01:00	0	0	0	1	2	8	10	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	
02:00	0	0	0	0	0	5	8	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	
03:00	0	0	0	0	0	5	11	8	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	
04:00	0	0	0	0	0	12	41	25	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	
05:00	2	0	0	0	10	39	119	64	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	241	
06:00	25	0	3	16	156	321	80	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	610	
07:00	59	7	8	51	319	523	139	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1111	
08:00	46	2	14	73	333	447	128	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1049	
09:00	35	2	9	44	189	365	113	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	768	
10:00	39	1	9	25	204	361	109	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	757	
11:00	36	1	14	40	201	376	110	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	788	
12 PM	38	0	9	45	209	390	138	17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	847	
13:00	44	1	10	50	238	417	122	18	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	901	
14:00	69	0	4	65	307	426	128	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1008	
15:00	75	2	7	24	306	561	190	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1181	
16:00	81	0	9	41	334	566	193	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1235	
17:00	88	1	9	80	349	621	166	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1323	
18:00	85	0	6	45	300	479	120	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1041	
19:00	28	0	1	29	207	315	79	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	668	
20:00	11	1	0	25	128	222	90	10	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	489	
21:00	4	1	4	3	84	207	72	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	380	
22:00	2	0	0	2	29	108	59	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	
23:00	0	0	0	2	16	57	35	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114	
Total	767	19	118	674	3987	6979	2199	188	14	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	14949	

Daily
 15th Percentile : 31 MPH
 50th Percentile : 37 MPH
 85th Percentile : 41 MPH
 95th Percentile : 44 MPH

 Mean Speed(Average) : 35 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 10966
 Percent in Pace : 73.4%
 Number of Vehicles > 35 MPH : 9384
 Percent of Vehicles > 35 MPH : 62.8%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #13
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),west of Indian Path Rd

WB, EB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
09/24/09	1	0	0	0	15	29	16	5	0	0	0	0	0	0	66
01:00	0	0	0	0	9	21	10	0	0	0	0	0	0	0	40
02:00	0	0	0	1	4	16	9	2	0	0	0	0	1	1	34
03:00	0	0	0	0	3	9	8	4	1	0	0	0	0	0	25
04:00	0	0	0	2	15	34	28	4	1	1	0	0	0	0	85
05:00	3	0	0	6	44	121	64	10	1	0	0	0	0	0	249
06:00	27	3	9	23	204	255	81	7	0	0	0	0	0	0	609
07:00	50	0	7	67	342	533	112	8	0	0	0	0	0	0	1119
08:00	57	1	17	104	387	352	81	3	2	0	0	0	0	0	1004
09:00	63	2	7	45	241	360	101	12	0	0	0	0	0	0	831
10:00	33	3	28	39	168	390	149	10	1	0	0	0	0	0	821
11:00	34	1	11	30	184	385	145	13	0	0	0	0	0	0	803
12 PM	47	0	2	47	220	425	158	17	2	0	0	0	0	0	918
13:00	49	2	17	51	203	383	134	8	0	0	0	0	0	0	847
14:00	65	2	29	115	353	375	76	9	0	0	0	0	0	0	1024
15:00	88	0	3	86	407	461	117	1	0	0	0	0	0	0	1163
16:00	111	12	15	95	543	479	84	7	0	0	0	0	0	0	1346
17:00	100	6	7	86	463	490	113	12	0	0	0	0	0	0	1277
18:00	57	0	5	50	267	502	130	6	2	0	0	0	0	0	1019
19:00	26	1	9	24	201	335	73	6	0	0	0	0	0	0	675
20:00	13	1	3	17	107	219	80	12	1	0	0	0	0	0	453
21:00	7	1	2	9	93	177	69	8	1	0	0	0	0	0	367
22:00	0	0	1	1	27	110	53	9	4	1	0	1	0	0	207
23:00	0	0	0	5	14	75	37	10	0	0	0	0	0	0	141
Total	831	35	172	903	4514	6536	1928	183	16	2	0	1	1	1	15123

Daily
 15th Percentile : 31 MPH
 50th Percentile : 36 MPH
 85th Percentile : 40 MPH
 95th Percentile : 44 MPH
 Mean Speed(Average) : 35 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 11050
 Percent in Pace : 73.1%
 Number of Vehicles > 35 MPH : 8668
 Percent of Vehicles > 35 MPH : 57.3%

Grand Total	1598	54	290	1577	8501	13515	4127	371	30	4	1	2	1	1	30072
-------------	------	----	-----	------	------	-------	------	-----	----	---	---	---	---	---	-------

Overall
 15th Percentile : 31 MPH
 50th Percentile : 37 MPH
 85th Percentile : 41 MPH
 95th Percentile : 44 MPH
 Mean Speed(Average) : 35 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 22016
 Percent in Pace : 73.2%
 Number of Vehicles > 35 MPH : 18052
 Percent of Vehicles > 35 MPH : 60.0%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #13
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),west of Indian Path Rd

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/23/09	0	16	6	0	1	0	0	0	0	0	0	0	0	23	1
01:00	0	11	5	0	0	0	0	0	0	0	0	0	0	16	0
02:00	0	9	2	0	1	0	0	0	0	0	0	0	0	12	1
03:00	0	9	4	0	1	0	0	0	0	0	0	0	0	14	1
04:00	0	30	25	1	5	0	0	0	0	0	0	0	0	61	6
05:00	3	80	56	1	10	0	0	1	0	0	0	0	0	151	12
06:00	4	179	97	5	15	0	1	0	0	0	0	0	0	301	21
07:00	5	437	168	5	16	5	0	2	0	1	0	0	0	639	29
08:00	1	394	136	11	24	6	0	1	2	0	0	0	0	575	44
09:00	2	251	95	6	19	3	0	3	2	0	0	0	0	381	33
10:00	5	241	89	2	16	0	0	1	3	0	0	0	0	357	22
11:00	0	249	107	3	24	2	0	3	0	0	0	0	0	388	32
12 PM	5	252	124	5	17	5	0	4	1	0	0	0	0	413	32
13:00	9	304	113	2	13	2	0	4	3	0	0	0	0	450	24
14:00	6	335	138	11	17	7	0	0	1	1	0	0	0	516	37
15:00	3	338	147	4	18	2	0	2	1	1	0	0	0	516	28
16:00	10	357	180	0	15	4	0	3	4	0	0	0	0	573	26
17:00	7	448	147	1	22	3	0	3	2	0	0	0	0	633	31
18:00	16	336	121	3	15	3	0	3	1	0	0	0	0	498	25
19:00	3	245	68	1	12	0	0	0	0	0	0	0	0	329	13
20:00	4	189	59	0	4	0	0	0	0	0	0	0	0	256	4
21:00	1	144	37	0	6	2	0	0	0	0	0	0	0	190	8
22:00	1	87	27	0	1	1	0	0	0	0	0	0	0	117	2
23:00	0	50	10	0	1	0	0	0	0	0	0	0	0	61	1
Total	85	4991	1961	61	273	45	1	30	20	3	0	0	0	7470	433
Percent	1.1%	66.8%	26.3%	0.8%	3.7%	0.6%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%		5.8%
AM Peak	07:00	07:00	07:00	08:00	08:00	08:00	06:00	09:00	10:00	07:00				07:00	08:00
Vol.	5	437	168	11	24	6	1	3	3	1				639	44
PM Peak	18:00	17:00	16:00	14:00	17:00	14:00		12:00	16:00	14:00				17:00	14:00
Vol.	16	448	180	11	22	7		4	4	1				633	37

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #13
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),west of Indian Path Rd

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/24/09	0	21	6	1	1	1	0	0	0	0	0	0	0	30	3
01:00	0	17	3	0	0	0	0	0	0	0	0	0	0	20	0
02:00	0	7	3	0	1	0	0	3	0	0	0	0	0	14	4
03:00	0	12	4	0	1	0	0	0	0	0	0	0	0	17	1
04:00	0	28	17	0	6	0	0	0	0	0	0	0	0	51	6
05:00	0	78	66	2	8	1	0	0	0	0	0	0	0	155	11
06:00	3	188	96	5	11	2	0	1	0	0	0	0	0	306	19
07:00	4	450	156	7	18	2	1	3	1	0	0	0	0	642	32
08:00	5	336	143	8	18	3	1	3	1	0	0	0	0	518	34
09:00	2	286	105	6	17	5	0	0	2	0	0	0	0	423	30
10:00	6	260	102	5	16	4	1	5	3	0	0	0	0	402	34
11:00	8	254	103	1	21	3	0	0	1	0	0	0	0	391	26
12 PM	4	283	115	0	17	5	0	4	1	0	0	0	0	429	27
13:00	8	276	109	2	17	1	0	4	2	0	0	0	0	419	26
14:00	10	318	130	14	14	4	0	3	1	0	0	0	0	494	36
15:00	5	372	135	11	14	4	0	2	0	1	0	0	0	544	32
16:00	6	425	168	3	30	4	0	1	4	0	0	0	0	641	42
17:00	8	400	137	1	27	3	0	1	0	0	0	0	0	577	32
18:00	6	338	123	2	9	1	0	2	0	0	0	0	0	481	14
19:00	5	252	92	0	6	1	0	1	0	0	0	0	0	357	8
20:00	2	180	62	0	4	1	0	0	0	0	0	0	0	249	5
21:00	1	140	34	0	0	0	0	0	0	0	0	0	0	175	0
22:00	1	79	34	0	5	0	0	0	0	0	0	0	0	119	5
23:00	0	48	20	1	2	0	0	1	1	0	0	0	0	73	5
Total	84	5048	1963	69	263	45	3	34	17	1	0	0	0	7527	432
Percent	1.1%	67.1%	26.1%	0.9%	3.5%	0.6%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%		5.7%
AM Peak	11:00	07:00	07:00	08:00	11:00	09:00	07:00	10:00	10:00					07:00	08:00
Vol.	8	450	156	8	21	5	1	5	3					642	34
PM Peak	14:00	16:00	16:00	14:00	16:00	12:00		12:00	16:00	15:00				16:00	16:00
Vol.	10	425	168	14	30	5		4	4	1				641	42
Grand Total	169	10039	3924	130	536	90	4	64	37	4	0	0	0	14997	865
Percent	1.1%	66.9%	26.2%	0.9%	3.6%	0.6%	0.0%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%		5.8%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #13
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),west of Indian Path Rd

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/23/09	0	23	12	1	1	0	0	0	0	0	0	0	0	37	2
01:00	1	12	4	0	0	0	0	0	0	0	0	0	0	17	0
02:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9	0
03:00	0	8	5	0	2	0	0	0	0	0	0	0	0	15	2
04:00	0	14	7	1	2	0	0	0	0	0	0	0	0	24	3
05:00	0	52	26	2	7	2	0	0	1	0	0	0	0	90	12
06:00	2	189	89	8	15	1	0	1	3	0	0	0	0	308	28
07:00	6	293	131	7	22	3	0	2	5	0	0	0	0	469	39
08:00	2	277	143	11	32	1	1	2	2	1	0	0	0	472	50
09:00	6	252	105	2	13	2	0	3	4	0	0	0	0	387	24
10:00	1	267	98	4	26	2	0	2	0	0	0	0	0	400	34
11:00	3	259	104	1	23	4	0	4	1	0	0	0	0	399	33
12 PM	1	284	117	3	26	1	0	1	0	0	0	0	0	433	31
13:00	3	293	128	6	18	1	0	0	2	0	0	0	0	451	27
14:00	5	337	116	5	18	2	0	2	5	0	0	0	0	490	32
15:00	4	450	178	3	22	4	0	1	1	0	0	0	0	663	31
16:00	7	430	185	3	27	4	0	2	1	0	0	0	0	659	37
17:00	6	474	178	0	25	1	0	2	2	0	0	0	0	688	30
18:00	6	382	125	0	25	3	0	0	0	0	0	0	0	541	28
19:00	6	246	80	0	6	0	0	0	0	0	0	0	0	338	6
20:00	1	168	53	0	10	0	0	0	0	0	0	0	0	232	10
21:00	1	140	46	0	3	0	0	0	0	0	0	0	0	190	3
22:00	0	72	21	0	0	0	0	0	0	0	0	0	0	93	0
23:00	1	36	15	0	1	0	0	0	0	0	0	0	0	53	1
Total	62	4965	1968	57	324	31	1	22	27	1	0	0	0	7458	463
Percent	0.8%	66.6%	26.4%	0.8%	4.3%	0.4%	0.0%	0.3%	0.4%	0.0%	0.0%	0.0%	0.0%		6.2%
AM Peak	07:00	07:00	08:00	08:00	08:00	11:00	08:00	11:00	07:00	08:00				08:00	08:00
Vol.	6	293	143	11	32	4	1	4	5	1				472	50
PM Peak	16:00	17:00	16:00	13:00	16:00	15:00		14:00	14:00					17:00	16:00
Vol.	7	474	185	6	27	4		2	5					688	37

Old Colony Planning Council
 70 School Street
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 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #13
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),west of Indian Path Rd

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/24/09	0	28	6	0	1	0	0	1	0	0	0	0	0	36	2
01:00	0	17	2	0	1	0	0	0	0	0	0	0	0	20	1
02:00	0	14	4	0	2	0	0	0	0	0	0	0	0	20	2
03:00	0	5	1	1	1	0	0	0	0	0	0	0	0	8	2
04:00	0	19	10	2	3	0	0	0	0	0	0	0	0	34	5
05:00	0	51	30	3	7	1	0	2	0	0	0	0	0	94	13
06:00	4	184	85	7	17	2	0	2	1	0	0	0	0	302	29
07:00	2	305	127	10	27	1	0	3	1	0	0	0	0	476	42
08:00	6	285	153	11	25	2	0	2	0	0	0	0	0	484	40
09:00	2	235	134	6	23	2	0	2	2	0	0	0	0	406	35
10:00	1	270	111	1	28	4	0	2	0	0	0	0	0	417	35
11:00	0	277	107	4	19	1	0	2	1	0	0	0	0	411	27
12 PM	2	320	135	4	20	4	0	1	2	0	0	0	0	488	31
13:00	3	288	112	3	16	3	0	2	0	0	0	0	0	427	24
14:00	1	356	132	8	25	3	0	1	1	0	0	0	0	527	38
15:00	5	429	144	6	20	6	0	7	2	0	0	0	0	619	41
16:00	7	467	196	8	23	3	0	1	3	0	0	0	0	708	38
17:00	9	482	172	3	27	6	0	2	0	0	0	0	0	701	38
18:00	2	358	137	1	30	4	0	3	1	0	0	0	0	536	39
19:00	3	236	68	0	9	0	0	1	0	0	0	0	0	317	10
20:00	0	147	51	0	4	0	0	0	0	0	0	0	0	202	4
21:00	1	139	46	0	4	1	0	1	0	0	0	0	0	192	6
22:00	0	68	16	0	3	0	0	0	1	0	0	0	0	88	4
23:00	1	55	9	0	3	0	0	0	0	0	0	0	0	68	3
Total	49	5035	1988	78	338	43	0	35	15	0	0	0	0	7581	509
Percent	0.6%	66.4%	26.2%	1.0%	4.5%	0.6%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%		6.7%
AM Peak	08:00	07:00	08:00	08:00	10:00	10:00		07:00	09:00					08:00	07:00
Vol.	6	305	153	11	28	4		3	2					484	42
PM Peak	17:00	17:00	16:00	14:00	18:00	15:00		15:00	16:00					16:00	15:00
Vol.	9	482	196	8	30	6		7	3					708	41
Grand Total	111	10000	3956	135	662	74	1	57	42	1	0	0	0	15039	972
Percent	0.7%	66.5%	26.3%	0.9%	4.4%	0.5%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%		6.5%

Old Colony Planning Council
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Community: Halifax
 Com #_U/RFC: 118_U5
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Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),west of Indian Path Rd

WB, EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/23/09	0	39	18	1	2	0	0	0	0	0	0	0	0	60	3
01:00	1	23	9	0	0	0	0	0	0	0	0	0	0	33	0
02:00	0	16	4	0	1	0	0	0	0	0	0	0	0	21	1
03:00	0	17	9	0	3	0	0	0	0	0	0	0	0	29	3
04:00	0	44	32	2	7	0	0	0	0	0	0	0	0	85	9
05:00	3	132	82	3	17	2	0	1	1	0	0	0	0	241	24
06:00	6	368	186	13	30	1	1	1	3	0	0	0	0	609	49
07:00	11	730	299	12	38	8	0	4	5	1	0	0	0	1108	68
08:00	3	671	279	22	56	7	1	3	4	1	0	0	0	1047	94
09:00	8	503	200	8	32	5	0	6	6	0	0	0	0	768	57
10:00	6	508	187	6	42	2	0	3	3	0	0	0	0	757	56
11:00	3	508	211	4	47	6	0	7	1	0	0	0	0	787	65
12 PM	6	536	241	8	43	6	0	5	1	0	0	0	0	846	63
13:00	12	597	241	8	31	3	0	4	5	0	0	0	0	901	51
14:00	11	672	254	16	35	9	0	2	6	1	0	0	0	1006	69
15:00	7	788	325	7	40	6	0	3	2	1	0	0	0	1179	59
16:00	17	787	365	3	42	8	0	5	5	0	0	0	0	1232	63
17:00	13	922	325	1	47	4	0	5	4	0	0	0	0	1321	61
18:00	22	718	246	3	40	6	0	3	1	0	0	0	0	1039	53
19:00	9	491	148	1	18	0	0	0	0	0	0	0	0	667	19
20:00	5	357	112	0	14	0	0	0	0	0	0	0	0	488	14
21:00	2	284	83	0	9	2	0	0	0	0	0	0	0	380	11
22:00	1	159	48	0	1	1	0	0	0	0	0	0	0	210	2
23:00	1	86	25	0	2	0	0	0	0	0	0	0	0	114	2
Total	147	9956	3929	118	597	76	2	52	47	4	0	0	0	14928	896
Percent	1.0%	66.7%	26.3%	0.8%	4.0%	0.5%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%		6.0%
AM Peak	07:00	07:00	07:00	08:00	08:00	07:00	06:00	11:00	09:00	07:00				07:00	08:00
Vol.	11	730	299	22	56	8	1	7	6	1				1108	94
PM Peak	18:00	17:00	16:00	14:00	17:00	14:00		12:00	14:00	14:00				17:00	14:00
Vol.	22	922	365	16	47	9		5	6	1				1321	69

Old Colony Planning Council
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Station ID:
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 Date Start: 23-Sep-09
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 Plymouth St (106),west of Indian Path Rd

WB, EB																
Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total	
09/24/09	0	49	12	1	2	1	0	1	0	0	0	0	0	66	5	
01:00	0	34	5	0	1	0	0	0	0	0	0	0	0	40	1	
02:00	0	21	7	0	3	0	0	3	0	0	0	0	0	34	6	
03:00	0	17	5	1	2	0	0	0	0	0	0	0	0	25	3	
04:00	0	47	27	2	9	0	0	0	0	0	0	0	0	85	11	
05:00	0	129	96	5	15	2	0	2	0	0	0	0	0	249	24	
06:00	7	372	181	12	28	4	0	3	1	0	0	0	0	608	48	
07:00	6	755	283	17	45	3	1	6	2	0	0	0	0	1118	74	
08:00	11	621	296	19	43	5	1	5	1	0	0	0	0	1002	74	
09:00	4	521	239	12	40	7	0	2	4	0	0	0	0	829	65	
10:00	7	530	213	6	44	8	1	7	3	0	0	0	0	819	69	
11:00	8	531	210	5	40	4	0	2	2	0	0	0	0	802	53	
12 PM	6	603	250	4	37	9	0	5	3	0	0	0	0	917	58	
13:00	11	564	221	5	33	4	0	6	2	0	0	0	0	846	50	
14:00	11	674	262	22	39	7	0	4	2	0	0	0	0	1021	74	
15:00	10	801	279	17	34	10	0	9	2	1	0	0	0	1163	73	
16:00	13	892	364	11	53	7	0	2	7	0	0	0	0	1349	80	
17:00	17	882	309	4	54	9	0	3	0	0	0	0	0	1278	70	
18:00	8	696	260	3	39	5	0	5	1	0	0	0	0	1017	53	
19:00	8	488	160	0	15	1	0	2	0	0	0	0	0	674	18	
20:00	2	327	113	0	8	1	0	0	0	0	0	0	0	451	9	
21:00	2	279	80	0	4	1	0	1	0	0	0	0	0	367	6	
22:00	1	147	50	0	8	0	0	0	1	0	0	0	0	207	9	
23:00	1	103	29	1	5	0	0	1	1	0	0	0	0	141	8	
Total	133	10083	3951	147	601	88	3	69	32	1	0	0	0	15108	941	
Percent	0.9%	66.7%	26.2%	1.0%	4.0%	0.6%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%		6.2%	
AM Peak	08:00	07:00	08:00	08:00	07:00	10:00	07:00	10:00	09:00					07:00	07:00	
Vol.	11	755	296	19	45	8	1	7	4					1118	74	
PM Peak	17:00	16:00	16:00	14:00	17:00	15:00		15:00	16:00	15:00				16:00	16:00	
Vol.	17	892	364	22	54	10		9	7	1				1349	80	
Grand Total	280	20039	7880	265	1198	164	5	121	79	5	0	0	0	30036	1837	
Percent	0.9%	66.7%	26.2%	0.9%	4.0%	0.5%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%		6.1%	

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #14
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),east of Indian Path Rd

Start Time	21-Sep-09		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	*	*	21	38	29	37	*	*	*	*	*	*	25	38
01:00	*	*	*	*	16	18	20	20	*	*	*	*	*	*	18	19
02:00	*	*	*	*	12	10	13	19	*	*	*	*	*	*	12	14
03:00	*	*	*	*	13	16	16	9	*	*	*	*	*	*	14	12
04:00	*	*	*	*	62	24	53	33	*	*	*	*	*	*	58	28
05:00	*	*	*	*	144	85	149	88	*	*	*	*	*	*	146	86
06:00	*	*	*	*	308	283	305	293	*	*	*	*	*	*	306	288
07:00	*	*	*	*	667	475	672	464	*	*	*	*	*	*	670	470
08:00	*	*	*	*	580	467	503	470	*	*	*	*	*	*	542	468
09:00	*	*	*	*	372	389	444	408	*	*	*	*	*	*	408	398
10:00	*	*	*	*	369	399	404	400	*	*	*	*	*	*	386	400
11:00	*	*	*	*	384	399	371	399	*	*	*	*	*	*	378	399
12:00 PM	*	*	*	*	396	428	437	480	*	*	*	*	*	*	416	454
01:00	*	*	*	*	441	452	417	423	*	*	*	*	*	*	429	438
02:00	*	*	*	*	509	469	476	538	*	*	*	*	*	*	492	504
03:00	*	*	*	*	504	665	558	623	*	*	*	*	*	*	531	644
04:00	*	*	*	*	571	675	625	718	*	*	*	*	*	*	598	696
05:00	*	*	*	*	625	699	583	708	*	*	*	*	*	*	604	704
06:00	*	*	*	*	503	546	469	562	*	*	*	*	*	*	486	554
07:00	*	*	*	*	317	336	360	310	*	*	*	*	*	*	338	323
08:00	*	*	*	*	250	243	245	204	*	*	*	*	*	*	248	224
09:00	*	*	*	*	191	182	183	188	*	*	*	*	*	*	187	185
10:00	*	*	*	*	115	100	121	94	*	*	*	*	*	*	118	97
11:00	*	*	*	*	66	57	76	68	*	*	*	*	*	*	71	62
Total	0	0	0	0	7436	7455	7529	7556	0	0	0	0	0	0	7481	7505
Day	0	0	0	0	14891		15085		0	0	0	0	0	0	14986	
AM Peak					07:00	07:00	07:00	08:00							07:00	07:00
Vol.					667	475	672	470							670	470
PM Peak					17:00	17:00	16:00	16:00							17:00	17:00
Vol.					625	699	625	718							604	704

Comb. Total 0 0 14891 15085 0 0 0 14986

Old Colony Planning Council
70 School Street
Brockton, MA 02301
508-583-1833

Community: Halifax
Com #_U/RFC: 118_U5
Recorder #: Jamar #14
Tube Layout: L6 Basic (2')

Station ID:
Site Code: 118
Date Start: 23-Sep-09
Date End: 24-Sep-09
Plymouth St (106),east of Indian Path Rd

Start Time	21-Sep-09 Mon	22-Sep-09 Tue	23-Sep-09 Wed	24-Sep-09 Thu	25-Sep-09 Fri	26-Sep-09 Sat	27-Sep-09 Sun	Week Average
12:00 AM	*	*	59	66	*	*	*	62
01:00	*	*	34	40	*	*	*	37
02:00	*	*	22	32	*	*	*	27
03:00	*	*	29	25	*	*	*	27
04:00	*	*	86	86	*	*	*	86
05:00	*	*	229	237	*	*	*	233
06:00	*	*	591	598	*	*	*	594
07:00	*	*	1142	1136	*	*	*	1139
08:00	*	*	1047	973	*	*	*	1010
09:00	*	*	761	852	*	*	*	806
10:00	*	*	768	804	*	*	*	786
11:00	*	*	783	770	*	*	*	776
12:00 PM	*	*	824	917	*	*	*	870
01:00	*	*	893	840	*	*	*	866
02:00	*	*	978	1014	*	*	*	996
03:00	*	*	1169	1181	*	*	*	1175
04:00	*	*	1246	1343	*	*	*	1294
05:00	*	*	1324	1291	*	*	*	1308
06:00	*	*	1049	1031	*	*	*	1040
07:00	*	*	653	670	*	*	*	662
08:00	*	*	493	449	*	*	*	471
09:00	*	*	373	371	*	*	*	372
10:00	*	*	215	215	*	*	*	215
11:00	*	*	123	144	*	*	*	134
Total	0	0	14891	15085	0	0	0	14986
Percentage	0.0%	0.0%	99.4%	100.7%	0.0%	0.0%	0.0%	
AM Peak			07:00	07:00				07:00
Vol.			1142	1136				1139
PM Peak			17:00	16:00				17:00
Vol.			1324	1343				1308

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #14
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),east of Indian Path Rd

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
09/23/09	0	0	0	0	3	10	6	1	0	0	0	0	0	0	21
01:00	0	0	0	0	2	6	7	1	0	0	0	0	0	0	16
02:00	0	0	0	0	2	7	2	1	0	0	0	0	0	0	12
03:00	0	0	0	2	2	6	2	0	1	0	0	0	0	0	13
04:00	0	0	0	1	5	34	19	3	0	0	0	0	0	0	62
05:00	0	0	0	1	23	71	42	7	0	0	0	0	0	0	144
06:00	10	0	2	11	72	155	49	9	0	0	0	0	0	0	308
07:00	32	1	3	34	222	300	69	6	0	0	0	0	0	0	667
08:00	28	24	51	121	151	156	47	2	0	0	0	0	0	0	580
09:00	14	0	3	28	117	153	52	5	0	0	0	0	0	0	372
10:00	15	0	2	13	96	187	49	7	0	0	0	0	0	0	369
11:00	10	0	1	7	114	204	45	3	0	0	0	0	0	0	384
12 PM	22	0	1	7	72	216	72	6	0	0	0	0	0	0	396
13:00	21	1	3	13	114	208	74	6	1	0	0	0	0	0	441
14:00	31	14	34	81	144	157	42	6	0	0	0	0	0	0	509
15:00	32	1	2	12	111	262	78	6	0	0	0	0	0	0	504
16:00	35	2	2	21	106	301	101	3	0	0	0	0	0	0	571
17:00	43	0	0	21	130	321	101	8	1	0	0	0	0	0	625
18:00	21	1	1	6	145	255	69	4	1	0	0	0	0	0	503
19:00	13	0	2	4	86	171	37	3	1	0	0	0	0	0	317
20:00	3	0	0	3	75	127	40	2	0	0	0	0	0	0	250
21:00	3	0	2	0	43	102	40	0	0	1	0	0	0	0	191
22:00	0	0	0	3	24	67	19	2	0	0	0	0	0	0	115
23:00	0	0	0	0	11	34	18	3	0	0	0	0	0	0	66
Total	333	44	109	389	1870	3510	1080	94	5	1	0	0	0	1	7436

Daily
 15th Percentile : 31 MPH
 50th Percentile : 37 MPH
 85th Percentile : 41 MPH
 95th Percentile : 44 MPH

 Mean Speed(Average) : 35 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 5380
 Percent in Pace : 72.4%
 Number of Vehicles > 35 MPH : 4691
 Percent of Vehicles > 35 MPH : 63.1%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #14
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),east of Indian Path Rd

WB

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	999	Total
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	76	999	Total
09/24/09	0	0	0	0	3	18	6	2	0	0	0	0	0	0	0	29
01:00	0	0	0	1	2	14	2	1	0	0	0	0	0	0	0	20
02:00	0	0	0	1	2	6	3	1	0	0	0	0	0	0	0	13
03:00	0	0	0	0	2	9	3	0	1	1	0	0	0	0	0	16
04:00	0	0	2	0	6	28	16	1	0	0	0	0	0	0	0	53
05:00	0	0	0	0	22	94	28	5	0	0	0	0	0	0	0	149
06:00	19	0	3	12	75	145	50	1	0	0	0	0	0	0	0	305
07:00	35	2	3	40	205	326	59	2	0	0	0	0	0	0	0	672
08:00	43	25	58	113	108	121	34	1	0	0	0	0	0	0	0	503
09:00	17	0	6	16	115	229	58	3	0	0	0	0	0	0	0	444
10:00	19	1	25	17	99	177	62	4	0	0	0	0	0	0	0	404
11:00	15	0	3	20	65	179	80	8	1	0	0	0	0	0	0	371
12 PM	21	0	0	4	105	211	86	9	0	1	0	0	0	0	0	437
13:00	26	3	1	14	97	188	83	5	0	0	0	0	0	0	0	417
14:00	35	11	27	89	143	138	30	3	0	0	0	0	0	0	0	476
15:00	36	0	1	24	147	260	86	4	0	0	0	0	0	0	0	558
16:00	40	2	3	18	169	309	84	0	0	0	0	0	0	0	0	625
17:00	42	0	0	10	134	299	92	6	0	0	0	0	0	0	0	583
18:00	20	0	0	6	103	261	73	6	0	0	0	0	0	0	0	469
19:00	11	0	0	3	102	183	57	3	1	0	0	0	0	0	0	360
20:00	4	0	0	7	60	132	37	4	1	0	0	0	0	0	0	245
21:00	2	0	0	6	37	100	33	5	0	0	0	0	0	0	0	183
22:00	2	0	0	0	22	63	26	5	2	0	1	0	0	0	0	121
23:00	1	0	0	1	15	34	22	3	0	0	0	0	0	0	0	76
Total	388	44	132	402	1838	3524	1110	82	6	2	1	0	0	0	0	7529

Daily
 15th Percentile : 31 MPH
 50th Percentile : 37 MPH
 85th Percentile : 41 MPH
 95th Percentile : 44 MPH
 Mean Speed(Average) : 35 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 5362
 Percent in Pace : 71.2%
 Number of Vehicles > 35 MPH : 4725
 Percent of Vehicles > 35 MPH : 62.8%

Grand Total	721	88	241	791	3708	7034	2190	176	11	3	1	0	0	1	14965
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Overall
 15th Percentile : 31 MPH
 50th Percentile : 37 MPH
 85th Percentile : 41 MPH
 95th Percentile : 44 MPH
 Mean Speed(Average) : 35 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 10742
 Percent in Pace : 71.8%
 Number of Vehicles > 35 MPH : 9416
 Percent of Vehicles > 35 MPH : 62.9%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #14
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),east of Indian Path Rd

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
09/23/09	0	0	0	4	8	12	13	1	0	0	0	0	0	0	38
01:00	0	0	0	0	5	6	5	2	0	0	0	0	0	0	18
02:00	0	0	0	0	5	3	1	1	0	0	0	0	0	0	10
03:00	0	0	0	1	3	7	3	1	1	0	0	0	0	0	16
04:00	0	0	0	0	5	15	3	1	0	0	0	0	0	0	24
05:00	2	0	0	1	19	47	14	2	0	0	0	0	0	0	85
06:00	10	0	0	7	83	150	32	0	1	0	0	0	0	0	283
07:00	35	1	5	21	147	238	27	1	0	0	0	0	0	0	475
08:00	38	1	27	115	151	118	14	2	1	0	0	0	0	0	467
09:00	21	1	5	16	122	186	36	2	0	0	0	0	0	0	389
10:00	19	0	2	12	147	187	28	4	0	0	0	0	0	0	399
11:00	12	2	3	17	129	197	37	2	0	0	0	0	0	0	399
12 PM	31	1	3	25	144	191	33	0	0	0	0	0	0	0	428
13:00	34	0	3	21	162	185	46	1	0	0	0	0	0	0	452
14:00	44	0	18	59	175	159	13	0	1	0	0	0	0	0	469
15:00	48	12	14	50	237	267	35	2	0	0	0	0	0	0	665
16:00	48	2	9	39	234	293	48	2	0	0	0	0	0	0	675
17:00	51	3	4	59	180	364	36	2	0	0	0	0	0	0	699
18:00	34	1	5	19	136	303	47	1	0	0	0	0	0	0	546
19:00	12	0	0	9	128	168	17	2	0	0	0	0	0	0	336
20:00	7	0	0	5	115	88	26	1	0	1	0	0	0	0	243
21:00	7	0	0	5	50	104	16	0	0	0	0	0	0	0	182
22:00	0	0	0	1	23	51	23	2	0	0	0	0	0	0	100
23:00	0	0	0	2	9	34	11	0	0	0	1	0	0	0	57
Total	453	24	98	488	2417	3373	564	32	4	1	1	0	0	0	7455

Daily
 15th Percentile : 31 MPH
 50th Percentile : 36 MPH
 85th Percentile : 40 MPH
 95th Percentile : 43 MPH

 Mean Speed(Average) : 34 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 5790
 Percent in Pace : 77.7%
 Number of Vehicles > 35 MPH : 3975
 Percent of Vehicles > 35 MPH : 53.3%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #14
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),east of Indian Path Rd

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
09/24/09	0	0	0	0	8	18	9	2	0	0	0	0	0	0	37
01:00	0	0	0	0	6	9	5	0	0	0	0	0	0	0	20
02:00	0	0	0	0	5	8	3	1	0	0	0	0	2	0	19
03:00	0	0	0	0	1	6	2	0	0	0	0	0	0	0	9
04:00	0	0	0	0	4	14	13	1	0	1	0	0	0	0	33
05:00	0	0	0	0	23	49	13	3	0	0	0	0	0	0	88
06:00	19	1	1	9	89	149	24	1	0	0	0	0	0	0	293
07:00	32	3	8	30	149	218	24	0	0	0	0	0	0	0	464
08:00	28	4	32	118	168	109	11	0	0	0	0	0	0	0	470
09:00	22	0	0	15	161	179	27	3	1	0	0	0	0	0	408
10:00	25	0	1	11	112	206	42	3	0	0	0	0	0	0	400
11:00	20	0	0	5	105	222	45	2	0	0	0	0	0	0	399
12 PM	29	1	5	18	139	227	61	0	0	0	0	0	0	0	480
13:00	30	18	2	22	121	190	37	3	0	0	0	0	0	0	423
14:00	52	15	33	96	181	141	19	1	0	0	0	0	0	0	538
15:00	44	6	12	61	238	239	23	0	0	0	0	0	0	0	623
16:00	47	2	8	77	354	219	11	0	0	0	0	0	0	0	718
17:00	57	0	3	35	280	308	23	2	0	0	0	0	0	0	708
18:00	29	0	6	19	190	287	31	0	0	0	0	0	0	0	562
19:00	18	0	2	9	116	154	10	1	0	0	0	0	0	0	310
20:00	6	0	0	6	59	113	19	1	0	0	0	0	0	0	204
21:00	5	0	0	5	58	96	22	2	0	0	0	0	0	0	188
22:00	4	0	0	0	24	52	13	0	1	0	0	0	0	0	94
23:00	1	0	1	2	12	39	13	0	0	0	0	0	0	0	68
Total	468	50	114	538	2603	3252	500	26	2	1	0	0	2	0	7556

Daily
 15th Percentile : 30 MPH
 50th Percentile : 36 MPH
 85th Percentile : 40 MPH
 95th Percentile : 42 MPH
 Mean Speed(Average) : 34 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 5855
 Percent in Pace : 77.5%
 Number of Vehicles > 35 MPH : 3783
 Percent of Vehicles > 35 MPH : 50.1%

Grand Total	921	74	212	1026	5020	6625	1064	58	6	2	1	0	2	0	15011
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Overall
 15th Percentile : 31 MPH
 50th Percentile : 36 MPH
 85th Percentile : 40 MPH
 95th Percentile : 42 MPH
 Mean Speed(Average) : 34 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 11645
 Percent in Pace : 77.6%
 Number of Vehicles > 35 MPH : 7758
 Percent of Vehicles > 35 MPH : 51.7%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #14
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),east of Indian Path Rd

WB, EB

Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	999	Total
09/23/09	0	0	0	4	11	22	19	2	0	0	0	0	0	0	1	59
01:00	0	0	0	0	7	12	12	3	0	0	0	0	0	0	0	34
02:00	0	0	0	0	7	10	3	2	0	0	0	0	0	0	0	22
03:00	0	0	0	3	5	13	5	1	2	0	0	0	0	0	0	29
04:00	0	0	0	1	10	49	22	4	0	0	0	0	0	0	0	86
05:00	2	0	0	2	42	118	56	9	0	0	0	0	0	0	0	229
06:00	20	0	2	18	155	305	81	9	1	0	0	0	0	0	0	591
07:00	67	2	8	55	369	538	96	7	0	0	0	0	0	0	0	1142
08:00	66	25	78	236	302	274	61	4	1	0	0	0	0	0	0	1047
09:00	35	1	8	44	239	339	88	7	0	0	0	0	0	0	0	761
10:00	34	0	4	25	243	374	77	11	0	0	0	0	0	0	0	768
11:00	22	2	4	24	243	401	82	5	0	0	0	0	0	0	0	783
12 PM	53	1	4	32	216	407	105	6	0	0	0	0	0	0	0	824
13:00	55	1	6	34	276	393	120	7	1	0	0	0	0	0	0	893
14:00	75	14	52	140	319	316	55	6	1	0	0	0	0	0	0	978
15:00	80	13	16	62	348	529	113	8	0	0	0	0	0	0	0	1169
16:00	83	4	11	60	340	594	149	5	0	0	0	0	0	0	0	1246
17:00	94	3	4	80	310	685	137	10	1	0	0	0	0	0	0	1324
18:00	55	2	6	25	281	558	116	5	1	0	0	0	0	0	0	1049
19:00	25	0	2	13	214	339	54	5	1	0	0	0	0	0	0	653
20:00	10	0	0	8	190	215	66	3	0	1	0	0	0	0	0	493
21:00	10	0	2	5	93	206	56	0	0	1	0	0	0	0	0	373
22:00	0	0	0	4	47	118	42	4	0	0	0	0	0	0	0	215
23:00	0	0	0	2	20	68	29	3	0	0	1	0	0	0	0	123
Total	786	68	207	877	4287	6883	1644	126	9	2	1	0	0	1	14891	

Daily
 15th Percentile : 31 MPH
 50th Percentile : 36 MPH
 85th Percentile : 40 MPH
 95th Percentile : 44 MPH
 Mean Speed(Average) : 35 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 11170
 Percent in Pace : 75.0%
 Number of Vehicles > 35 MPH : 8666
 Percent of Vehicles > 35 MPH : 58.2%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #14
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),east of Indian Path Rd

WB, EB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
09/24/09	0	0	0	0	11	36	15	4	0	0	0	0	0	0	66
01:00	0	0	0	1	8	23	7	1	0	0	0	0	0	0	40
02:00	0	0	0	1	7	14	6	2	0	0	0	0	2	0	32
03:00	0	0	0	0	3	15	5	0	1	1	0	0	0	0	25
04:00	0	0	2	0	10	42	29	2	0	1	0	0	0	0	86
05:00	0	0	0	0	45	143	41	8	0	0	0	0	0	0	237
06:00	38	1	4	21	164	294	74	2	0	0	0	0	0	0	598
07:00	67	5	11	70	354	544	83	2	0	0	0	0	0	0	1136
08:00	71	29	90	231	276	230	45	1	0	0	0	0	0	0	973
09:00	39	0	6	31	276	408	85	6	1	0	0	0	0	0	852
10:00	44	1	26	28	211	383	104	7	0	0	0	0	0	0	804
11:00	35	0	3	25	170	401	125	10	1	0	0	0	0	0	770
12 PM	50	1	5	22	244	438	147	9	0	1	0	0	0	0	917
13:00	56	21	3	36	218	378	120	8	0	0	0	0	0	0	840
14:00	87	26	60	185	324	279	49	4	0	0	0	0	0	0	1014
15:00	80	6	13	85	385	499	109	4	0	0	0	0	0	0	1181
16:00	87	4	11	95	523	528	95	0	0	0	0	0	0	0	1343
17:00	99	0	3	45	414	607	115	8	0	0	0	0	0	0	1291
18:00	49	0	6	25	293	548	104	6	0	0	0	0	0	0	1031
19:00	29	0	2	12	218	337	67	4	1	0	0	0	0	0	670
20:00	10	0	0	13	119	245	56	5	1	0	0	0	0	0	449
21:00	7	0	0	11	95	196	55	7	0	0	0	0	0	0	371
22:00	6	0	0	0	46	115	39	5	3	0	1	0	0	0	215
23:00	2	0	1	3	27	73	35	3	0	0	0	0	0	0	144
Total	856	94	246	940	4441	6776	1610	108	8	3	1	0	2	1	15085

Daily
 15th Percentile : 31 MPH
 50th Percentile : 36 MPH
 85th Percentile : 40 MPH
 95th Percentile : 44 MPH
 Mean Speed(Average) : 34 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 11217
 Percent in Pace : 74.4%
 Number of Vehicles > 35 MPH : 8508
 Percent of Vehicles > 35 MPH : 56.4%

Grand Total	1642	162	453	1817	8728	13659	3254	234	17	5	2	0	2	1	29976
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Overall
 15th Percentile : 31 MPH
 50th Percentile : 36 MPH
 85th Percentile : 40 MPH
 95th Percentile : 44 MPH
 Mean Speed(Average) : 35 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 22387
 Percent in Pace : 74.7%
 Number of Vehicles > 35 MPH : 17174
 Percent of Vehicles > 35 MPH : 57.3%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #14
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),east of Indian Path Rd

WB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
	09/23/09	0	18	2	0	1	0	0	0	0	0	0	0	0	21	1
	01:00	0	11	5	0	0	0	0	0	0	0	0	0	0	16	0
	02:00	0	9	3	0	0	0	0	0	0	0	0	0	0	12	0
	03:00	0	8	4	0	1	0	0	0	0	0	0	0	0	13	1
	04:00	0	33	23	1	5	0	0	0	0	0	0	0	0	62	6
	05:00	3	83	51	1	5	0	0	1	0	0	0	0	0	144	7
	06:00	3	194	90	5	13	1	1	0	0	0	0	0	0	307	20
	07:00	5	478	152	6	15	5	0	4	0	1	0	0	0	666	31
	08:00	2	404	131	10	19	6	0	5	2	0	0	0	0	579	42
	09:00	1	252	89	8	14	3	0	2	2	0	0	0	0	371	29
	10:00	7	253	83	2	17	2	0	2	2	0	0	0	0	368	25
	11:00	2	240	105	4	24	3	0	4	1	0	0	0	0	383	36
	12 PM	3	254	116	5	10	3	0	4	1	0	0	0	0	396	23
	13:00	10	301	103	2	14	3	0	5	3	0	0	0	0	441	27
	14:00	9	328	125	13	18	9	0	3	2	1	0	0	0	508	46
	15:00	4	341	132	2	16	3	0	3	2	0	0	0	0	503	26
	16:00	9	376	164	0	10	4	0	1	5	1	0	0	0	570	21
	17:00	6	455	141	1	15	1	0	3	1	0	0	0	0	623	21
	18:00	17	355	111	3	12	3	0	1	1	0	0	0	0	503	20
	19:00	3	245	57	0	10	0	0	1	0	0	0	0	0	316	11
	20:00	5	197	42	0	5	1	0	0	0	0	0	0	0	250	6
	21:00	1	151	35	0	3	1	0	0	0	0	0	0	0	191	4
	22:00	1	91	22	0	1	0	0	0	0	0	0	0	0	115	1
	23:00	0	57	8	0	1	0	0	0	0	0	0	0	0	66	1
	Total	91	5134	1794	63	229	48	1	39	22	3	0	0	0	7424	405
	Percent	1.2%	69.2%	24.2%	0.8%	3.1%	0.6%	0.0%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%		5.5%
AM Peak	10:00	07:00	07:00	08:00	11:00	08:00	06:00	08:00	08:00	07:00					07:00	08:00
Vol.	7	478	152	10	24	6	1	5	2	1				666	42	
PM Peak	18:00	17:00	16:00	14:00	14:00	14:00		13:00	16:00	14:00				17:00	14:00	
Vol.	17	455	164	13	18	9		5	5	1				623	46	

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #14
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),east of Indian Path Rd

WB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
	09/24/09	0	22	5	1	1	0	0	0	0	0	0	0	0	29	2
	01:00	0	17	3	0	0	0	0	0	0	0	0	0	0	20	0
	02:00	0	9	1	0	0	0	0	3	0	0	0	0	0	13	3
	03:00	0	13	2	0	1	0	0	0	0	0	0	0	0	16	1
	04:00	0	30	18	0	5	0	0	0	0	0	0	0	0	53	5
	05:00	0	82	58	2	6	1	0	0	0	0	0	0	0	149	9
	06:00	3	192	91	3	13	2	0	1	0	0	0	0	0	305	19
	07:00	4	485	151	7	17	2	0	2	2	1	0	0	0	671	31
	08:00	4	341	122	9	14	5	1	4	2	0	0	0	0	502	35
	09:00	5	310	95	6	18	8	0	0	2	0	0	0	0	444	34
	10:00	5	274	90	6	17	3	1	6	2	0	0	0	0	404	35
	11:00	5	253	90	1	16	4	0	0	1	0	0	0	0	370	22
	12 PM	5	288	117	0	17	6	1	2	1	0	0	0	0	437	27
	13:00	5	288	106	2	9	2	0	3	2	0	0	0	0	417	18
	14:00	11	317	113	16	9	6	0	2	0	0	0	0	0	474	33
	15:00	8	383	139	9	11	3	0	2	1	1	0	0	0	557	27
	16:00	3	434	154	2	21	5	0	3	2	0	0	0	0	624	33
	17:00	7	413	138	1	18	3	0	0	1	0	0	0	0	581	23
	18:00	6	339	112	2	8	1	0	1	0	0	0	0	0	469	12
	19:00	4	268	79	0	5	1	0	2	0	0	0	0	0	359	8
	20:00	1	182	58	0	3	1	0	0	0	0	0	0	0	245	4
	21:00	1	155	26	0	0	0	0	0	0	0	0	0	0	182	0
	22:00	1	83	32	0	4	0	0	0	0	0	0	0	0	120	4
	23:00	0	57	14	1	2	0	0	1	1	0	0	0	0	76	5
	Total	78	5235	1814	68	215	53	3	32	17	2	0	0	0	7517	390
	Percent	1.0%	69.6%	24.1%	0.9%	2.9%	0.7%	0.0%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%		5.2%
	AM Peak	09:00	07:00	07:00	08:00	09:00	09:00	08:00	10:00	07:00	07:00				07:00	08:00
	Vol.	5	485	151	9	18	8	1	6	2	1				671	35
	PM Peak	14:00	16:00	16:00	14:00	16:00	12:00	12:00	13:00	13:00	15:00				16:00	14:00
	Vol.	11	434	154	16	21	6	1	3	2	1				624	33
	Grand Total	169	10369	3608	131	444	101	4	71	39	5	0	0	0	14941	795
	Percent	1.1%	69.4%	24.1%	0.9%	3.0%	0.7%	0.0%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%		5.3%

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #14
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),east of Indian Path Rd

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/23/09	0	30	7	1	0	0	0	0	0	0	0	0	0	38	1
01:00	1	14	3	0	0	0	0	0	0	0	0	0	0	18	0
02:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10	0
03:00	0	13	1	0	2	0	0	0	0	0	0	0	0	16	2
04:00	0	13	8	1	2	0	0	0	0	0	0	0	0	24	3
05:00	1	54	22	2	4	1	0	0	1	0	0	0	0	85	8
06:00	1	190	70	7	10	1	0	0	3	0	0	0	0	282	21
07:00	6	321	116	7	16	5	0	0	3	0	0	0	0	474	31
08:00	2	317	106	11	22	3	1	1	1	1	0	0	0	465	40
09:00	4	283	79	3	10	2	0	3	5	0	0	0	0	389	23
10:00	1	293	75	1	23	4	0	1	0	0	0	0	0	398	29
11:00	4	303	65	2	15	2	0	5	2	0	0	0	0	398	26
12 PM	0	315	92	2	15	2	0	1	0	0	0	0	0	427	20
13:00	1	328	97	5	13	4	0	0	2	0	0	0	0	450	24
14:00	6	348	86	6	11	4	0	1	5	0	0	0	0	467	27
15:00	4	499	135	2	18	3	0	1	1	0	0	0	0	663	25
16:00	8	502	137	2	19	2	0	1	1	1	0	0	0	673	26
17:00	4	536	140	0	14	2	0	1	2	0	0	0	0	699	19
18:00	7	410	107	0	16	1	0	3	0	0	0	0	0	544	20
19:00	7	269	48	2	8	1	0	0	1	0	0	0	0	336	12
20:00	2	194	41	0	6	0	0	0	0	0	0	0	0	243	6
21:00	2	152	25	0	2	1	0	0	0	0	0	0	0	182	3
22:00	0	86	14	0	0	0	0	0	0	0	0	0	0	100	0
23:00	1	45	11	0	0	0	0	0	0	0	0	0	0	57	0
Total	62	5523	1487	54	226	38	1	18	27	2	0	0	0	7438	366
Percent	0.8%	74.3%	20.0%	0.7%	3.0%	0.5%	0.0%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%		4.9%
AM Peak	07:00	07:00	07:00	08:00	10:00	07:00	08:00	11:00	09:00	08:00				07:00	08:00
Vol.	6	321	116	11	23	5	1	5	5	1				474	40
PM Peak	16:00	17:00	17:00	14:00	16:00	13:00		18:00	14:00	16:00				17:00	14:00
Vol.	8	536	140	6	19	4		3	5	1				699	27

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #14
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Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),east of Indian Path Rd

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/24/09	0	32	4	0	0	0	0	1	0	0	0	0	0	37	1
01:00	0	18	1	0	1	0	0	0	0	0	0	0	0	20	1
02:00	0	15	4	0	0	0	0	0	0	0	0	0	0	19	0
03:00	0	6	1	1	1	0	0	0	0	0	0	0	0	9	2
04:00	0	21	6	2	4	0	0	0	0	0	0	0	0	33	6
05:00	0	55	24	3	3	1	0	2	0	0	0	0	0	88	9
06:00	2	200	72	5	11	0	0	2	1	0	0	0	0	293	19
07:00	1	326	107	7	16	3	0	1	2	0	0	0	0	463	29
08:00	7	321	108	8	20	4	0	1	0	0	0	0	0	469	33
09:00	2	273	104	5	19	1	0	3	1	0	0	0	0	408	29
10:00	1	292	84	0	17	4	0	2	0	0	0	0	0	400	23
11:00	2	300	76	1	12	3	0	4	0	0	0	0	0	398	20
12 PM	1	351	99	3	15	6	0	1	3	0	0	0	0	479	28
13:00	2	312	87	3	10	4	0	4	0	0	0	0	0	422	21
14:00	4	405	98	8	18	4	0	1	1	0	0	0	0	539	32
15:00	2	475	113	5	15	3	0	7	2	0	0	0	0	622	32
16:00	3	554	128	6	18	3	1	2	1	0	0	0	0	716	31
17:00	9	543	130	3	18	4	0	1	1	1	0	0	0	710	28
18:00	4	422	113	1	17	1	0	2	1	0	0	0	0	561	22
19:00	3	246	56	0	5	0	0	0	0	0	0	0	0	310	5
20:00	1	157	41	0	3	0	0	1	0	0	0	0	0	203	4
21:00	1	152	32	0	2	0	0	1	0	0	0	0	0	188	3
22:00	0	83	8	0	2	0	0	0	1	0	0	0	0	94	3
23:00	1	55	12	0	0	0	0	0	0	0	0	0	0	68	0
Total	46	5614	1508	61	227	41	1	36	14	1	0	0	0	7549	381
Percent	0.6%	74.4%	20.0%	0.8%	3.0%	0.5%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%		5.0%
AM Peak	08:00	07:00	08:00	08:00	08:00	08:00		11:00	07:00					08:00	08:00
Vol.	7	326	108	8	20	4		4	2					469	33
PM Peak	17:00	16:00	17:00	14:00	14:00	12:00	16:00	15:00	12:00	17:00				16:00	14:00
Vol.	9	554	130	8	18	6	1	7	3	1				716	32
Grand Total	108	11137	2995	115	453	79	2	54	41	3	0	0	0	14987	747
Percent	0.7%	74.3%	20.0%	0.8%	3.0%	0.5%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%		5.0%

Old Colony Planning Council
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Community: Halifax
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Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
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 Plymouth St (106),east of Indian Path Rd

WB, EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
09/23/09	0	48	9	1	1	0	0	0	0	0	0	0	0	59	2
01:00	1	25	8	0	0	0	0	0	0	0	0	0	0	34	0
02:00	0	17	5	0	0	0	0	0	0	0	0	0	0	22	0
03:00	0	21	5	0	3	0	0	0	0	0	0	0	0	29	3
04:00	0	46	31	2	7	0	0	0	0	0	0	0	0	86	9
05:00	4	137	73	3	9	1	0	1	1	0	0	0	0	229	15
06:00	4	384	160	12	23	2	1	0	3	0	0	0	0	589	41
07:00	11	799	268	13	31	10	0	4	3	1	0	0	0	1140	62
08:00	4	721	237	21	41	9	1	6	3	1	0	0	0	1044	82
09:00	5	535	168	11	24	5	0	5	7	0	0	0	0	760	52
10:00	8	546	158	3	40	6	0	3	2	0	0	0	0	766	54
11:00	6	543	170	6	39	5	0	9	3	0	0	0	0	781	62
12 PM	3	569	208	7	25	5	0	5	1	0	0	0	0	823	43
13:00	11	629	200	7	27	7	0	5	5	0	0	0	0	891	51
14:00	15	676	211	19	29	13	0	4	7	1	0	0	0	975	73
15:00	8	840	267	4	34	6	0	4	3	0	0	0	0	1166	51
16:00	17	878	301	2	29	6	0	2	6	2	0	0	0	1243	47
17:00	10	991	281	1	29	3	0	4	3	0	0	0	0	1322	40
18:00	24	765	218	3	28	4	0	4	1	0	0	0	0	1047	40
19:00	10	514	105	2	18	1	0	1	1	0	0	0	0	652	23
20:00	7	391	83	0	11	1	0	0	0	0	0	0	0	493	12
21:00	3	303	60	0	5	2	0	0	0	0	0	0	0	373	7
22:00	1	177	36	0	1	0	0	0	0	0	0	0	0	215	1
23:00	1	102	19	0	1	0	0	0	0	0	0	0	0	123	1
Total	153	10657	3281	117	455	86	2	57	49	5	0	0	0	14862	771
Percent	1.0%	71.7%	22.1%	0.8%	3.1%	0.6%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%		5.2%
AM Peak	07:00	07:00	07:00	08:00	08:00	07:00	06:00	11:00	09:00	07:00				07:00	08:00
Vol.	11	799	268	21	41	10	1	9	7	1				1140	82
PM Peak	18:00	17:00	16:00	14:00	15:00	14:00		12:00	14:00	16:00				17:00	14:00
Vol.	24	991	301	19	34	13		5	7	2				1322	73

Old Colony Planning Council
 70 School Street
 Brockton, MA 02301
 508-583-1833

Community: Halifax
 Com #_U/RFC: 118_U5
 Recorder #: Jamar #14
 Tube Layout: L6 Basic (2')

Station ID:
 Site Code: 118
 Date Start: 23-Sep-09
 Date End: 24-Sep-09
 Plymouth St (106),east of Indian Path Rd

WB, EB	Start Time	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
	09/24/09	0	54	9	1	1	0	0	1	0	0	0	0	66	3
	01:00	0	35	4	0	1	0	0	0	0	0	0	0	40	1
	02:00	0	24	5	0	0	0	0	3	0	0	0	0	32	3
	03:00	0	19	3	1	2	0	0	0	0	0	0	0	25	3
	04:00	0	51	24	2	9	0	0	0	0	0	0	0	86	11
	05:00	0	137	82	5	9	2	0	2	0	0	0	0	237	18
	06:00	5	392	163	8	24	2	0	3	1	0	0	0	598	38
	07:00	5	811	258	14	33	5	0	3	4	1	0	0	1134	60
	08:00	11	662	230	17	34	9	1	5	2	0	0	0	971	68
	09:00	7	583	199	11	37	9	0	3	3	0	0	0	852	63
	10:00	6	566	174	6	34	7	1	8	2	0	0	0	804	58
	11:00	7	553	166	2	28	7	0	4	1	0	0	0	768	42
	12 PM	6	639	216	3	32	12	1	3	4	0	0	0	916	55
	13:00	7	600	193	5	19	6	0	7	2	0	0	0	839	39
	14:00	15	722	211	24	27	10	0	3	1	0	0	0	1013	65
	15:00	10	858	252	14	26	6	0	9	3	1	0	0	1179	59
	16:00	6	988	282	8	39	8	1	5	3	0	0	0	1340	64
	17:00	16	956	268	4	36	7	0	1	2	1	0	0	1291	51
	18:00	10	761	225	3	25	2	0	3	1	0	0	0	1030	34
	19:00	7	514	135	0	10	1	0	2	0	0	0	0	669	13
	20:00	2	339	99	0	6	1	0	1	0	0	0	0	448	8
	21:00	2	307	58	0	2	0	0	1	0	0	0	0	370	3
	22:00	1	166	40	0	6	0	0	0	1	0	0	0	214	7
	23:00	1	112	26	1	2	0	0	1	1	0	0	0	144	5
	Total	124	10849	3322	129	442	94	4	68	31	3	0	0	15066	771
	Percent	0.8%	72.0%	22.0%	0.9%	2.9%	0.6%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%		5.1%
AM Peak	08:00	07:00	07:00	08:00	09:00	08:00	08:00	10:00	07:00	07:00				07:00	08:00
Vol.	11	811	258	17	37	9	1	8	4	1				1134	68
PM Peak	17:00	16:00	16:00	14:00	16:00	12:00	12:00	15:00	12:00	15:00				16:00	14:00
Vol.	16	988	282	24	39	12	1	9	4	1				1340	65
Grand Total	277	21506	6603	246	897	180	6	125	80	8	0	0	0	29928	1542
Percent	0.9%	71.9%	22.1%	0.8%	3.0%	0.6%	0.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%		5.2%

Crosswalks

Background

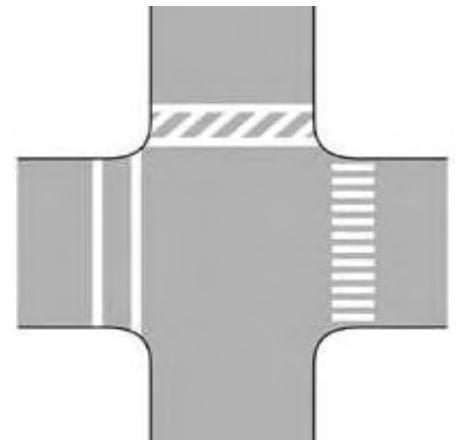
In 2006, pedestrians accounted for fourteen percent of total roadway fatalities in Massachusetts. Nationwide there were 4,784 pedestrian fatalities accounting for eleven percent of all roadway fatalities. Based upon these statistics, pedestrian accommodation should be a critical element of transportation safety, and, in fact, is required under Massachusetts General Law. One common practice for accommodating pedestrians is the use of crosswalks.

Roadways must accommodate a wide variety of pedestrians who behave differently and have a variety of physical, cognitive, and sensory abilities. From a crossing perspective, this is important as some pedestrians may require more time to cross a street and desire more predictable surfaces. Similarly, pedestrians who are visually impaired may require audible and tactile cues. Pedestrians using wheelchairs may cross the street more quickly, but are also more difficult to see from a vehicle.

Design of a Crosswalk

Crosswalk markings provide guidance for pedestrians who are crossing roadways. Minimally, crosswalks must consist of two parallel lines that shall not be less than 6 inches or greater than 24 inches in width. The crosswalk should have a width of no less than six feet.

For added visibility additional marking opportunities exist. For example, the preferred type of crosswalk marking in many municipalities is the ladder, or “continental” pattern consisting of white longitudinal lines parallel to traffic flow, however “zebra” (diagonal) striping may also be used. Longitudinal or diagonal lines should be 12 to 24 inches wide and spaced 12 to 60 inches apart. Crosswalk markings should be spaced so that the lines are not in wheel paths. In addition, the spacing should not exceed 2.5 times the width of the lines. See the [Manual on Uniform Traffic Control Devices \(MUTCD Section 3B.17\)](#) for more information.



Source: MUTCD

Installing Crosswalks

Crosswalks are typically installed at intersections where pedestrian delineation proves beneficial. At non-intersection locations, crosswalks should only be added when there is both a significant pedestrian presence and after an engineering study deems it safe.



Continental Crosswalk Markings (Source: www.pedbikeimages.org)

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Crosswalks

When to Install Crosswalks

Crosswalks should be marked at all intersections with substantial conflicts between vehicles and pedestrians, as well as at other appropriate points of pedestrian concentration, including non-intersection locations with a significant pedestrian presence. As per the [MUTCD Section 3B.17](#), an engineering study should be performed before installing marked crosswalks away from traffic signals or STOP signs. Warning signs should be installed at non-intersection crosswalks, and added visibility should be provided through parking prohibitions on the crosswalk approaches. Worth noting is that some municipalities have established quantitative guidelines (e.g., number of pedestrians per some specified time period) for installing crosswalks at non-intersection locations.

Crosswalks at Intersections

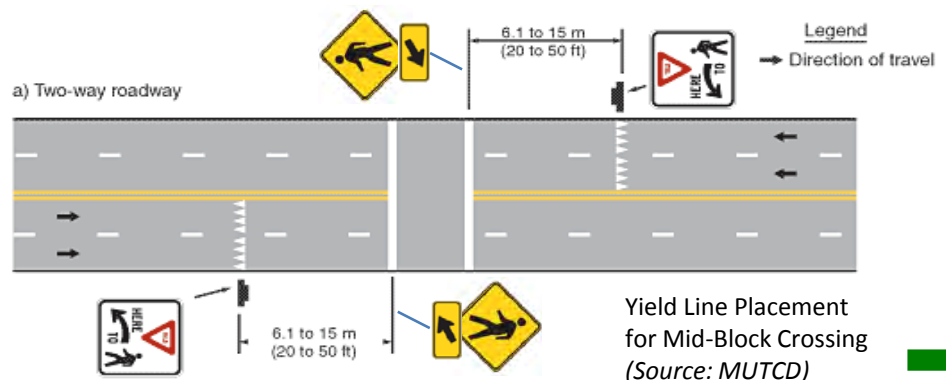
Crosswalks should be marked at intersections when they:

- Help pedestrians find their way across a complex intersection;
- Show pedestrians a safe route across traffic;
- Minimize exposure to motor vehicles, bicycles, and traffic conflicts; and
- Position pedestrians where they can best be seen by oncoming traffic.

Crosswalks located at intersections should be no more than 26 feet from the edge of the intersections. When crosswalks are located on a street with a stop line or with traffic signals, there should be a minimum spacing of 4 feet between the outer edge of the crosswalk and the nearest edge of the stop bar.

Non-Intersection Crosswalks

At non-intersection locations, in addition to the crosswalk markings, yield lines may be used to indicate the point at which vehicles should yield to pedestrians. Yield lines consist of solid white isosceles triangles pointing toward approaching vehicles and extend across the approach lane. The individual triangles have a base 12 to 24 inches wide and a height of 1.5 times the base, and are spaced 3 to 12 inches apart. If used, yield lines should be placed next to a "Yield Here to Pedestrians" (R1-5) sign. Please see [MUTCD Section 3B.16](#) for additional details at these locations.



Pedestrian Crossing
Warning Sign



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Crosswalks



Post-mounted Regulatory Pedestrian Sign
(Source: MassHighway Traffic Engineering)



Unsignalized Pedestrian Crossing Sign
(Source: MUTCD)



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Pedestrian Laws and Regulations

- [Massachusetts General Law \(MGL\) Chapter 89, Section 11](#) requires, among other things, that when traffic control signals are not in place or not in operation the driver of a vehicle shall yield the right of way to a pedestrian crossing the roadway within a marked crosswalk;
- Regulations promulgated under [MGL Chapter 90, Section 18A](#), by MassHighway, require every pedestrian crossing a roadway at any point other than a marked crosswalk shall yield the right-of-way to all vehicles upon the roadway;
- As per the [MUTCD Section 2B.12](#) in-street pedestrian crossing signage shall not be used at signalized intersections, and if it is placed in the roadway the sign support shall comply with the breakaway requirements.

Crosswalk Enhancements on Local Roadways

Raised Crosswalks

Raised crosswalks bring the roadway up to the level of the sidewalk at the crosswalk. They improve the visibility of the crosswalk and pedestrian, and by acting as a speed hump they can be effective at reducing vehicle speeds.

In-Roadway Warning Lights

In-roadway warning lights are amber lights embedded in the roadway on both sides of a crosswalk that begin flashing when activated by a pedestrian, thereby alerting drivers that a pedestrian is in the vicinity of the crosswalk.

Roadway Lighting

Although street lighting provides a benefit at many locations, it is particularly beneficial at crosswalks where lighting increases the visibility of pedestrians to passing motorists.

Refuge Islands and/or Medians

The addition of refuge islands and/or medians may be an effective design technique that affords pedestrians the opportunity to cross a roadway in stages.

Resources

The Manual on Uniform Traffic Control Devices (MUTCD)

Published by the FHWA, the MUTCD defines the standards used by transportation professionals nationwide to install and maintain traffic control devices on all streets and highways. The most recent version (2003) can be found at <http://mutcd.fhwa.dot.gov/>

The Pedestrian and Bicycle Information Center (PBIC)

The PBIC is a national clearinghouse for information about health, safety, engineering, advocacy, education, enforcement, access, and mobility for pedestrians and bicyclists. Information can be found at <http://www.walkinginfo.org/index.cfm>

Low Cost Non-Intersection Safety Improvements

Research Has Shown...

Post mounted delineators and chevrons can reduce run-off road crashes by up to 58% and 31%, respectively.

(Source: *Low Cost Local Road Safety Solutions* by American Traffic Safety Services Association and National Association of County Engineers)

Background

In 2006, there were 430 fatalities in vehicular crashes in Massachusetts with over half of these fatalities occurring at non-intersection locations. As a result, targeting safety at these non-intersection locations has been the focus of safety-related projects at all levels; however, it is often at the local level where the most significant impacts are realized. This fact sheet provides insight regarding low cost safety fixes for non-intersection crash locations. Recognizing that resources are often limited, an emphasis is provided on the identification of strategies that will yield effective results which are easily implemented from both a time and cost perspective.

Low Cost Safety Countermeasure Development

When attempting to improve safety at non-intersection locations consider some general strategies such as the following:

- Identify crash countermeasures that are likely to influence crashes based upon the dominant crash type.
- Select alternatives, assess the economic costs, and implement the appropriate countermeasure(s).
- Evaluate countermeasures to ensure no adverse consequences occur during and after implementation.

Countermeasure Considerations

Technically feasible – Is the countermeasure feasible for the particular location? Does it comply with existing guidelines and/or standards?

Advantageous Cost/Benefit – Does the benefit of the countermeasure outweigh the costs? Are there more cost-effective strategies to consider?

Affordable and Practical – Is the countermeasure practical considering the identified problem? Can it be funded?

Acceptable – Will the public accept the countermeasure politically and within the community? Will there be educational needs for the public?

Legal – Is the countermeasure legal to use? For example, speed limits are regularly revised without proper authorization, and STOP signs are used without meeting the appropriate MUTCD warrants.

Compatible with other roadway features – Does the countermeasure disrupt other safety features, which may result in unintended consequences?



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Low Cost Non-Intersection Safety Improvements

Although large-scale treatments can be used, there are also many effective low cost countermeasures that can be implemented. This fact sheet targets some of the common safety challenges at non-intersection locations, and places an emphasis on identifying low-cost improvements that could likely be implemented in a short timeframe (i.e., less than a year). Although several definitions exist for low cost improvements, such as the FHWA definition of less than \$50,000, the information below is based upon treatments under \$15,000.

Identified Safety Challenge	Potential Countermeasures
Horizontal curve issues	<ul style="list-style-type: none"> • Provide advance warning signage. • Add chevrons along the curve. • Add embedded pavement markings and enhanced curve delineation. • Add roadside reflectors to delineate curves. • Increase/add pavement markings to provide 6-inch centerlines and/or edgelines.
Sight distance issues	<ul style="list-style-type: none"> • Trim or clear trees or bushes obstructing various access points or existing signage. • Add warning signs advising of potential hazards.
Run-off-road crashes at known location	<ul style="list-style-type: none"> • Enhance delineation through improved pavement markers or roadside reflectors. • Provide adequate clear zone to minimize crash consequences. • Add guard rail to limit roadway departures.
Edge drop-off	<ul style="list-style-type: none"> • Add and maintain fill to prevent drop-off at roadside which limits vehicle ability to re-enter the roadway upon departure. • Identify drop-off cause (e.g., drainage) and improve.
Drainage-related issues	<ul style="list-style-type: none"> • Ensure adequate drainage . • Clear/clean catch basins with regularity.
Weather-related crashes	<ul style="list-style-type: none"> • Alter or increase winter weather treatment program. • Utilize warning signs to identify possible hazardous locations for motorists. • Employ changeable message signs to alert motorists of winter weather conditions.
Pedestrian crossings	<ul style="list-style-type: none"> • Adequately mark with advance signage and yield lines any non-intersection pedestrian crosswalks.



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Low Cost Non-Intersection Safety Improvements

Identified Safety Challenge	Potential Countermeasures
Maintenance issues	<ul style="list-style-type: none"> • Clear brush which may inhibit roadway operations or obstruct existing roadway signage. • Sweep roadways and shoulders regularly. • Fill roadway cracks and potholes. • Replace worn pavement markings and faded signs.
Tree or utility pole crashes	<ul style="list-style-type: none"> • Relocate or remove existing trees or poles in problematic locations. • Add reflectors to trees or poles. • Add guard rail shielding existing trees or poles.
Speed-related crashes	<ul style="list-style-type: none"> • Ensure roadways are properly posted in accordance with existing speed regulations (check with MassHighway for existing regulations). • Consider traffic calming measures to reduce speeds. • Consider experimental optical speed measures. • Restripe to provide narrower lanes. • Ensure regular enforcement of appropriate speed limits.
Parking	<ul style="list-style-type: none"> • Restrict parking at selected locations including constrained cross-section, near intersections, and on the approaches to pedestrian crosswalks.
Passing issues	<ul style="list-style-type: none"> • Restrict and enforce passing when adequate passing sight distance is not provided.

Resources

NCHRP 500 Series – Implementation of AASHTO Strategic Highway Safety Plan

This series of guidebooks provides recommendations and countermeasures aimed at targeting specific safety problems along roadways, and is found at <http://safety.transportation.org/guides.aspx>

Massachusetts Traffic Safety Toolbox Series

This series of fact sheets provides information on safety improvements that can be implemented at the local level. Information on problem areas, possible countermeasures, and implementation considerations is included in each fact sheet which can be found at www.mass.gov/mhd/safetytoolbox/

Massachusetts Traffic Safety Toolbox Series



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Sight Distance

Background

According to the [American Association of State Highway and Transportation Officials \(AASHTO\)](#), the ability of a driver to see ahead on the roadway is of paramount importance for the safe and efficient operation of a vehicle. In general, sight distance refers to the driver's line of sight. Insufficient sight distance is a significant factor in roadway crashes and many other near collisions.

Sight distance can be categorized into various types: (1) *stopping sight distance (SSD)*, (2) *decision sight distance (DSD)*, (3) *passing sight distance (PSD)*, and (4) *intersection sight distance (ISD)*. Each of these sight distances considers the reaction time of the driver and the subsequent time to complete the associated task (e.g., stopping, slowing, or maneuvering). Although summaries of these sight distance values are provided in this fact sheet, the actual formulas and figures used to determine these values should be obtained from AASHTO's *A Policy on Geometric Design of Highways and Streets* (AASHTO Green Book).

Stopping Sight Distance

Stopping sight distance is calculated as the sum of (1) the distance a vehicle travels from the instant a driver sees an object necessitating a stop until the instant the brakes are applied, and (2) the distance required to actually stop the vehicle once the brakes are applied. In roadway design, the SSD is used to determine if drivers will have sufficient time to stop. Specifically, SSD is affected by both horizontal and vertical curves in a roadway's alignment.



Source : Iowa State University Center for Transportation Research and Education
- *Handbook of Simplified Practice for Traffic Studies*

It is important to understand the SSD available along roadways to determine if motorists are being afforded sufficient time to stop their vehicle. In the event that appropriate SSD is not available there are various countermeasures that can be considered. For example, one countermeasure that could improve conditions immediately is the trimming of brush that obstructs sight lines. Longer-term solutions may include geometric changes in horizontal and vertical curves.

Did You Know?

The Federal Highway Administration reports that crash rates tend to increase as the available sight distance decreases.



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Sight Distance

Decision Sight Distance

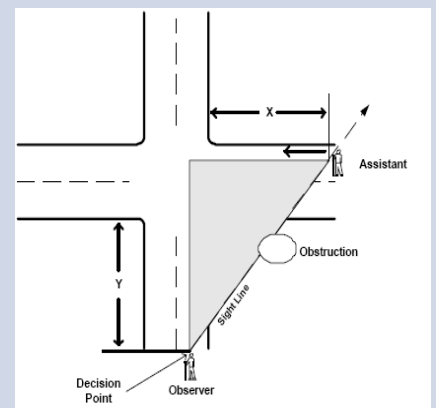
Decision sight distance (DSD) refers to the sight distance needed for a driver to (1) detect an unexpected or difficult-to-perceive condition in a roadway environment, (2) recognize the threat condition, (3) select an appropriate speed and path, and (4) initiate and complete the maneuver safely and efficiently. Some common examples of DSD on the roadway include the distance required to slow down for a turn, a merge, a lane drop, or an exit. It is important to consider DSD at locations where drivers may require additional time or distance due to complex driving situations. Because DSD is a greater distance than SSD, advance warning signs of an upcoming maneuver or required action may be warranted.

Passing Sight Distance

Passing sight distance (PSD) is the length of roadway needed to complete a normal passing maneuver. PSD is the distance required to make a decision, react, pass, and rejoin the traffic stream. A calculation of PSD helps to determine if sufficient distance is available to allow for a passing zone to be installed or to determine if a current passing zone actually affords motorists sufficient distance and time to complete a passing maneuver.

Intersection Sight Distance

Intersection sight distance (ISD) refers to the line of sight between a driver on a roadway and a vehicle attempting to enter from a side street or driveway. This value is critical in determining where driveways or other access points should be located, or what traffic control devices are necessary, to ensure that adequate ISD is provided. ISD is easily measured in the field, and information on this procedure can be found in the AASHTO Green Book.



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Sight Distance

PSD should be periodically re-evaluated to determine if adequate sight distance is provided per the AASHTO Green Book. Passing zones should be removed or adjusted when adequate PSD can not be provided

Countermeasures for Improving or Mitigating Sight Distance

A simple and relatively low cost and quick solution can be trimming trees, bushes, and plants within the right of way. Without disturbing private property or historic sites, one possible approach is to take annual visits around town and trim overhanging branches or trim bushes that affect the driver's line of sight. On private property, a respectful conversation with residents or property owners can often result in permission to trim on private property.

Utilizing traffic signs can also be an effective strategy. Signage can be added to alert drivers of an upcoming situation that is out of sight distance range. For example, adding a turn ahead or railroad grade crossing sign can help mitigate limitations in available sight distance. Also consider that some signs may inhibit sight distance so removing unnecessary signs that interfere with sight distance can also be effective.



Turn Ahead
Warning Sign
(Source MUTCD)

Another option that may help mitigate sight distance would be the establishment of an advisory speed. Although an advisory speed plaque does not guarantee that a driver will slow down, it may alert the driver that this section of roadway could be hazardous. Please note that these speeds are not enforceable, and advisory speed plaques should be mounted with the warning sign it is intended to supplement.



Sample Advisory
Speed Plaque
(W13-1)
(Source MUTCD)

Altering the roadway or intersection itself may be a long-term, higher-cost countermeasure that may improve sight distance.

Resources

A Policy on Geometric Design of Highways and Streets

The AASHTO Policy, also known as the AASHTO "Green Book", is based upon established design practices, and is intended to provide guidance in roadway design. This document is available for purchase through AASHTO at <https://bookstore.transportation.org/>

Massachusetts Traffic Safety Toolbox Series

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Retroreflectivity

Background

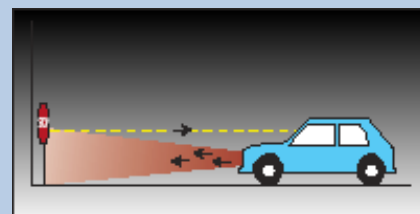
According to the Federal Highway Administration (FHWA), while only 25 percent of travel occurs at night, more than half of traffic fatalities occur during nighttime hours. In Massachusetts, nearly half of all fatal crashes occur during the nighttime. Poor visibility may be a contributing factor in nighttime crashes. Headlights and roadway lighting help to illuminate the roadway, but are often not enough to meet the needs of nighttime drivers. For this reason, FHWA recommends the use of retroreflective traffic control devices so that at night a driver can see a sign or pavement marking sooner and can then take appropriate actions.

Retroreflective Signs and Pavement Markings

Retroreflective materials used on signs, pavement markings, and other traffic control devices can provide additional visual cues on wet pavements and in the nighttime driving environment helping to meet the needs of nighttime drivers. Retroreflective materials, which use small glass beads and microprismatic reflectors mixed into the paint, have the ability to reflect light and enable a vehicle operator to see traffic control devices more easily at night. The [Manual on Uniform Traffic Control Devices \(MUTCD\)](#) states that all signs and pavement markings shall be retroreflective or have adequate ambient lighting. Fortunately, most traffic signs and pavement markings use retroreflective technology.

Retroreflective paint can be useful and effective and can be used in nearly all instances to reflect a vehicle's headlights thus adding conspicuity. According to the MUTCD, pavement markings shall be installed with the proper retroreflective color as per [Section 3A.04](#). Similarly, all regulatory, warning, and guide signs must use retroreflective or other illuminating materials displaying the same color during both night and day, unless specifically stated otherwise in the [MUTCD Section 2A.11](#). Additionally, it is important to note that the installation procedure is critical in order to obtain the full benefit of retroreflective materials. For example, the height and lateral placement of a sign are critical components of the installation. Please see the MUTCD for additional information regarding the installation procedures of retroreflective signs.

As shown in the adjacent picture, the headlight from a vehicle shines on a retroreflective sign and the message on the sign bounces back to the driver.



Source: FHWA

Did You Know?

The FHWA estimates that up to half of the 58 million traffic signs in the U.S. are beyond their useful lifespan (estimated at 10 years) from a retroreflectivity standpoint.

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Retroreflectivity



Retroreflective STOP Sign (Source: minimumreflectivity.org)

Measuring Retroreflectivity

As of January 2008, the FHWA has established guidelines for maintaining minimum retroreflectivity levels on traffic signs, which are available in the online version of the MUTCD in [Section 2A.09](#). Signage that does not provide adequate retroreflectivity should be upgraded. In the field, retroreflectivity can be measured in two ways:

1. A precise measurement can be attained with a retroreflectometer. This device is pointed at a sign or pavement marking and measures the light from the object that has been scattered and reflected back to the meter. The actual units for this measure are candela per square meter per incident lux (cd/lx/m^2).
2. A more subjective, yet commonly used method, is to gauge retroreflectivity through a simple visual inspection at night.

Costs for Retroreflective Devices

When considering retroreflective devices, considerations in the overall cost include the type of traffic control device (e.g., paint, signs, etc.), the associated installation costs, as well as the level of retroreflective properties. It is also worth noting that costs may vary across manufacturers and with the quantity of an order. Based upon these variations in cost, it is recommended that several alternatives be considered when ordering retroreflective materials, including paint and signage. The following are some devices and the associated prices*:

- Retroreflective delineator—\$22.75 per device
- Retroreflective warning signs—\$18 per square foot
- Retroreflective location and guide signs—\$20 per square foot
- Retroreflective street name signs —\$100 per sign
- Retroreflective paint—\$1.70 per square foot

*prices included are from the [MassHighway Weighted Average Bid Prices](#) as of January 2008. These prices reflect the relative costs for retroreflective materials, and will generally be lower than what a municipality may expect to pay.

Resources

Massachusetts Traffic Safety Toolbox Series

This series of fact sheets provides information on safety improvements that can be implemented at the local level. Information on problem areas, possible countermeasures, and implementation considerations is included in each fact sheet which can be found at www.mass.gov/mhd/safetytoolbox/

The Manual on Uniform Traffic Control Devices (MUTCD)

Published by the FHWA, the MUTCD defines the standards used by transportation professionals nationwide to install and maintain traffic control devices on all streets and highways. The most recent version (2003) can be found at <http://mutcd.fhwa.dot.gov/>



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DID YOU KNOW?



Roughly 48% of students bicycled or walked to school in 1969. Today, less than 15% of children walk or bicycle to classes.*

Travel to school can account for up to 25% of morning traffic.*

Among children 6-11 the rate of overweight has increased from 4% to 16% since 1963.*

In the late 1960s, 90% of children who lived within one mile from school walked or bicycled. Today, only 31% of children who live that close to school walk or bicycle.*

**national statistics*



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THE SAFE ROUTES TO SCHOOL PROGRAM

The Massachusetts Safe Routes to School program encourages safe, healthy trip options for travel to and from school. The program collaborates with superintendents, public officials, principals, teachers, parent-teacher organizations, students, community stakeholders, and neighbors. Successful Safe Routes to School initiatives include the five Es: education, encouragement, enforcement, engineering, and evaluation.

BENEFITS

- Physical Health
- Environmental Health
- Safety

ENCOURAGE

- Walking
- Bicycling
- Multi-family carpools
- Bus

GOALS

The Massachusetts Safe Routes to School program aims to reduce congestion, air pollution, and traffic conflicts near participating schools, while increasing the health and mobility of school-aged children. Safe Routes programs can establish healthy lifetime habits for students, increase children's independence, help them arrive at school ready to learn, and teach safe pedestrian, bicyclist, and driver skills.

SAFE ROUTES TO SCHOOL STATEWIDE RESOURCES

- Customized program design and implementation
- Educational materials and programs
- Student giveaways
- Safety enhancements
- Infrastructure improvements



Individuals' Abilities and Behaviors and Current Technologies in Intersection Crosswalks

IT IS WELL RECOGNIZED THAT PEDESTRIANS WHOSE ATTENTIONS ARE DISTRACTED BY OTHER COGNITIVE, EMOTIONAL AND PHYSICAL TASKS MAY NOT CONSISTENTLY ENGAGE IN SELF-PROTECTIVE BEHAVIORS AT INTERSECTIONS. THIS ARTICLE ASSESSES CROSSWALK TECHNOLOGY AND HOW IT RELATES TO THE NEEDS OF VARIOUS PEDESTRIAN POPULATIONS.

INTRODUCTION

The 2000 Uniform Vehicle Code and Model Traffic Ordinance define a crosswalk as “any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface.”¹ Road striping serves to legally establish the crosswalk; alert road users of a pedestrian crossing point across roadways without traffic signals or STOP signs; and provide guidance for pedestrians crossing roadways by defining paths within the signalized intersection, according to the *Manual on Uniform Traffic Control Devices* (MUTCD).

Many guidelines and recommendations govern the design of new intersections and upgrades to existing intersections that attempt to meet the needs of the entire pedestrian population, which ranges in age, physical and mental capabilities, emotional states and levels of risk-taking. The crosswalk safety treatment implemented over the years has used a combination of engineering, enforcement and education (the three Es).² Although significant work to implement educational and enforcement efforts and engineering controls has been ongoing, pedestrian fatalities still account for more than 10 percent of traffic related fatalities.³

Current crosswalk engineering countermeasures focus on speed control as well as maintaining a separation between

pedestrians and vehicles.^{4,5} Examples of common infrastructure countermeasures include roundabouts,

speed bumps, pedestrian refuge islands, multilane STOP signs and in-pavement flashing lights. Examples of common pedestrian and vehicular traffic flow countermeasures include reduced speed

limits, leading pedestrian intervals, exclusive pedestrian phases, adequate traffic signal timing and pedestrian prompting devices.⁶

Studies have shown that these technologies provide positive measures for increased pedestrian safety. For example, research by Markowitz et al. found a statistically significant injury reduction after the implementation of a “countdown” system in a city’s intersection signals.⁷

An assumption by roadway designers has been that pedestrians will allocate appropriate attention to their surroundings, thus allowing these features to have a meaningful impact on their behavior. A diverse set of circumstances and activities may result in pedestrians not allocating appropriate attention to their surroundings. For example, eating on the run, reading a book, or being lost in thought may contribute to pedestrians missing important environmental cues that may contribute to their safety (see Figures 1 and 2).

There is projected to be an approximate five-fold increase in the number of cellular phones worldwide between the years 2000 and 2011, and currently as many as 20 percent of Americans over the age of 12 own a portable digital music player.^{8,9,10} The recent boom in the sales of personal mobile electronic devices (PMEDs) offers an additional source of potential distraction for pedestrians who multitask while walking to their destination.

DIVERSITY AMONG THE POPULATION OF CROSSWALK USERS

Over the years, research findings have been used by roadway designers to accommodate the abilities and limitations of pedestrians. For example, studies have sought to characterize the function of perceptual systems, such as those underlying human vision and audition, and these

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data have been considered alongside environmental conditions (e.g., lighting or road noise) during the planning of crosswalks. In doing so, roadway designers have been able to characterize and account for the range in the pedestrian population likely to be using crosswalks.

However, continuing challenges face roadway planners despite the existence of many well-characterized behavioral patterns in the population. For example, while crossing a particular roadway may be well within the abilities of “typical” adult pedestrians, their ability to navigate the crosswalk may be limited due to environmental conditions, other pedestrians, or hindrances such as luggage. Therefore, while data on the capabilities and limitations of pedestrians of all ages may provide criteria as to a majority population to be served by crosswalks, additional factors may need to be considered. Including the interaction between mixed populations of pedestrians and the cognitive, perceptual and physical demands of walking while performing competing tasks may offer a more complete and realistic picture of crosswalk user tasks and the challenges faced when designing crosswalks.

The pedestrian population includes disabled individuals who may require additional information and/or assistance to safely cross a street. For example, for normally-abled individuals, most of the information at a crosswalk is obtained visually by watching traffic, seeing the markings and signage and observing the electric signs that indicate when it is safe to walk. Those who are visually impaired are more dependent on auditory cues such as the sound of the passing traffic and, potentially, sounds generated by the crosswalk signaling system. The special needs of disabled individuals have inspired roadway designers to create new and innovative technologies to meet their needs.

For example, MUTCD has defined accessible pedestrian signals (APS) as devices communicating “information about pedestrian timing in nonvisual format such as audible tones, verbal messages, and/or vibrating surfaces.”¹¹ APS in the United States currently include ped-head-mounted, pushbutton integrated, receiver-based and vibrotactile only. Of these, speakers attached to pedestrian sig-



Figure 1. A diverse set of circumstances and activities may result in pedestrians not allocating appropriate attention to their surroundings.

nals (known as ped-head-mounted) are the most common.¹² For crosswalks equipped with auditory signaling, the placement of the signal, as well as the type of auditory cue it produces, contributes to its effectiveness for visually impaired individuals.¹³

Barlow and Franck discuss how the APS supply information regarding the signal status but cannot substitute for the other information gained from environmental cues.¹⁴ Survey data have shown that it is common for visually impaired individuals to have trouble knowing when they should begin to cross the street and have difficulty using pushbuttons.¹⁵ Auditory cues are pertinent for these individuals to determine traffic flow, their alignment within the crosswalk and their location within the crosswalk while they are crossing the street.¹⁶

Research has also shown that it is a common occurrence within the visually impaired population for pedestrians to begin crossing the street in the correct location and with the correct alignment but to travel outside the crosswalk by the time they reach the opposite side.^{17,18} Experimental studies have shown that far-sided audible signals are most effective at producing accurate crossings.¹⁹

The above-described technologies were designed to meet the needs of attentive pedestrians seeking crossing information. Pedestrians who may be



Figure 2. A diverse set of circumstances and activities may result in pedestrians not allocating appropriate attention to their surroundings.

distracted and not attending sufficiently to the crossing task to use the available information pose design challenges to the crosswalk engineer. The list of potential pedestrian distractions is infinite and may include looking at something in a direction other than the direction of travel, reading a newspaper, waving away an insect, talking to a friend, eating, looking at one's watch, attempting to find something in a backpack, or using a PMED. Looking is not always seeing, and distraction caused by any of the above activities could result in pedestrians either failing to look or looking but failing to see.

The looked-but-failed-to-see phenomenon is not new and is not limited to pedestrians. As described in Langham et al., a simple reasoning task can present enough of a distraction to cause drivers to slow their response to an in-lane hazard.²⁰ There has been limited research on this phenomenon in pedestrians, but current research indicates that individuals who are auditorily distracted while crossing an intersection appear to exhibit unsafe behavior (failure to look left and right, wait on curb for light to turn green before stepping into the street, etc.).^{21,22}

While important in the overall understanding of human behavior at real-world intersections, these observational studies only suggest a covariance between

behavior and cognitive distraction. To further assess this potential connection, two recently published research studies have attempted to address this issue in an experimental setting.

Kuzel et al. asked volunteers to walk through an office hallway and report on objects they perceived and details of those objects while being normally attentive, while having a casual cell phone conversation and while having a challenging cell phone conversation. The volunteers passed 11 out-of-place salient objects placed at eye and ground level. Prior to each trial, the subjects were told they would be tested on what they saw while walking through the hall. The results showed significant effects of conversation and level of conversation difficulty on objects recalled, details recalled and time to complete the trial.²³

Nasar et al. recruited pedestrians in a real-world environment to walk a course either with or without being engaged in a cell phone conversation. Participants walked past five out-of-place objects at eye level and ground level. At completion of the course, participants were shown photographs and asked to select the photograph that contained the objects they had just passed. The results indicated that subjects noticed significantly more objects while not engaged in conversation.²⁴ The results of these studies suggest that engaging in an auditorily distractive activity can cause pedestrians to miss salient objects in their environment.

A different study by Kuzel et al. provided a review of real-world collisions involving pedestrians who were reportedly auditorily distracted at the time. The review indicated that highly salient and expected roadway objects such as buses, police vehicles and trains have been involved in collisions with reportedly distracted pedestrians at or near standardized road crossing points.²⁵ The data suggest that pedestrians distracted by auditory activities, regardless of their form, may not always be sufficiently engaged in the act of crossing or walking along a street to perform the task safely.

In response, researchers, enforcement officials and transportation engineers are presented with several options to meet the continuing challenge of improving

**MANY CURRENT AND
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TECHNOLOGIES ARE
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MAKE PEDESTRIANS
MORE AWARE OF THEIR
SURROUNDINGS.**

the safety of distracted pedestrians, including educating the public about the potential dangers of being distracted while walking; enacting regulations to change pedestrians' behavior related to distracted walking; and/or implementing new engineering controls. Research conducted on the effects of cell phone use while driving has found that educating drivers about the hazards is more easily achievable than changing their behavior.²⁶

The effect of the enactment of laws by some states to require hands-free use of cell phones to reduce driver distraction remains to be determined. Implementation of new engineering controls between vehicles and the roadway infrastructure may help reduce injury among distracted pedestrians by shaping driver behavior.

FUTURE CROSSWALK TECHNOLOGIES

Vehicle infrastructure integration (VII) is a current initiative by the U.S. Department of Transportation to develop active safety technologies and create a communications infrastructure where data are transmitted between vehicles and the roadway.²⁷ One particular area of VII that may be able to address the needs of the distracted pedestrian is Cooperative Intersection Collision Avoidance Systems (CICAS). These systems are both vehicle-

and infrastructure-based and would seek to warn drivers about likely violations of traffic control devices and/or potentially inform drivers about the existence of pedestrians within an intersection.²⁸

Implementation of CICAS consists of vehicle-based technologies and systems; infrastructure-based technologies and systems; and communications systems to provide warnings and data between the infrastructure and equipped vehicles. Such technologies would serve to warn drivers of a potentially harmful situation so that they can devote their full attention to their environment, react appropriately to the task at hand and hopefully avoid an adverse event. These systems would in essence attempt to prompt drivers to allocate their attention to the roadway in the event of an impending collision.

These technologies are currently under investigation but have not been fully evaluated to determine their utility in real-world situations. It is interesting to note that much of the focus of the new technological developments is related to human factors issues; namely, alerting drivers to pay more attention when it is most critical to avoid a collision.

CONCLUSIONS

Current crosswalk features and technologies are capable of assisting diverse populations in safely crossing a roadway, and new technologies are currently under development. One important consideration in crosswalk design and implementation is human behavior. Research conducted during the last century has supplied the information necessary to design crosswalks that meet the needs of much of the pedestrian population. Many current and potential future technologies are focused on helping make pedestrians more aware of their surroundings. Having an understanding of how distractions affect pedestrian-intersection interactions is important in evaluating such technologies.

Recent research has sought to increase our understanding of the behaviors and performance capabilities of PMED-distracted pedestrians. By making the choice not to engage in distractive activities while crossing the street, pedestrians can make intersections and crosswalks safer for themselves. Regardless of the safety tech-

nologies available at a given crosswalk, one clear way to reduce potential accidents due to inattention is to have both pedestrians and drivers choose not to engage in activities that may distract them.

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References

1. *Manual on Uniform Traffic Control Devices*, Sec. 4A.(02). Washington, DC, USA: Federal Highway Administration (FHWA), 2003. Accessible via mutcd.fhwa.dot.gov/htm/2003r1/part4/part4a.htm.
2. "Case Study No. 11: Balancing Engineering, Education, Law Enforcement, and Encouragement." National Bicycling and Walking Study. Publication No. FHWA-PD-93-009. Washington, DC: FHWA, 1994.
3. National Highway Traffic Safety Association, U.S. Department of Transportation. "Traffic Safety Facts 2006." Accessible via www.nrd.nhtsa.dot.gov/Pubs/810791.PDF.
4. Gandhi, T. and M.M. Trivedi. "Pedestrian Protection Systems: Issues, Survey, and Challenges." *IEEE Transactions on Intelligent Transportation Systems*, Vol. 8, No. 3 (September 2007).
5. Retting, R.A., S.A. Ferguson and A.T. McCartt. "A Review of Evidence-Based Traffic Engineering Measures Designed to Reduce Pedestrian-Motor Vehicle Crashes." *American Journal of Public Health*, Vol. 93, No. 9 (September 2003).
6. Barlow, J., B. Bentzen et al. "Blind Pedestrians and the Changing Technology and Geometry of Signalized Intersections: Safety, Orientation, and Independence." *Journal of Visual Impairment & Blindness*, Vol. 99, No.10 (October 2005).
7. Markowitz, F., S. Sciortino et al. "Pedestrian Countdown Signals: Experience with an Extensive Pilot Installation." *ITE Journal*, Vol. 76, No. 1 (January 2006).
8. Sheehan, M.O. "Communications Networks Expand." *Vital Signs* (2003).
9. Plunkett Research Ltd. "Wireless, Cellular and RFID Industry Trends." Accessible via www.plunkettresearch.com.
10. Kleinschmit, M. "Portable MP3 Player Ownership Reaches New High," June 29, 2006. Accessible via www.ipsos-na.com/news/press-release.cfm?id=3124.
11. FHWA, 2003.
12. Barlow, J. M. and L. Franck. "Crossroads: Modern Interactive Intersections and Accessible Pedestrian Signals." *Journal of Visual Impairment & Blindness*, Vol. 99, No. 10 (October 2005).
13. Ashmead, D., R. Wall et al. "Which Crosswalk? Effects of Accessible Pedestrian Signal Characteristics." *ITE Journal*, Vol. 74, No. 9 (September 2004).
14. Barlow and Franck, October 2005.
15. Bentzen, B., J. Barlow et al. "Addressing Barriers to Blind Pedestrians at Signalized Intersections." *ITE Journal*, Vol. 70 No. 9 (September 2000).
16. Barlow, Bentzen et al., October 2005.
17. Ibid.
18. Bentzen, Barlow et al., September 2000.
19. Wall, R., D. Ashmead et al. "Directional Guidance from Audible Pedestrian Signals for Street Crossing." *Ergonomics*, Vol. 47, No. 12 (2004): 1318-1338.
20. Langham, M., G. Hole et al. "An Analysis of 'Looked but Failed to See' Accidents Involving Parked Police Vehicles." *Ergonomics*, Vol. 45, No. 3 (2002).
21. Bungum, T.J., C. Day and L.J. Henry. "The Association of Distraction and Caution Displayed by Pedestrians at a Lighted Crosswalk." *Journal of Community Health*, Vol. 30, No. 4 (August 2005).
22. Hatfield, J. and S. Murphy. "The Effects of Mobile Phone Use on Pedestrian Crossing Behavior at Signalized and Unsignalized Intersections." *Accident Analysis and Prevention*, Vol. 39, No. 1 (January 2007).
23. Kuzel M., M. Heller, S. DiJorio, R. Gray and S. Straughn. "Perception and Cognition during Walking While Concurrently Using a Cellular Phone." Paper W0108. Proceedings, International Conference on Contemporary Ergonomics, Nottingham, United Kingdom, 2008.
24. Nasar, J., P. Hecht and R. Wener. "Mobile Telephones, Distracted Attention, and Pedestrian Safety." *Accident Analysis and Prevention*, Vol. 40, No. 1 (2008).
25. Kuzel, M.J., M.F. Heller, J.B. Sala, L. Ciccarelli and R. Gray. "An Analysis of Real-World Accidents Involving Distracted Pedestrians." Proceedings, XXth Annual International Occupational Ergonomics and Safety Conference, Chicago, IL, USA, 2008.
26. Roe, A. "Drivers Ignoring Cell Phone Bans." MSN Money, June 17, 2008.
27. U.S. Department of Transportation, Research and Innovative Technology Administration. Accessible via www.its.dot.gov/vii/.
28. U.S. Department of Transportation, Research and Innovative Technology Administration. Accessible via www.its.dot.gov/cicas/cicas_overview.htm.



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