

OLD COLONY PLANNING COUNCIL

**Birch Avenue, Newfield Street,
Stafford Street, and Towns Street
Traffic Data Collection and Analysis Project**

Plymouth, MA

Local Highway Technical Assistance Project

9/1/2011



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Old Colony Planning Council



Robert G. Moran, Jr.
President

70 School Street
Brockton, MA 02301-4097

Pasquale Ciaramella
Executive Director

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September 1, 2011

Mr. Jonathan Beder, Director
Plymouth Department of Public Works
159 Camelot Drive
Plymouth, MA 02360

RE: Birch Avenue, Newfield Street, Stafford Street, and Towns Street Traffic Data Collection and Analysis Project, Plymouth, MA

Dear Mr. Beder,

Per your request, please find the enclosed traffic counts (volume, speed, and class) conducted by Old Colony Planning Council (OCPC) for the 48 hour periods from May 23-24, 2007 and May 25-26, 2011 on Birch Avenue, Newfield Street, Stafford Street, and Towns Street in Plymouth. These traffic counts were conducted to provide current traffic volumes for the Birch Avenue and Newfield Street area in support of residents' concerns.

This correspondence includes a total of fourteen (14) Automatic Traffic Recorder (ATR) counts conducted by OCPC on the aforementioned streets in 2007 and 2011 as well as a traffic data summary table and volume, speed, and classification comparison charts.

Should you have any questions regarding this material, or if any additional information is needed, please contact Jed Cornock at 508.583.1833 x215 or jcornock@ocpcrpa.org.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Charles Kilmer', is written over the word 'Sincerely,'.

Charles Kilmer
Transportation Program Manager

Enclosures:

Birch Avenue, Newfield Street, Stafford Street, and Towns Street Traffic Data Collection and Analysis Project

cc: Mr. William Hallisey, Jr., Chairman, Plymouth Board of Selectmen
Mr. Mark Stankiewicz, Plymouth Town Manager
Mr. Sid Kashi, P.E., Plymouth Town Engineer
Mr. James Downey, EIT, Plymouth Transportation Engineer
Chief Michael Botieri, Plymouth Police Department
Mr. Lee Hartmann, Plymouth Planning Director and OCPC Delegate
Ms. Valerie Massard, Plymouth Senior Planner and OCPC Alternate
Mr. Andrew Lehmann, MPO Activities Liason, MassDOT
Mr. Paul Maloney, P.E., Metropolitan Planner, FHWA

Traffic Counts Summary & Analysis

2007 & 2011 Traffic Data Summary Table

2007 & 2011 Volume Comparison Chart

2007 & 2011 Speed Comparison Chart

2007 & 2011 Classification Comparison Chart

Old Colony Planning Council

Birch Avenue, Newfield Street, Stafford Street, and Towns Street Traffic Data Collection and Analysis Project

2007 & 2011 Traffic Data Summary Table

Community	Street	Location	Year	Date	Source	ADT	AM Peak Hour	AM Peak Volume	PM Peak Hour	PM Peak Volume	V/C Ratio	85% Speed	% Heavy Vehicles	U/R	FC
PLYMOUTH	BIRCH AVE	E OF NEWFIELD ST	2007	5/23/2007	OCPC	1,752	11:00 AM	109	4:00 PM	162	0.05	33 MPH	3.5%	U	0
PLYMOUTH	BIRCH AVE	E OF NEWFIELD ST	2011	5/25/2011	OCPC	1,303	11:00 AM	88	3:00 PM	127	0.04	33 MPH	2.9%	U	0
PLYMOUTH	BIRCH AVE	W OF STAFFORD ST	2007	5/23/2007	OCPC	1,748	11:00 AM	110	4:00 PM	162	0.05	34 MPH	2.9%	U	0
PLYMOUTH	BIRCH AVE	W OF STAFFORD ST	2011	5/25/2011	OCPC	1,342	11:00 AM	92	3:00 PM	135	0.04	32 MPH	7.3%	U	0
PLYMOUTH	NEWFIELD ST	N OF BIRCH AVE	2007	5/23/2007	OCPC	1,920	11:00 AM	118	4:00 PM	174	0.05	30 MPH	2.8%	U	0
PLYMOUTH	NEWFIELD ST	N OF BIRCH AVE	2011	5/25/2011	OCPC	1,812	11:00 AM	114	3:00 PM	168	0.05	28 MPH	3.4%	U	0
PLYMOUTH	NEWFIELD ST	S OF SUMMER ST	2007	5/23/2007	OCPC	2,054	8:00 AM	121	4:00 PM	188	0.06	30 MPH	4.9%	U	0
PLYMOUTH	NEWFIELD ST	S OF SUMMER ST	2011	5/25/2011	OCPC	1,479	11:00 AM	96	3:00 PM	142	0.04	28 MPH	6.4%	U	0
PLYMOUTH	STAFFORD	N OF TOWNS ST	2007	5/23/2007	OCPC	811	11:00 AM	44	5:00 PM	75	0.02	34 MPH	4.5%	U	0
PLYMOUTH	STAFFORD	N OF TOWNS ST	2011	5/25/2011	OCPC	890	7:00 AM	71	4:00 PM	74	0.02	28 MPH	6.0%	U	0
PLYMOUTH	STAFFORD	S OF BIRCH AVE	2007	5/23/2007	OCPC	979	7:00 AM	69	5:00 PM	98	0.03	30 MPH	6.3%	U	0
PLYMOUTH	STAFFORD	S OF BIRCH AVE	2011	5/25/2011	OCPC	926	11:00 AM	64	4:00 PM	86	0.03	34 MPH	6.6%	U	0
PLYMOUTH	TOWNS ST	W OF SOUTH ST	2007	5/23/2007	OCPC	2,030	11:00 AM	116	4:00 PM	184	0.06	33 MPH	4.6%	U	0
PLYMOUTH	TOWNS ST	W OF SOUTH ST	2011	5/25/2011	OCPC	1,757	11:00 AM	118	3:00 PM	168	0.05	31 MPH	6.3%	U	0

Average Daily Traffic (ADT) - The average number of vehicles for a weekday (24 hours, non weekend or holiday) collected over a 24 to 48 hour period

Volume to Capacity Ratio (V/C Ratio) - The ratio of PM peak hour volume of traffic to the peak hour capacity of the roadway

85th Percentile Speed (85% Speed) - The speed at or below which 85 percent of all vehicles in the sample area are traveling

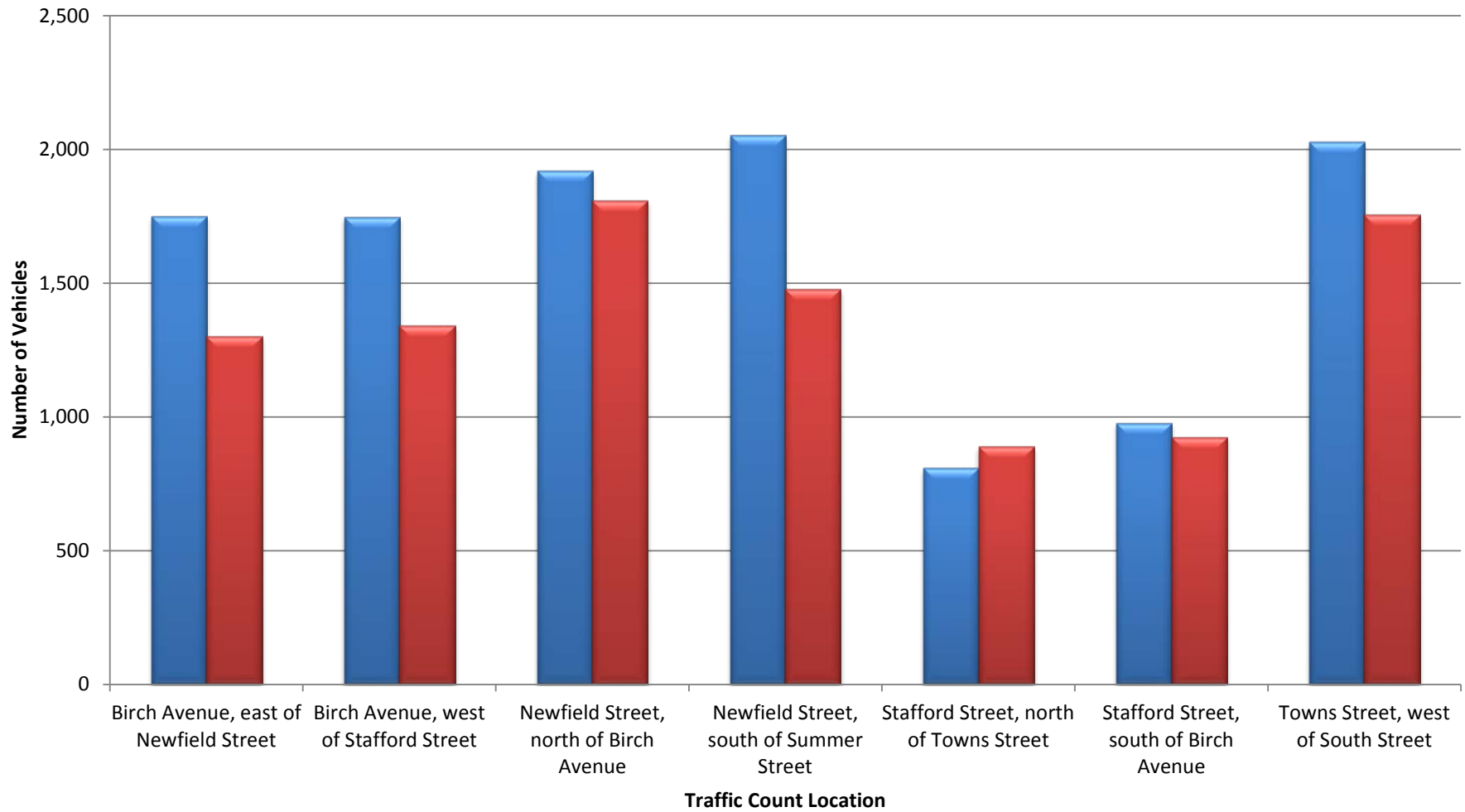
Heavy Vehicle Percentage - The percentage of buses and vehicles with two (2) or more axles and six or more tires

Urban/Rural Designation - Federal aid urban or rural designation

Functional Classification - The character of services that a particular roadway is intended to provide

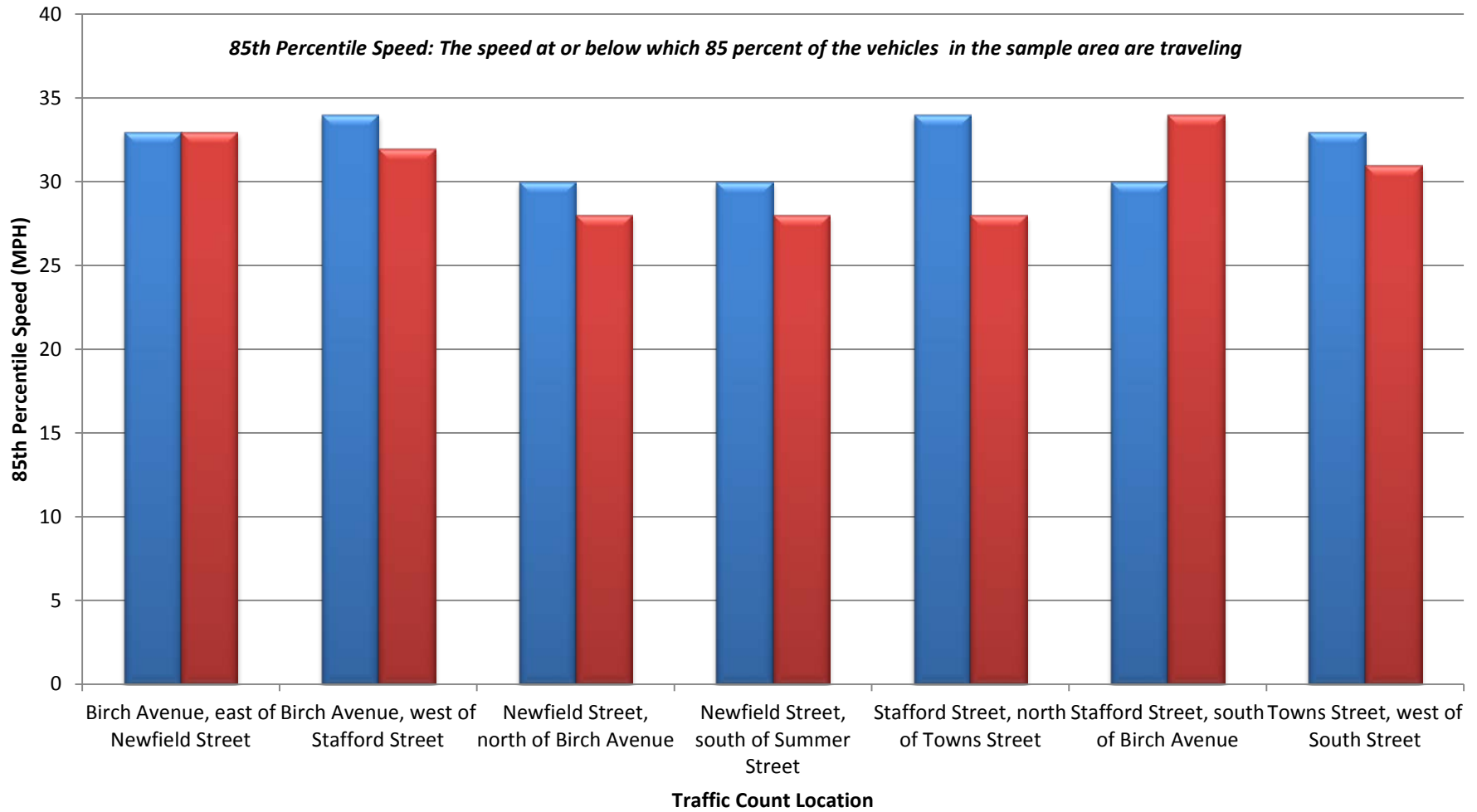
Old Colony Planning Council
Birch Avenue, Newfield Street, Stafford Street, and Towns Street
Traffic Data Collection and Analysis Project
2007 & 2011 Volume Comparison

■ May, 2007 ■ May, 2011



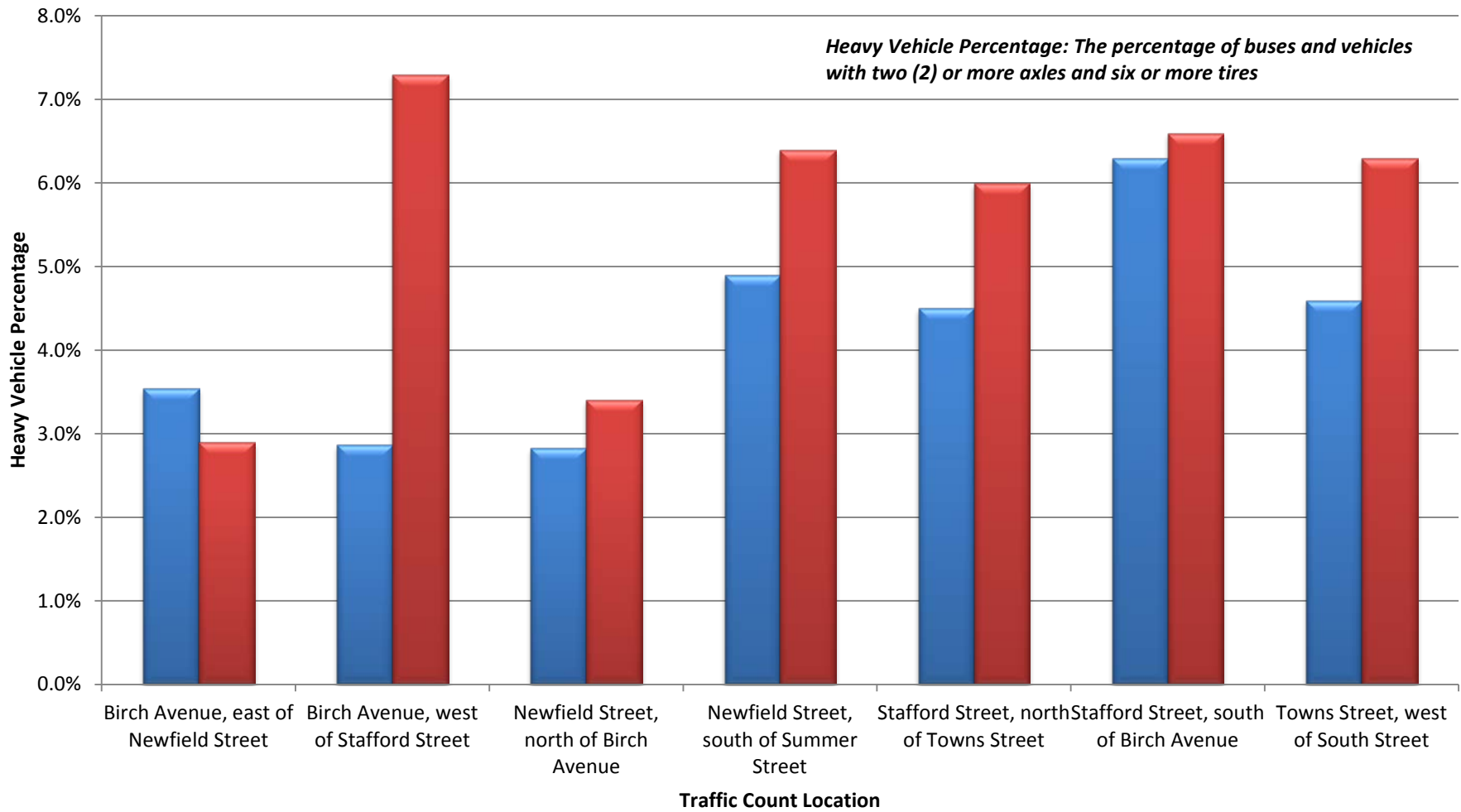
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Birch Avenue, Newfield Street, Stafford Street, and Towns Street
Traffic Data Collection and Analysis Project
2007 & 2011 Speed Comparison

■ May, 2007 ■ May, 2011



Old Colony Planning Council
Birch Avenue, Newfield Street, Stafford Street, and Towns Street
Traffic Data Collection and Analysis Project
2007 & 2011 Classification Comparison

■ May, 2007 ■ May, 2011



Automatic Traffic Recorder (ATR) Counts

Birch Avenue, east of Newfield Street (2007 & 2011)

Birch Avenue, west of Stafford Street (2007 & 2011)

Newfield Street, north of Birch Avenue (2007 & 2011)

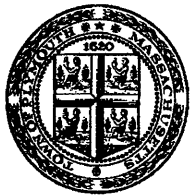
Newfield Street, south of Summer Street (2007 & 2011)

Stafford Street, north of Towns Street (2007 & 2011)

Stafford Street, south of Birch Avenue (2007 & 2011)

Towns Street, west of South Street (2007 & 2011)

Appendix
Town of Plymouth Project Request Letter



TOWN OF PLYMOUTH

Department of Public Works
11 Lincoln Street
Plymouth, Massachusetts 02360

RECEIVED
APR 17 2007

April 11, 2007

Charles Kilmer
Transportation Program Manager
Old Colony Planning Council
70 School Street
Brockton, MA 02301-4097

**Subject: Request for Traffic Count Data for Birch Avenue and Newfield Street
in the Town of Plymouth**

Dear Mr. Kilmer:

Please accept this letter as the Town's request for Traffic Count Data in regard to Speed, Volume, and Heavy Vehicle Percentage for Birch Avenue and Newfield Street.

This information will be used to address traffic concerns raised by residents living on this road.

I thank you in advance for your assistance.

Please call me if you have any questions or need additional information concerning this matter.

Very truly yours.

Saeed B. Kashi, P.E.
Town Engineer