### CITY OF NEWTON

### **BOARD OF ALDERMEN**

### TRAFFIC COUNCIL AGENDA

THURSDAY, FEBRUARY 17, 2011

City Hall Room 222

7:00 pm

### **ITEMS SCHEDULED FOR DISCUSSION:**

TC15-10

JAMES & NANCY BOWDRING, 94 Hammondswood Road, requesting No Left Turn 7:00 a.m. to 9:00 a.m. at the intersection of Beacon Street and Hammondswood Road. (Ward 7) [05/06/10 @ 12:36 PM]

HELD (4-0, Ciccone not present) on 10/21/10 for 60-Day Trial, No Left Turn 7:00 a.m. to 9:00 a.m., from Beacon Street to Hammondswood Road.

### **7:30 pm OR LATER**

TC1-11 <u>DAREN DEAN</u>, Two Newton Place, 255 Washington Street, requesting Right Turn on Red at the intersection of Centre and Jefferson Streets. (Ward 1) [01/07/11 @ 11:08 AM]

### 8:00 pm OR LATER

- TC41-10 <u>DAVID KOSES</u>, on behalf of the Newton Safe Routes to School Task Force, requesting parking restrictions on both sides of Cypress Street, in the vicinity of 280 Cypress Street, in association with modifications to the island and related infrastructure changes near the school entrance, to be paid for through Mass DOT'S Safe Routes to School Infrastructure Program. (Ward 6) [12/23/10 @ 9:10 AM]
- TC42-10 <u>DAVID KOSES</u>, on behalf of the Newton Safe Routes to School Task Force, requesting installation of a pedestrian hybrid signal and crosswalk on Parker Street in the vicinity of Daniel Street and Athelstane Road, to be paid for through Mass DOT' Safe Routes to School Infrastructure Program. (Ward 6) [12/23/10 @ 9:10 AM]

The location of this meeting is handicap accessible, and reasonable accommodations will be provided to persons requiring assistance. If you have a special accommodation need, please contact the Newton ADA Coordinator Kathleen Cahill, 617-796-1125, via email at <a href="McCahill@newtonma.gov">KCahill@newtonma.gov</a> or via TDD/TTY at (617) 796-1089 at least two days in advance of the meeting date.

### ITEMS NOT SCHEDULED FOR DISCUSSION:

- TC3-11 ROBERT TENDLER, 19 Lawrence Avenue, requesting removal of the present parking restrictions and the imposition of "Resident Parking Only" on Lawrence Avenue. (Ward 7) [01/28/11 @ 12:14 PM]
- TC2-11 <u>ALD. SALVUCCI, LENNON, CICCONE AND MERRILL</u> on behalf of the Citizens of Newton Corner requests establishing reasonable regulations and install traffic safety devices as are necessary to protect pedestrians traveling to the south side of the Massachusetts Turnpike. (Wards 1 and 2) [01/11/11 @ 9:42 AM]
- HP3-10

  DAVID KOSES on behalf of the Jackson Homestead, requesting a handicap parking space on Jackson Road in the vicinity of the Jackson Homestead. (Ward 1) [09/27/10 @ 11:15 AM]

  (No position taken by the Mayor's Committee for Persons with Disabilities (MCPD). On 11/08/10, the MCPD Committee voted 7-0-0 to recommend that the request for handicap parking be revisited when the renovations to improve accessibility planned for Jackson Homestead/Newton History Museum have been completed).
- TC40-10 <u>ALD. DANBERG, BLAZAR, SHAPIRO, FULLER AND BAKER</u> requesting discussion of and possible ban of parking during morning rush hour on Beacon Street a) (North side) between Langley Road and Centre Street and b) (South side) between Langley Road and Centre Street.

  (Wards 6 & 7) [12/13/10 @ 11:56 AM]
- TC38-10 <u>ALD. JOHNSON AND LINSKY</u> requesting a lowering of the speed limit on Cabot Street. (Wards 1 & 2) [11/01/10 @ 9:12 AM]
- TC37-10 NEWTON HIGHLANDS NEIGHBORHOOD, Newton recommending the implementation of a pedestrian-activated blinking warning sign on a mast-arm above Walnut Street (at either Hyde or Duncklee Streets), similar to those recently implemented at other locations in Newton, and any other necessary measures to allow for a safe pedestrian crossing area in this corridor of Walnut Street (currently lacking). (Ward 6) [10/13/10 @ 11:44 AM]
- TC34-10 <u>ALD. LAPPIN</u> requesting an analysis of parking and traffic flow on Florence Street as it relates to pedestrian and bike safety. (Wards 7 & 8) [10/04/10 @ 3:44 PM]
- TC33-10 <u>DAVID KOSES</u> on behalf of the Jackson Homestead, requesting changes to reduce commuter parking on the south side of Washington Street, in the proximity of the Jackson Homestead. (Ward 1) [09/27/10 @ 11:15 AM]
- TC32-10 GABE SMALLMAN, c/o Mark Schwarez, 600 California Street, requesting Goddard Street be considered a one-way street to address speeding and to reduce cut through traffic. (Ward 8) [09/07/10 @ 3:28 PM]

- TC30-10 NANCY BRAUDIS, 57 Theodore Road, requesting a pedestrian warning beacon with a crosswalk at Theodore Road and Parker Street. (Ward 8) [08/30/10 @ 11:45 AM]
  - HELD (4-1, Grafe) on 12/16/10 until additional counts can be taken during warmer weather.
- TC29-10 ALDERMEN BAKER, FULLER AND SCHNIPPER requesting installation of pedestrian activated warning light at a crosswalk location to be determined on Beacon Street between Hammond Street and Reservoir Avenue, together with suitable illumination, or other enhancements, to facilitate Safe pedestrian crossing while maintaining through traffic flow. (Ward 7) [08/26/10 @ 8:53 AM]
- TC28-10

  JAMES DANILA, on behalf of the Department of Public Works, requests a right turn only restriction on westbound Carriage Road at Lowell Avenue to facilitate the relocation of the stop line on Lowell Avenue to help improve pedestrian, bicycle, and vehicle safety. (Ward 2) [08/26/10 @ 8:57 AM]

  HELD (3-0-1, Grafe, Ciccone not present) on 10/21/10. Traffic Council will await additional input from abutters.

  HELD (5-0) on 12/16/10. Traffic Council will take this item up again in March 2011 with additional design and cost information to be provided by the Department of Public Works.
- TC24-10 <u>ALD. DANBERG AND BLAZAR</u> requesting discussion on possible methods of improving traffic flow and safety at the intersections of Beacon and Centre Streets and Beacon Street and Langley Road, including but not limited to retiming of the lights. (Ward 6) [07/02/10 @ 12:22 PM]
- TC23-10 <u>ALD. DANBERG, BLAZAR AND SHAPIRO</u>, on behalf of Kay Alexander and Steve Hamilton requesting a discussion on traffic mitigation possibilities on Sumner, Marshall, Everett and Gibbs Streets in Newton Centre to address speeding and cut-through traffic. (Ward 6) [06/21/10 @ 10:02 PM]
- TC17-10 TRAFFIC COUNCIL CHAIR, on behalf of School Department, requesting parking restrictions on Walnut Street between Hull Street and Otis Street. (Ward 2) [05/12/10 @ 4:30 PM]
  - B) HELD (5-0) on 06/24/10 for 60-Day Trial, No standing, both sides, School Days 7:00am to 4:00pm, between a point where the northbound left-turn lane to Elm Road begins at Hull Street.
  - B) HELD (4-1, Grafe) on 09/30/10 to extend existing 60-day trial.

- WILLIAM FRANKLIN, 29 Trowbridge Avenue, requesting a) no parking either side of Trowbridge Avenue 24 hrs/day except by permit, b) each household should be issued two mobile permits and c) the street should be posted on either end as residents only. (Ward 2) [05/04/10 @ 6:20 PM]
   HELD (5-0) on 09/30/10 for new 60-Day Trial, No Standing, all days, north side of public way section of Trowbridge Avenue; No Parking, south side of Trowbridge Avenue, from Walnut Street to a point 50 feet east of Walnut Street; One-Hour Limit, 8 a.m. to 10 p.m., all days, south side of Trowbridge Avenue, from a point 50 feet east of Walnut Street to the end of the public
- TC55-09

  ALD. CICCONE, LENNON AND MERRILL requesting a safety analysis and improvements at the intersection of Lewis Terrace, Lewis Street and Newtonville Avenue. (Ward 1) [01/12/10 @ 10:44 AM]

  HELD (5-0) on 09/30/10. DPW will add Speed Limit signage and alter street lighting, if appropriate, perform a speed study on Newtonville Avenue and conduct tree trimming.

way.

TC29-09

ALD. SANGIOLO, GENTILE AND HARNEY requesting installation of a pedestrian-activated warning signal on Commonwealth Avenue in front of the Marriott Hotel in Auburndale. (Ward 4) [08/04/09 @ 9:59 AM]

HELD (5-0) on 12/17/09. Item will be rescheduled at a time to be requested by Ward 4 Aldermen.

Respectfully submitted,

David Koses, Traffic Council Chair

### REQUEST FOR TRAFFIC IMPROVEMENT OR CHANGE CITY OF NEWTON TRAFFIC COUNCIL, ROOM 101A 1000 COMMONWEALTH AVENUE NEWTON CENTRE 02459

The Traffic Council is administered through the Clerk of the Board's Office. The Petitioner and other parties who may in the Council's judgment be substantially affected by such petition will be notified with the first date the petition will be discussed by the Traffic Council. NOTE: There are additional petition requirements for Resident Only Permit Areas; see Sec. 19-201 of the City of Newton Ordinances. If you have further questions, please call the Clerk of the Board's Office at (617) 796-1210.

Complete both sides and submit to the Clerk of the Board's Office (PLEA'SE PRINTED PRINTED PARTY COMPLETE PRINTED PRINTED PRINTED PRINTED	NT):
PETITIONER'S NAME NANCY BOWDRING SIGNATURE: Daicy	le. Bouding
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TELEPHONE (DAY): 6 17-965-1205 (EVENING): Same	

I. Identify the location and briefly describe the nature of the problem:

There is a continuous flow of two-way trettic on Hammondswood Rd from Beacon St. to Common wealth Ave (The Beacon St. end of Hammondswood Rd. is private.) buch of the traffic comes from Hammond Pond Phury. To lessen the number of vehicles using the street as a short cut to Commonwealth Ave. it is suggested that a no-left farm from 7:00 am to 9:00 am. sign be posted at the intersection of Beacon St. and I tammonds wood Rd. The section of Hammondswood Rd. Section St. and I sprivate and is maintained and paid on the Beacon St. end is private and is maintained and paid for by the residents of that part of the road.

2. Draw a simple diagram or attach a map in the box below that shows the subject street(s) and conditions.

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3. Obtain required signatures on reverse side of this form.

Last Revised July 1, 2005

For Clerk's use only:	
DATE FILED:	The Mark State of the State of

### REQUIRED SIGNATURES (Please Print)

\*Petitions for intersectional controls/regulations (traffic signals, stop signs, no turn on red, etc.) require a total of six (6) signatures (including petitioner's) from owners or tenants whose building or lot of land is located within five-hundred (500) feet of the affected intersection (one signature per household or business).

•Petitions for parking restrictions, truck exclusions, speed limits, and all other traffic regulations must be
signed by one (1) owner or tenant of at least half of the residential, commercial and/or non-profit units
which abut the affected street or way, provided that in no event shall more than ten (10) signatures
(including petitioner's) be required (one signature per household or business).
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NAME: JEAN WALSH SIGNATURE: IN E THE
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1 - ( - 1-010 )
NAME: LAUVA GAINSOOW SIGNATURE.
ADDRESS: 50   Beauty St UNIT# Home
TELEPHONE (DAY): 107-256-9002 (EVENING): 67-256-9002
NAME: JOEL EICHLER SIGNATURE: Hell he cuble
ADDRESS: 93 MONADOUCK RD UNIT# HOME
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NAME: Joyce Gruenberg SIGNATURE: Jackful
ADDRESS: 7/ Hammond/wood Rd. UNIX# (Home
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NAME: W. KIN FUNG. SIGNATURE:
ADDRESS: 120 Hammondswood Rd UNITH- HOME
TELEPHONE (DAY): 781-888-8006 (EVENING): 781-888-8006
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NAME: Margaret Evangelatos SIGNATURE: M. Guardelis
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NAME: MAROLD SIMON SIGNATURE: Land June
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Complete both sides and submit to the Clerk of the E		7 \ 7	)
PETITIONER'S NAME Daren Dean ADDRESS: Two Newton Place, 255 was	SIGNATURE	Jaj	e
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TELEPHONE (DAY): 617-796-7659		77.584 C	F
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1. Identify the location and briefly describe the natur	e of the problem:		
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cycle and making a right on red is not permitted.  Respectfully, we ask that you consider extending the made when the light is red.		and/or allowing	g for right turns to
be made when the light is red.			
2. Draw a simple diagram or attach a map in the box	below that shows	the subject street	(s) and
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3. Obtain required signatures on reverse side of this form.



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- •Petitions for parking restrictions, truck exclusions, speed limits, and all other traffic regulations must be signed by one (1) owner or tenant of <u>at least half</u> of the residential, commercial and/or non-profit units which abut the affected street or way, provided that in no event shall more than <u>ten (10)</u> signatures (including petitioner's) be required (one signature per household or business)

Ð	NAME: Daren Dean ADDRESS: 255 Washington Street, N	SIGNATURE: Jaya
O	ADDRESS: 255 Washington Street, N	enton MA OGUNIT# 1270
	TELEPHONE (DAY): 617-796-7659	(EVENING): 67-584-8140
<b></b>	NAME: GERRY JANEHA S ADDRESS: 255 Washington St.	GIGNATURE: Donth
	ADDRESS: 255 Washington St. TELEPHONE (DAY): 617-796-7650	UNIT# J 4
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3	NAME: June Doyce St. ADDRESS: 253 Weshigton St.	SIGNATURE: Dosan Dodge
	ADDRESS: 253 Wearlighten St	UNIT# $3^{\circ}$ $0$
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9	NAME: Daviel Boxloom S	GIGNATURE: Conduction
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	NAME: KVISTINA PERKINS	
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	NAME: /VZ4 OSGODD S	SIGNATURE.
	ADDRESS: 255 WASHZAGTON JT.	UNIT# 270
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Complete both sides and submit to the Clerk of the Board's Office (PLEASE PRINT):

PETITIONER'S NAME DOUG KOSES SIGNATURE: DELL'ASSISSIONATURE:
ADDRESS:Unit #
TELEPHONE (DAY):(EVENING):
1. Identify the location and briefly describe the nature of the problem:
David Koses, on behalf of the Newton Safe Ractes to
School Task Force, requesting parking restrictions on
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Conditions.
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3. Obtain required signatures on reverse side of this form.

For Clerk's use only: DATE FILED:

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- •Petitions for parking restrictions, truck exclusions, speed limits, and all other traffic regulations must be signed by one (1) owner or tenant of at least half of the residential, commercial and/or non-profit units which abut the affected street or way, provided that in no event shall more than ten (10) signatures (including petitioner's) be required (one signature per household or business).

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TEL 978.794.1792

65 GLENN STREET | LAWRENCE, MA 01843 FAX 978.794.1793 WWW.TECMASS.COM

October 15, 2010

Mayor Setti D. Warren **Newton City Hall** 1000 Commonwealth Avenue Newton Centre, MA 02459

Ref: T0233

RE: Safe Routes to School Infrastructure Program

Preliminary Assessment for the Bowen School

Newton, Massachusetts

### Dear Mayor Warren:

We are pleased to transmit the enclosed ten (10) copies of the Preliminary Assessment for the Bowen School as part of the Safe Routes to School (SRTS) Infrastructure Program. managed by the Massachusetts Department of Transportation (MassDOT). This school was selected to receive a Preliminary Assessment that outlines our recommendations for improvements to the walking and bicycling environment near the school.

We developed the report findings and recommendations based on information submitted by Bowen School's staff, meetings and discussions with school and City staff, and field visits to inspect infrastructure and observe student behavior. Once the recommendations were developed to a preliminary level, we reviewed them with the City's Planning and Engineering Department staff, who generally concurred with the findings and recommendations. We understand that the conceptual recommendations were discussed at a Traffic Council meeting in September 2009. The enclosed assessment includes additional detailed graphics along with a comprehensive description of the proposed recommendations.

We request that you review the written recommendations with City staff and City Council members for consistency with any previously identified City projects and municipal standards. We also ask that you review this document in light of comments previously provided to the schools by teachers and concerned parents. In order to maintain progress on these recommendations and facilitate their implementation, we request that you submit all comments on this document within six (6) weeks. After your review and endorsement, MassDOT will evaluate the candidate projects in Newton against similar projects from other schools when considering the use of federal SRTS funding.

Should the recommended project be advanced by MassDOT for design and construction, the SRTS Team would prepare right-of-way plans depicting the proposed improvements for the City's use in securing the property necessary to facilitate construction. Based on current MassDOT program guidelines, the City of Newton will be responsible for securing any required temporary and permanent easements and right-of-way alterations. As part of this process, the City would be responsible for all costs associated with appraisals, legal document preparation, and compensatory fees for land acquisition. Based on our recent experience, the land necessary for sidewalk projects is generally limited to a narrow sliver at the back of sidewalk. With the City's successful acquisition of property for this public use,

City of Newton – Safe Routes to School October 15, 2010 Page 2 of 2

all construction costs for the project would be 100 percent federally funded. We ask that you provide a letter of support for the project that includes an endorsement of the recommendations and a commitment that the City will secure any right-of-way or easements required to build the project and maintain the infrastructure after construction is complete.

As part of the subsequent project development process, the SRTS Team will complete a field survey and prepare detailed design plans for City and MassDOT review. This survey and engineering work will be funded by MassDOT. In terms of the public process, should a project be advanced, MassDOT would conduct a Design Public Hearing when the project reaches at least 25-percent completion. To ensure full community support, however, we ask that you solicit public comment on the *conceptual* designs in this Preliminary Assessment at an upcoming City Council meeting, to which project abutters and stakeholders are invited.

We look forward to your written endorsement of the recommendations and the City's commitment to secure the right-of-way and easements necessary to program the project. If you have any questions regarding our assessment or the process for implementing the improvements, please do not hesitate to contact me or Rebecca Brown at (978) 794-1792. We look forward to working with you on this very important pedestrian safety project.

Sincerely,

TEC, Inc.

Kevin R. Dandrade, PE, PTOE Principal / Project Manager

cc: Diana Guzzi, Bowen School, Principal

Lou Taverna, City Engineer (by email)

Clint Schukel, Associate City Engineer – Traffic (by email)
David Koses, Transportation Planning Coordinator (by email)

James P. Cope, MassDOT Office of Transportation Planning

Donna Smallwood, MassRIDES

**TEC File** 



## **Bowen School**Newton, Massachusetts

Safe Routes to School Infrastructure Program



Massachusetts Department of Transportation (MassDOT)
Office of Transportation Planning



**Preliminary Assessment** 

September 30, 2010



### 1 Introduction

This Safe Routes to School (SRTS) Infrastructure Assessment for the Bowen School in Newton, Massachusetts is a summary of potential improvements that are intended to make walking and bicycling safer and more attractive modes for children traveling to and from school. This assessment includes recommendations that can either be implemented as part of the Massachusetts SRTS Infrastructure Program or pursued by the City of Newton as part of a future project. This document describes the SRTS program, the travel characteristics of the Bowen School student population, issues related to pedestrian and bicycle access for the Bowen School, and the results of the preliminary assessment effort.

### 1.1 The SRTS Program

The federally funded SRTS program is administered through the Massachusetts Department of Transportation (MassDOT). According to the federal legislation<sup>1</sup> that created SRTS, the program's purpose is:

- (1) To enable and encourage children, including those with disabilities, to walk and bicycle to school;
- (2) To make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and
- (3) To facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

In Massachusetts, the program is composed of two parts: an education / encouragement component and an infrastructure improvement component. Mass*RIDES*, the Commonwealth's travel option service, delivers the in-school education and encouragement program for MassDOT.

The infrastructure improvement program is delivered by a consultant team led by TEC, Inc. under contract with MassDOT. The TEC, Inc. consultant team evaluates walking and bicycling access conditions at the school; identifies potential infrastructure projects that would improve pedestrian and bicycle access; and develops designs for a selected set of high priority pedestrian and bicycle access improvements.

<sup>1</sup> The federal-aid Safe Routes to School Program (SRTS Program) was created by Section 1404 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), signed into Public Law (P.L. 109-59) on August 10, 2005. The SRTS Program provides federal-aid highway funds to state Departments of Transportation (DOTs) in accordance with a formula specified in the legislation. These funds are available for infrastructure and non-infrastructure projects and to administer state Safe Routes to School programs that benefit elementary and middle school children in grades K-8. The federal-aid SRTS Program is administered by the Federal Highway Administration (FHWA) Office of Safety.

### 1.2 MassDOT Policy Support for SRTS

MassDOT policy and practice is strongly supportive of the SRTS program and the infrastructure improvement projects that it makes possible. Key MassDOT policies that support SRTS include:

- The GreenDOT Policy, MassDOT's comprehensive sustainability initiative that is designed to integrate environmental responsibility into all areas of MassDOT's responsibilities. GreenDOT is driven by three primary goals: reduce greenhouse gas emissions; promote the healthy transportation options of walking, bicycling, and public transit; and support smart growth development.
- Complete Streets, the comprehensive multi-modal design philosophy in MassDOT's Project Development and Design Guide. Complete Streets calls for safe and appropriate accommodation of all roadway users, and an approach to roadway design that works "from the outside in," giving critical early consideration not only to motor vehicles, but also pedestrians, bicyclists, and public transit riders.
- The Healthy Transportation Compact, an inter-agency group established by the 2009 Transportation Reform Law that established MassDOT, and led by MassDOT, the Executive Office of Health and Human Services, and the Executive Office of Energy and Environmental Affairs. The Healthy Transportation Compact is designed to promote healthy lifestyles through transportation system design and operations that facilitate walking, bicycling, and other active transportation modes.

These policies are all consistent with and supportive of the SRTS program, which seeks to promote active transportation and healthy lifestyles among the next generation of Massachusetts residents. It is MassDOT's desire that the SRTS program not only create healthy habits that will last a lifetime, but also to help educate school children on the importance of ensuring opportunities for active transportation in the way that we build and operate our transportation system.

### 1.3 The School Assessment Program

Over the course of a three-year period, MassDOT, through the TEC Team, will conduct assessments at up to 50 schools throughout the Commonwealth. The first round of assessments started in April 2008 and covered thirteen schools. Ten schools were assessed in the second round beginning in November 2008. Twelve additional assessments were commenced as part of round three beginning in April 2009. Fourth and fifth rounds of solicitations occurred in March and April 2010, respectively.

In order to receive an infrastructure assessment, a school must be a participant in the education and encouragement program managed by Mass*RIDES*, and the school must complete an assessment request. Each assessment request must be accompanied by a municipal letter of support from the City naming a municipal liaison for future coordination. To date, infrastructure assessments have been limited to one per community.

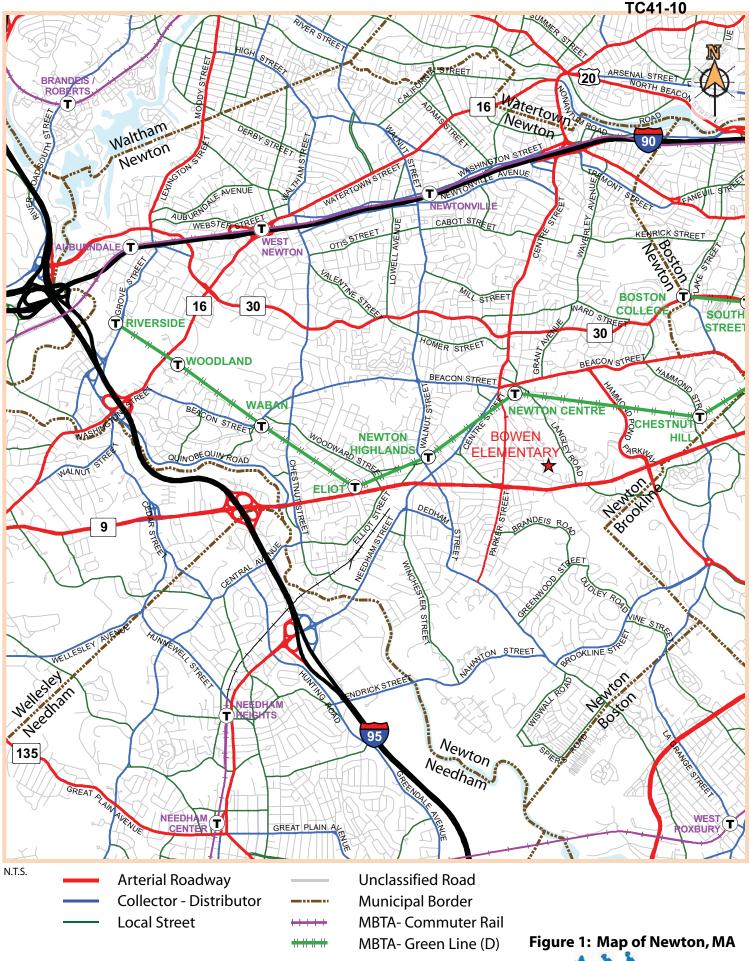
### 1.4 Use of Assessment Recommendations

Each assessment identifies measures that could improve bicycling and walking conditions. The assessment includes preliminary evaluation of feasibility, safety benefits, likelihood of increasing walking and bicycling, and cost. Based on this preliminary evaluation, several potential infrastructure projects are developed in greater detail for review with the school and municipal stakeholders. After this review, final implementation recommendations are made.

### 2 Bowen School

The Bowen School is located on Cypress Street, approximately one-quarter mile north of Jackson Street. Figure 1 shows the school's relationship to the network of arterial roadways, which carry heavy traffic volumes that can be a barrier to walking and bicycling. Figure 2 shows the school's relationship to the streets within a one-mile radius of the school. Both graphics are based on Geographic Information System (GIS) files maintained by MassDOT's Office of Transportation Planning.

This assessment focuses on the streets immediately adjacent to the school grounds because these are the streets that carry the greatest volume of school-related walking and bicycling trips.



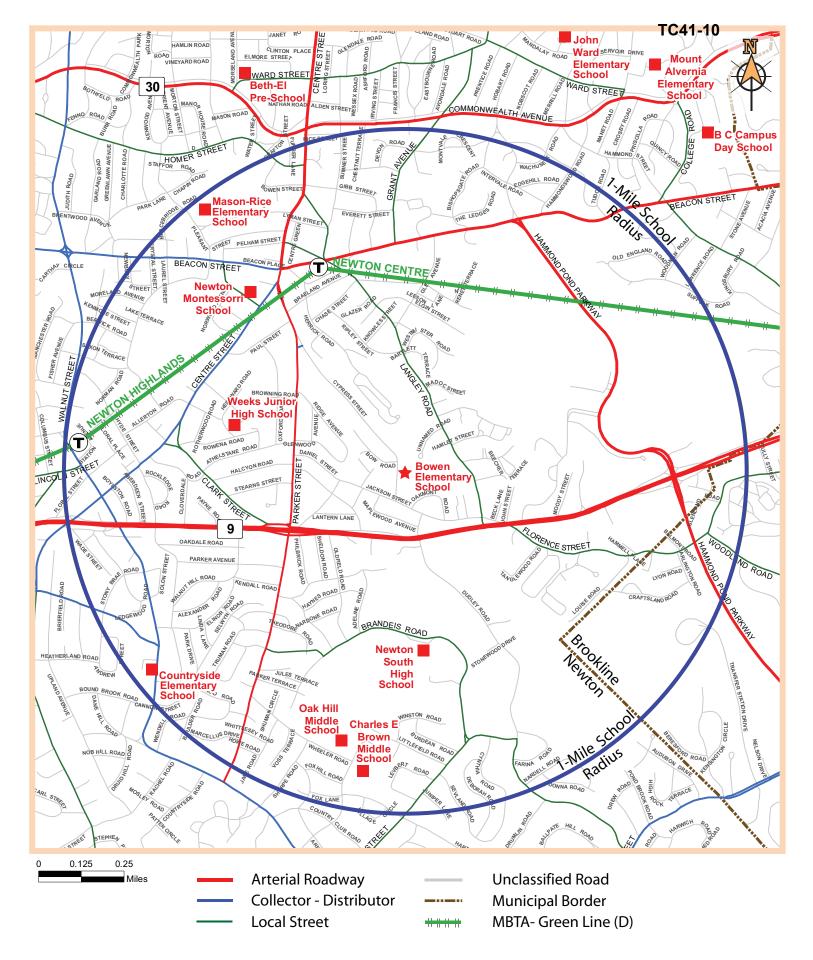


Figure 2: 1-Mile Street Network & Surrounding Schools

### 2.1 Completed SRTS School Assessment Request

(As submitted by the City)

School Informa	ation	Municipality Information				
School Name	Bowen Elementary	Municipality Name		' '		City of Newton
Street Address	280 Cypress Street Newton Center, MA 02459	Mailing Address		1000 Commonwealth Ave. Newton, MA 02459		
Original Contact Name	Dr. Patricia Kelly (Principal 2008)	Co	ontact Name	Clint Schuckel, PE, PTOE		
Tel. No.	617-559-9330	Te	el. No.	617-796-1024		
Email	patricia kelly@newton.k12. ma.us	Er	mail	cschuckel@newtonma.gov		

School Population Information (2008)										
Grade	K	1	2	3	4	5	6	7	8	Sum
Number of Students	79	81	81	77	63	54	-	-	-	435
Actual number residing within 1 mi of school	57	66	63	55	55	40	-	-	-	336
Estimated number who currently walk/bicycle	23	21	28	22	21	19	-	-	-	134

### Are students bused within 1 mile of the school? Explain if yes.

Some are bused for safety reasons, e.g. dangerous crossing like Route 9. Approximately 13% of students within 1 mile are eligible for busing.

### Describe the potential for increasing walking and bicycling to the school

Bowen serves a residential area in Newton with a dense student population and one of the highest elementary school enrollments in the city. The vast majority of families live within a 1-mile radius with safe walking routes to school on well-maintained sidewalks with supervised major crossings. We seek to encourage more of these families to leave their cars at home with infrastructure improvements that improve pedestrian comfort level and safety along the school route as well as upon arrival to the school.

### Describe the problems your school faces regarding safe routes to your school

Bowen has an extremely cramped drop-off space in front of the school, too small to even allow for a blue zone as it is shared with bus drop-off and staff parking. In addition, traffic flow and lines of sight are impeded by parent and staff overflow parking, which spills out onto the narrow streets feeding the school. It is not uncommon to see traffic delays and backups in front of the school, as well as increased driver anxiety, disregard for traffic rules, and children exiting vehicles in traffic.

Also, with the proximity to a very congested stretch of Route 9, the neighborhood streets feeding Bowen are often used as cut-through routes for commuters and drivers can be aggressive. High volume, excessive speeds and disregard for school safety all make for dangerous pedestrian crossings.

### 2.2 Participation in SRTS Education and Encouragement

The Bowen School has held the following school sponsored activities as part of the SRTS program:

- Participated in International Walk To School Day;
- Organized five walking school buses (some run weekly, some daily);
- Organized "walk to and from school days," traditionally on Tuesdays;
- Provided group rewards (with some material provided through Mass*RIDES*), such as stickers and pencils, and encouraged fun activities and competitions regarding apparel worn by walking students.

### 2.3 **Transportation Improvements in Newton**

Transportation and traffic control improvements in Newton are under the ultimate purview of the Board of Aldermen. Newton's Department of Public Works and its City Planning and Engineering Departments are tasked with making recommendations to the Aldermen for their adoption prior to implementation. There are a few intersections that are under review by the City in the vicinity of the school; these are discussed below in Section 2.5, Municipal Construction Projects & Recent Studies.

### 2.4 **Field Visit**

The first SRTS field visit and initial coordination meeting for the Bowen School took place on May 12, 2008, and included a discussion of the current programs employed by the school administration as part of the SRTS program through MassRIDES and a discussion of the present needs identified by staff and parents. The following people attended the initial meeting:

Attendee:	Representing:
Kevin Dandrade, Project Manager	TEC, Inc.
Dr. Patricia Kelly <sup>2</sup>	Principal, Bowen Elementary (2008)
Christine Morrow	MassRIDES
Gretchen Von Grossmann	Von Grossmann & Company
Adam Peller	SRTS Parent Liaison

Additional field visits were performed in June and October 2009 to confirm the construction considerations of the recommended improvements.

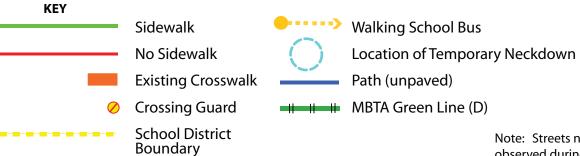
Bowen Elementary is situated in a residential neighborhood with closely spaced homes and a generally good walking environment. Most of the streets have sidewalks, as illustrated in Figure 3. The TEC Team concentrated on the roadway crossings; because the sidewalk infrastructure in this section of Newton is extensive, difficult crossings generally act as the barriers to walking and bicycling.

<sup>&</sup>lt;sup>2</sup> Dr. Kelly was succeeded by Principal Diana Guzzi in 2009.





1'' = 780'



Note: Streets not marked were not observed during the site visit.

**Figure 3: Existing Conditions Around Bowen School** 



### 2.5 General Observations

### School Arrival and Dismissal

- Generally, students enter the school through the main door on Cypress Street; a teacher must escort a student wanting to enter a different door.
- Pedestrian access is available via a path connecting the school to the Bowen Playground and beyond to Langley Road.
- Drop-off and pick-up activity occurs on Cypress Street in front of the school via a one-way northbound driveway with curb openings of approximately 40 feet at each end.
- Both cars and buses are permitted to use the driveway in the morning for pick-up and drop-off. In the afternoon, the driveway is restricted to buses, although this restriction is not always followed by parents.
- A sidewalk divides the school driveway from the street but is currently used for faculty parking because of insufficient supply of spaces (only 28 parking spots for more than 80 teachers and staff members). There is another parking area (approximately 13 spaces) adjacent to the paved play area northeast of the school.

### Traffic Patterns

- Because Cypress Street provides a connection between Newton Center and Route 9, the school staff is concerned about high peak-period traffic volumes.
- There is an established school zone on Cypress Street, with flashing sign assemblies approximately 200 feet north and south of the driveways and "School Zone" pavement markings.
- To the north of the school, Cypress Street has homes and driveways on the west side only. This creates an environment conducive to higher travels speeds, and many motorists appear to be operating above the posted speed limit of 30 miles per hour. Closer to the school, on-street parking helps to slow traffic speeds on Cypress Street.
- Parker Street, located to the west of the school, is a busy arterial roadway that also connects Route 9 with Newton Centre, carrying approximately 15,000 vehicles per day. Because some Bowen School students live west of Parker Street, crossing this busy road presents safety challenges, despite the presence of a crossing guard at Daniel Street. Street trees limit the visibility of pedestrians waiting to enter the crosswalk. Similarly, some tree limbs obstruct traffic signs. Motorists stopped at the stop sign on Daniel Street have difficulty turning onto Parker Street in peak traffic hours. The TEC Team observed long queues on Parker Street when the crossing guard stopped traffic during the peak arrival and dismissal periods.

### Sidewalk and Pathway Infrastructure

- North of the school, Cypress Street has a sidewalk only on the west side (on the side opposite the school). In addition, the street curves sharply just to the north of the school. Currently, the school staff encourages students and parents arriving by foot from the north to continue on the west side past the school to cross at Jackson Street, where a crossing guard is posted. This necessitates approximately 800 feet of additional travel to reach the crossing guard. Several students were observed crossing Cypress Street in the area of the sharp curve on Cypress Street opposite Bow Street.
- The crosswalks at Jackson Street and Cypress Street, which are complemented by a crossing guard and stop sign control on the Jackson Street approach, seem to operate safely based on the TEC Team's observations and according to school staff. However, the Jackson Street approaches to the intersection feature closely planted street trees, which limit the visibility of the existing pedestrian warning signs.
- Some limited curb extensions have been proposed for the intersection of Daniel Street and Jackson Street. The City Planning and Engineering Departments staff have indicated that the final design of the curb extensions has not yet been determined. Temporary asphalt curbing was installed several months ago as a demonstration of the curb-extension concept, and is now falling into disrepair.
- The connection from Langley Road through the Bowen Playground and to the school is circuitous, and stretches of sidewalk lack visibility from the street or from school grounds. The path from the school to the playground is an asphalt drive that is steep (not ADA-compliant) and reportedly slippery in winter. The asphalt path continues to the adjacent cul-de-sac where it meets a 4-foot wide concrete sidewalk that leads to Langley Road.
- Although on the edge of the school district, the intersection of Cypress Street and Parker Street near Newton Centre features an inefficient and indirect crosswalk layout for pedestrians. The intersection of the two streets forms an acute angle (approximately 30 degrees), between which is a triangular island whose third leg is a one-way eastbound connection from Parker Street northbound to Cypress Street southbound. If a sidewalk were built on the short one-way lane, it would make the pedestrian movement from the crosswalk to Cypress Street more direct.

### Municipal Construction Projects & Recent Studies

- The City has been working with the neighborhood to establish traffic calming
  measures at the intersection of Jackson Street and Daniel Street. Temporary curb
  returns have been constructed to define an intersection that is closer to a 90degree configuration, with Daniel Street eastbound under stop sign control.
  Another traffic engineering consulting firm, Traffic Solutions, had provided the
  City with conceptual improvement options, which are discussed further in this
  assessment report.
- The City performed a review of the warrants for the installation of an all-way stop at the intersection of Jackson Street and Cypress Street in early 2009. It was

determined that the intersection has sufficient traffic control under the existing conditions, whereby only Cypress Street is under stop control.

Crossing Guards

During the 2008-2009 school year, crossing guards were stationed at the following intersections near the Bowen School:

- Cypress Street at Jackson Street,
- Parker Street at Daniel Street, and
- Langley Road at the Bowen Playground driveway.

### 2.6 School/Municipality-Identified Needs/Opportunities

At the time of the group meeting in 2008, there were two distinct needs that were identified:

- Improve the organization and safety features of the school drop-off area; and
- Improve visibility of crossings and reduce vehicle speeds on approaches to key crossing locations (Parker Street at Daniel Street and Jackson Street at Cypress Street).

Although City staff was unavailable to meet at the time of the initial meeting, TEC followed up with the City Planning and Engineering Departments. There were no specific needs identified for this area other than the previous traffic calming work at the intersection of Jackson Street and Daniel Street.

### 3 Recommendations for Improvement

As a result of the needs identified in the assessment request, the field assessment, and input from school and City representatives, the TEC Team has identified a number of potential improvements to the pedestrian and bicycling environment in the vicinity of the Bowen School. These improvements are illustrated graphically in Figure 4, and have been divided into those improvements that are recommended for implementation through MassDOT's SRTS infrastructure program (Primary Recommendations) and those that are recommended for potential implementation through other funding sources (Secondary Recommendations).

### 3.1 Primary Recommendations

The following improvements are recommended as potential infrastructure projects to be built as part of the SRTS Infrastructure program:

### Recommendation 1 – Pedestrian Crossing and Refuge Area on Cypress Street

The principal recommendation includes the construction of a pedestrian refuge area, where pedestrians can wait outside of the traffic stream, and improvements to the crossing of Cypress Street directly in front of the school. The major project elements include:

• Construction of a raised landscape planter with low walls and an 8-10 foot wide

sidewalk.

- Reconstruction of the curb lines for 50-75 feet on the west side of Cypress Street to provide a minor narrowing of the travel ways.
- Installation of bollards to protect the pedestrian space approximately 18 inches inside the curb line.
- Application of pavement markings for a new crosswalk to provide additional sight distance from the current informal crossing location near the school's exit driveway.
- Installation of parking prohibition signs in close proximity to the crosswalk and other traffic control signs associated with the one-way flow of the school driveway.

The preliminary cost estimate for this improvement is approximately \$147,000. See Figure 5 for additional detail and a graphical depiction of the improvements.



Parker Street at Location of Proposed Sidewalk (Looking South)

### Recommendation 2 – Pedestrian Hybrid Beacon and Crosswalk on Parker Street

In order to provide a consistent level of traffic control for pedestrians seeking to cross Parker Street, the TEC Team recommends installation of a pedestrian hybrid beacon between Daniel Street and Athelstane Road (See Attachment 1 for Data and Warrant Analysis). The proposed traffic signal would help students crossing from the west side of Parker Street to access Bowen School. It will also be used for children on the east side of Parker Street desiring to walk to the Weeks Junior High

School. The major elements of the project include:

- Reconstruction of existing accessible ramps and construction of new ramps to comply with ADA standards as well as some cement concrete sidewalk approaches to the ramps.
- Removal of the existing crosswalk on Parker Street located at the northerly corner of Daniel Street.
- Application of pavement markings for the new crosswalk on Parker Street.
- Installation of one new mast arm to accommodate signal heads over the middle of Parker Street with one signal post on the opposite side of the street from the mast arm.
- Installation of pedestrian hybrid signal heads with countdown timers and push buttons.
- Installation of signs and pavement markings to complement the new traffic signal and provide warning for the signal operation.

A detailed traffic signal warrant analysis will be conducted as part of a Functional Design Report (FDR), which will be completed as part of the 25% / 75% design submission. The impact on traffic flow on Parker Street will be comparable to the use of a crossing guard during peak school arrival and dismissal periods. The preliminary construction cost estimate for this improvement is approximately \$135,500. See Figure 6 for additional detail and a graphical depiction of the improvements.

For the purpose of cost estimating, TEC assumed that all primary projects will be constructed concurrently.

### 3.2 Secondary Recommendations:

The following are recommended improvements to be implemented by the City or by utilizing other state and federal funding sources.

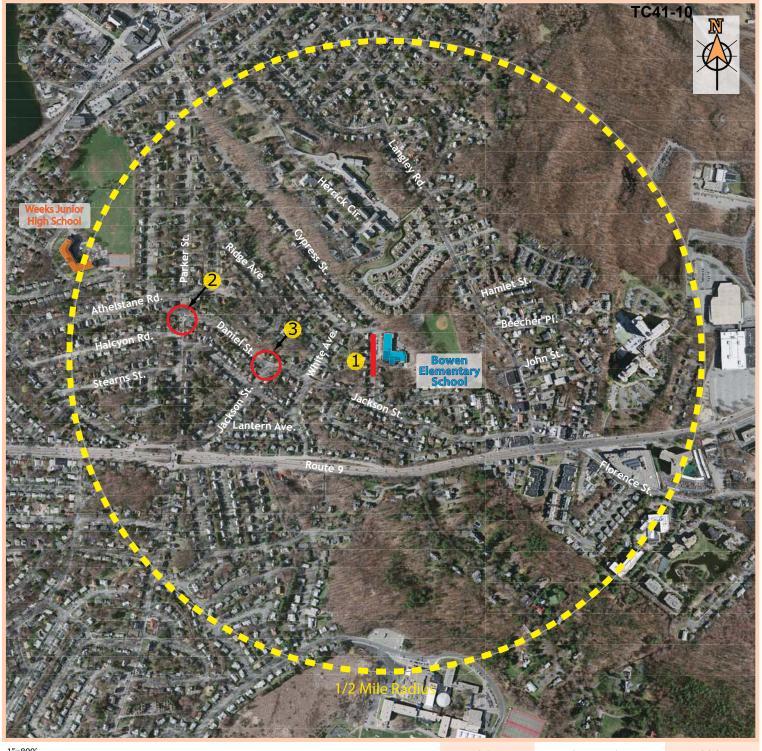
### Recommendation 3 – Reconstruction of the intersection of Jackson Street and Daniel Street

The TEC Team reviewed the conceptual recommendations for traffic calming improvements at the intersection of Jackson Street and Daniel Street based on work previously completed by another consultant for the City of Newton. The temporary asphalt curb lines provide limited benefit for pedestrian operations because the sidewalk locations have not changed. TEC recommends reconstructing the intersection to create an alignment that is closer to 90-degrees, similar to Proposed Alternative 1 dated June 23, 2005 (See Attachment 2).

This concept has merit in its ability to slow vehicle movements to and from Daniel Street. To enhance this recommendation, the City should reconstruct the drainage structures at the face of the new curb line and construct new ADA-compliant ramps. This improvement, if implemented, would shorten the pedestrian movements across Daniel Street and appears to maintain acceptable sight lines.

### **Additional Maintenance Recommendations:**

- Relocate the school's bike rack from its current location (south side of building in a building alcove not visible from the front or rear of the building) to the southwest corner at the front of the building in a planted area. The bicycle parking would be more secure if visible to people entering and exiting the building, and offers children a shorter route into the building.
- Install new MUTCD-compliant pedestrian warning signs at the intersection of Jackson Street and Cypress Street in new locations that maximize visibility along Jackson Street.



KEY PROPOSED IMPROVEMENT	FEASIBILITY	SAFETY/ MOBILITY BENEFIT	COST
Potential SRTS Infrastructure Project Recommendations			
School Entrance/Cypress Street Crossing	High	High	Low
Pedestrian Hybrid Beacon on Parker Street	High	High	Moderate
Recommendations to be Pursued by Town or through Other Funding Sour	ces		
3 Curb Line Bump-Outs at Jackson Street/Daniel Street	High	Low	Moderate
Recommendations to be Pursued by Town or through Other Funding Sour	ces	·	

**Figure 4: Location of Recommended Improvements** 



### RECOMMENDED SCOPE OF WORK AND **CONCEPTUAL COST ESTIMATE:**

ISLAND W/ GRANITE CURBING &

**CONCRETE SIDEWALK** \$54,000

**DRAINAGE MODIFICATIONS** \$8,000

PAVEMENT OVERLAY = \$25,000

SIGNS & STRIPING \$4,000

LANDSCAPING/PLANTER WALLS \$8,000

**BOLLARDS** \$2,000

TRAFFIC CONTROL/

MOBILIZATION/FIELD OFFICE \$16,000

25% CONTINGENCY &

CONSTRUCTION ENGINEERING = \$30,000

> **TOTAL** =\$147,000



Rendering of Potential Improvements at Cypress Street and School Entrance

R7-12

BETWEEN

S1-1



R7-1D



W16-7p



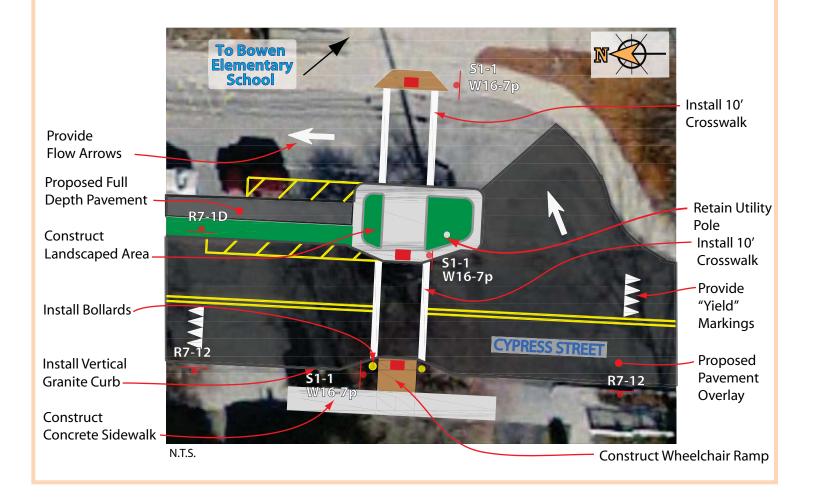


Figure 5: Recommendation 1- Proposed School Entrance

### **RECOMMENDED SCOPE OF WORK AND CONCEPTUAL COST ESTIMATE:**

WHEELCHAIR RAMPS/SIDEWALK \$ 20,000 **ROADWAY STRIPING & THERMOPLASTIC CROSSWALKS & MARKINGS** 6,000 TRAFFIC SIGNS 1,500 PEDESTRIAN TRAFFIC SIGNAL & **UNDERGROUND CONDUIT** 70,000 LANDSCAPING/TRIMMING 3,000 TRAFFIC CONTROL 8,000 25% CONTINGENCY & CONSTRUCTION ENGINEERING \$ 27,000 **TOTAL** 



Pedestrian Hybrid Beacon



Pedestrian Countdown Signal

Reapply Centerline, Edge Lines & Crosswalk Markings

Remove Existing Crosswalk

R1-1

W16-9p

R10-6

W11-2



R10-23



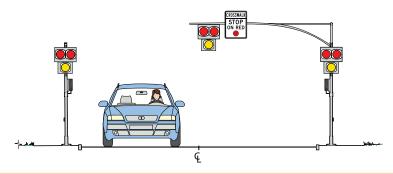




Figure 6: Recommendation 2 - Pedestrian Hybrid Beacon on Parker Street

### 4 Next Steps

MassDOT will finalize this assessment report after receipt of comments from City and school staff. Based on the findings of this and other assessment reports, MassDOT will advance infrastructure improvement projects in those communities where projects are most likely to increase the number of children walking and bicycling to school or substantially improve safety for pedestrians and bicyclists.

In order to successfully complete an SRTS infrastructure project, MassDOT and the City must work together to advance it through the SRTS infrastructure program process, which is illustrated in Figure 7. The Bowen School has completed Step 1, and this report is the culmination of Step 2. The next steps include design and permitting, which are described in greater detail in Section 4.2 below. These steps include schedule projections, which are general guidelines. Schedules can vary depending upon the school calendar (especially summer vacation), ability to reach a consensus on recommended actions, timing of City Council meetings, schedule for the City's right-of-way acquisition, and other factors.

Although the process is comprehensive and can take a significant amount of time, each step is necessary to satisfy requirements for the use of federal money to build these projects. MassDOT and the City each have important responsibilities, as described below. Cooperation and communication between MassDOT and the City will help to make the process move as smoothly and quickly as possible.

### 4.1 Project Approval (Step 3)

In order to advance the identified projects, the City must formally accept the recommendations in the report, as they may be refined in collaboration with MassDOT and its consultants, with specific emphasis on acceptance of the primary recommendation(s). This formal approval typically follows a vote of the City Council, the results of which are then documented in a letter to MassDOT.

To ensure community support for a proposed project, MassDOT strongly encourages the City to invite public comment from both the project abutters and the school community. Should the City's staff require assistance in presenting the recommendations, a representative of MassDOT or the TEC Team will be available to participate in such a meeting.

Formal acceptance of a project should include:

- Support for the project in its conceptual form
- Acknowledgement of the right-of-way acquisition process and the municipality's
  assumption of costs associated with legal counsel review and fee takings, if
  required. Right-of-way requirements are usually limited to narrow strip
  easements adjacent to the public right-of-way to provide space for a sidewalk; as
  a result, costs are not usually high.
- Identification of a municipal liaison who will be responsible for leading future design reviews with municipal staff, organizing public meetings, and coordinating the right-of-way acquisition process described below.

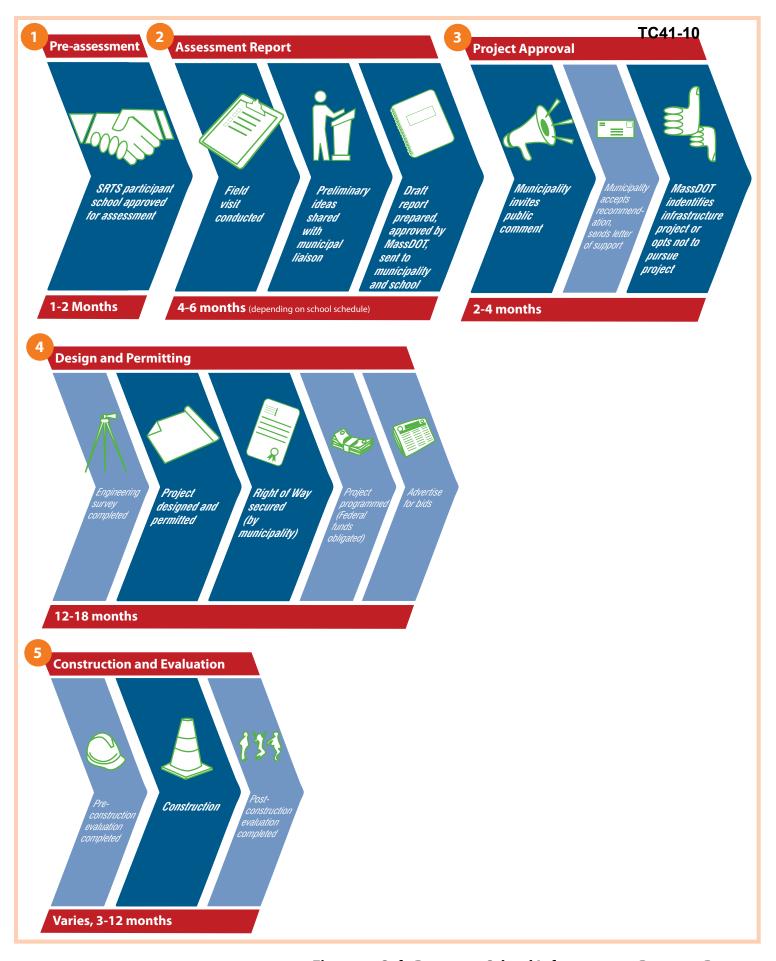


Figure 7: Safe Routes to School Infrastructure Program Process

### 4.2 Design, Evaluation, and Construction (Steps 4 & 5)

Once the SRTS infrastructure project is proposed and approved by MassDOT, a project design will be advanced in coordination with MassDOT and the City's municipal liaison. This project design will require conformance with MassDOT's *Project Development and Design Guide*, where applicable.

### **Ground Survey**

The design work will require detailed topographic ground survey and right-of-way layout research to properly locate the proposed infrastructure. The detailed ground survey is needed for any required utility design, including drainage, and to identify and minimize any impacts to the abutting parcels.

### Right-of-Way Certification (Municipal Responsibility)

The survey and design process would identify any fee takings and any easements (both temporary and permanent) on private property that are needed for construction. The City will be required to secure all fee takings and easements necessary to complete the project. The identification and legal clearance of the public right-of-way must be completed prior to MassDOT's issuance of a Right-of-Way Certificate, which is necessary to enable the use of federal funds for construction activities as part of the SRTS program. Under a City form of government, the acquisition of land typically requires a 2/3 vote of the City Council or Board of Aldermen. The vote is typically scheduled following the preparation of the Final Right-of-Way Plans.

### **Permitting**

MassDOT will coordinate any necessary Categorical Exclusion (CE) requests as part of National Environmental Policy Act (NEPA) permitting. These permitting elements require coordination with the MassDOT Highway Division's Environmental Section, Right-of-Way Bureau, and relevant District office.

### Final Design and Programming

As part of the SRTS program, the MassDOT Highway Division may accept a combined submission at the 25 percent/75 percent design stage in order to expedite the design review process for projects that are primarily associated with new sidewalk construction or reconstruction. Figure 8, presents a *generalized* summary of the steps required as part of the design and permitting process with associated time frames.

### Construction

After final plans, specifications, and cost estimates (PS & E) are completed and approved, the MassDOT Highway Division will publicly advertise the project for construction bids. After selection of a construction firm, a contract will be prepared and signed. The Highway Division will oversee the project through the appropriate District office.



Figure 8: Safe Routes to School Infrastructure Program Design and Permitting Timeframe

### **Pre-and Post-Construction Evaluation**

To quantify the benefits of the project, pre-construction and post-construction evaluations will be undertaken by MassDOT.

For additional information about the SRTS Infrastructure Program or to provide written comments on this Preliminary Assessment, please contact:

James P. Cope
MassDOT Office of Transportation Planning
Ten Park Plaza, Room 4150
Boston, MA 02116-3973
james.cope@state.ma.us

This report was prepared by the TEC, Inc. team:



Kevin Dandrade, PE, PTOE TEC, Inc. Principal / Project Manager 65 Glenn Street Lawrence, MA 01843 kdandrade@tecmass.com





7/13/2010

Project: SRTS Parker Street Pedestrian Hybrid Signal

Town: Newton, MA

Analyst: TEC / K. Dandrade

85th Percentile > 40 mph?

ZZ Population < 10,000 people?

**ATTACHMENT 1** 

# Warrant 1 - One of the Following Conditions Must Be Met for any 8 hours of an average day (Table 4C-1)

## Individual Option:

Condition A: Minimum Vehicular Volume

		M4 7-9	1268	99	NO
		5-6 PM	1306	06	ON
		4-5 PM	1136	64	NO
		3-4 PM	1159	65	NO
		2-3 PM	1048	39	NO
	TMC Data	1-2 PM	783	23	NO
	TMC	12-1 PM	908	36	NO
		11-12 AM	764	21	NO
		10-11 AM	741	27	NO
		9-10 AM	887	37	NO
		8-9 AM	1281	87	NO
		7-8 AM	1305	27	ON
100 / 0	Minimum	Volume	500	150	Met?
		Lanes	1	1	
		Street	Major	Minor	

OR

 $\begin{tabular}{l} Condition B: Interruption of Continuous Traffic \\ 100\% \end{tabular}$ 

		Minimum						TMC Data	Data					
Street	Lanes	Volume	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
Major	1	750	1305	1281	887	741	764	908	783	1048	1159	1136	1306	1268
Minor	1	75	57	87	37	27	21	36	23	39	99	64	06	56
		Met?	ON	YES	ON	ON	ON	ON	ON	ON	ON	ON	YES	ON

## Combination Option:

Condition A: Minimum Vehicular Volume

		Minimum						TMC Data	Data					
Street	Lanes	Volume	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
Major	1	400	1305	1281	887	741	764	908	783	1048	1159	1136	1306	1268
Minor	1	120	57	87	37	27	21	36	23	36	65	64	06	56
		Met?	ON	NO	ON	ON	NO	ON	ON	ON	ON	ON	ON	NO

AND

Condition B: Interruption of Continuous Traffic 80%

- 1		_			_
		6-7 PM	1268	99	ON
		5-6 PM	1306	90	YES
		4-5 PM	1136	64	YES
		3-4 PM	1159	92	YES
		2-3 PM	1048	39	ON
	Data	1-2 PM	783	23	ON
	TMC Data	12-1 PM	908	36	ON
		11-12 AM	764	21	ON
		10-11 AM	741	27	ON
		9-10 AM	887	37	ON
		8-9 AM	1281	87	YES
		7-8 AM	1305	57	ON
00.70	Minimum	Volume	009	09	Met?
		Lanes	1	1	
		Street	Major	Minor	

1 of 4

Project: SRTS Parker Street Pedestrian Hybrid Signal

Town: Newton, MA TEC # T0233

Analyst: TEC / K. Dandrade

Result: NO



		Minimum						TMC Data	Data					
Street	Lanes	Volume	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
Major	1	Figure 4C-1	1305	1281	887	741	764	908	282	1048	1159	1136	1306	1268
Minor	1	Figure 4C-1	57	87	3.7	27	21	36	23	36	65	64	06	56
		Met?	ON	YES	ON	ON	ON	ON	ON	ON	ON	ON	YES	ON

Result: NO

Warrant 3 - Peak Hour Volume (must be met for 1 hour of an average day)

		Minimim						TMC Data	Data					
		THEFT						CIVIT	Data					
Street	Lanes	Volume	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
Major	1	Figure 4C-3	1305	1281	887	741	764	908	783	1048	1159	1136	1306	1268
Minor	1	Figure 4C-3	57	87	37	27	21	36	23	39	65	64	06	56
		Met?	ON	ON	ON	ON	ON	ON	NO	ON	ON	ON	ON	NO

Result: NO

# Warrant 4 - Pedestrian Volume

Condition 1: Must be met for any 4 hours of an average day)

	_	TATITITITITI						INIC Data	Data					
Street	Lanes	Volume	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
Major	0	Figure 4C-5	1305	1281	887	741	764	908	783	1048	1159	1136	1306	1268
Peds	Result:	Figure 4C-5	20	54	5	1	3	4	3	7	87	19	40	8
		Met?	NO	NO	NO	ON	ON	ON	NO	NO	NO	NO	NO	ON

Result: NO OR

Condition 2: Must be met for 1hour of an average day)

		Minimum						TMC	TMC Data					
Street	Lanes	Volume	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
Major	1	Figure 4C-7	1305	1281	887	741	764	908	783	1048	1159	1136	1306	1268
Peds	0	Figure 4C-7	20	54	5	1	3	4	3	7	28	19	40	8

Project: SRTS Parker Street Pedestrian Hybrid Signal

Town: Newton, MA TEC # T0233

Analyst: TEC / K. Dandrade

Result: NO

Met?

## Warrants 5: - School Crossing

Assume: Length of crosswalk is 34'

AM Distribution: 36% Directional distribution to North, 64% to South

PM Distribution: 57% Directional distribution to/from North

3.5' travel distance per second

	M	~		7.0
	W4 2-9	1268	8	YES
	5-6 PM	1306	40	YES
	4-5 PM	1136	19	YES
	3-4 PM	1159	87	YES
	2-3 PM	1048	7	YES
TMC Data	1-2 PM	783	3	ON
TMC	12-1 PM	908	4	ON
	11-12 AM	764	3	ON
	10-11 AM	741	1	ON
	9-10 AM	887	5	ON
	8-9 AM	1281	54	YES
	7-8 AM	1305	20	YES
Minimum	Volume			Met?
	Lanes	0	0	
	Street	Major	Peds	

Result: YES

seconds (3600 seconds per hour/470 trips = 7.65 seconds). At a rate of 3.5' per second and 34' of travel length (34/3.5' = 9.71 seconds) it will take a pedestrian 10 seconds From 7-8am there are 1305 trips, of those 470 are northbound and 835 southbound. Conservatively and at an even distribution this is approximately one vehicle every 7.5 to cross. A formal gap study was not appropriate in April 2010 as the crossing guard was providing control.

# Warrants 6 to 8: Not Evaluated

## Assumptions:

1. Right turning traffic from the site was discounted by 50% on the minor street approach.

# Pedestrian Hybrid Beacon Warrant Analysis - Pedestrian Volume (based on 34' crosswalk)

	Condition 1	Condition 1: Must be met for any 4 hours of an average	r any 4 hour	s of an aver	age day)									
		Minimum						TMC	TMC Data					
Street	Lanes	Volume	7-8 AM	8-9 AM	9-10 AM	10-11 AM	9-10 AM   10-11 AM   11-12 AM   12-1 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	M4 7-9
Major	0	Figure 4F-1	1305	1281	288	741	764	908	783	1048	1159	1136	1306	1268
Peds	Result:	Figure 4F-1	20	54	5	1	3	4	3	7	87	19	40	8
		Met?	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
	Result:	ON												

Project: SRTS Parker Street Pedestrian Hybrid Signal

Town: Newton, MA TEC # T0233

Analyst: TEC / K. Dandrade

Based simply on posted speed limit of 30mph.

OR

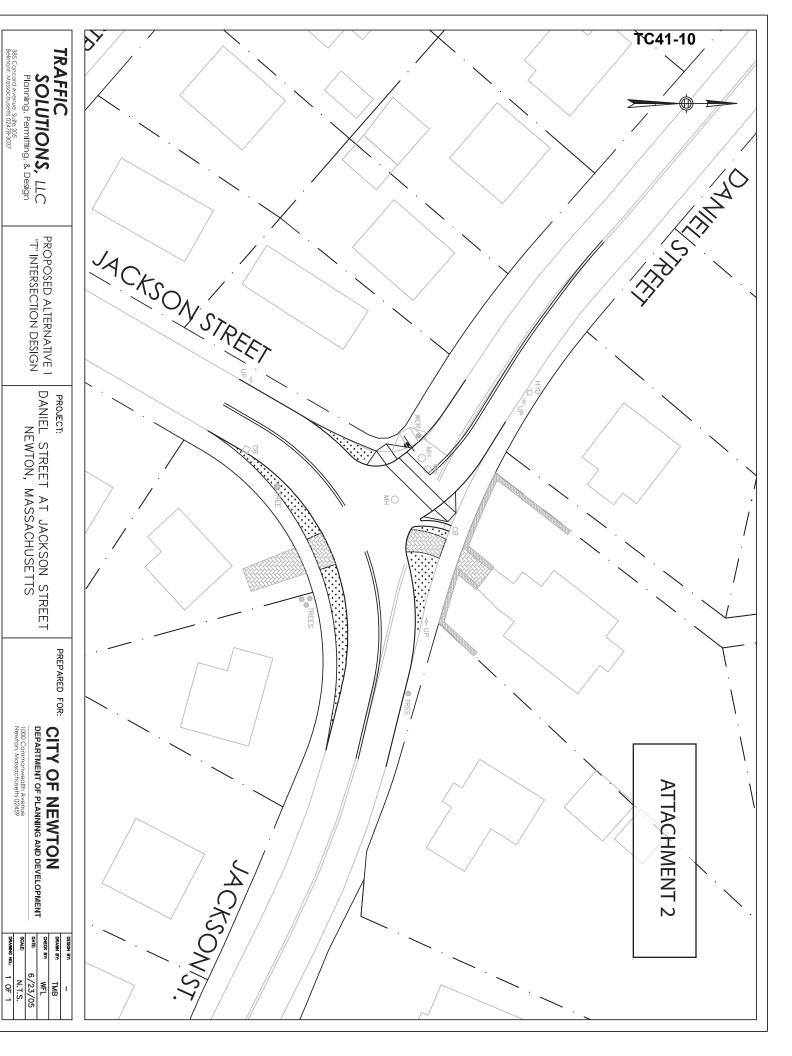
Condition 2: Must be met for 1hour of an average day)

	Condition 2	Condition 2: Must be meet for thour or an average day	I IIIOUI OI a	II avel age un	(3)									
		Minimum						TMC Data	Data					
Street	Lanes	Volume	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	M4 2-9
Major	1	Figure 4F-2	1305	1281	887	741	764	908	783	1048	1159	1136	1306	1268
Peds	0	Figure 4F-2	20	54	5	1	3	4	3	7	87	19	40	8
		Met?	YES	YES	ON	ON	ON	ON	ON	ON	YES	ON	YES	ON

Result: YES

The posted speed limit is 30mph. TEC observed speeds in excess of 35mph outside the peak hours.

MUTCD (2009) Signal Warrants



385 Concord Avenue, Suite 205 Belmont, Massachusetts 02478-3037

### REQUEST FOR TRAFFIC IMPROVEMENT OR CHANGE CITY OF NEWTON TRAFFIC COUNCIL, ROOM 101A 1000 COMMONWEALTH AVENUE 10 DEC 23 | A 9: INEWTON CENTRE 02459

The Traffic Council is administered through the Clerk of the Board's Office. The Petitioner and other parties who may in the Council's judgment be substantially affected by such petition will be notified with the first date the petition will be discussed by the Traffic Council. NOTE: There are additional petition requirements for Resident Only Permit Areas; see Sec. 19-201 of the City of Newton Ordinances. If you have further questions, please call the Clerk of the Board's Office at (617) 796-1210.

Complete both sides and submit to the Clerk of the Board's Office (PLEASE PRINT): PETITIONER'S NAME DAVID KOSES SIGNATURE: MON ADDRESS: TELEPHONE (DAY): (EVENING): 1. Identify the location and briefly describe the nature of the problem: David Koses, on behalf of the Newton Safe Routes to School Task Force, requesting installation of a pedestrian hybrid Signal and Crosswalk on Parker Street in the vicinity of Daniel Street and Athelstane Road, to be paid for through Mass Dot's Safe Routes to School Infrastructure program. Draw a simple diagram or attach a map in the box below that shows the subject street(s) and conditions.

3. Obtain required signatures on reverse side of this form.

For Clerk's use only: DATE FILED:

### REQUIRED SIGNATURES (Please Print)

- •Petitions for intersectional controls/regulations (traffic signals, stop signs, no turn on red, etc.) require a total of six (6) signatures (including petitioner's) from owners or tenants whose building or lot of land is located within five-hundred (500) feet of the affected intersection (one signature per household or business).
- \*Petitions for parking restrictions, truck exclusions, speed limits, and all other traffic regulations must be signed by one (1) owner or tenant of at least half of the residential, commercial and/or non-profit units which abut the affected street or way, provided that in no event shall more than ten (10) signatures (including petitioner's) be required (one signature per household or business).

NAME:	SIGNATURE:	
ADDRESS:	UNIT#	
TELEPHONE (DAY):	(EVENING):	
NAME:	SIGNATURE:	
ADDRESS:	SIGNATURE:UNIT#	
TELEPHONE (DAY):	UNIT# (EVENING):	
NAME:	SIGNATURE:	
ADDRESS:	UNIT#	
TELEPHONE (DAY):	(EVENING):	
NAME:	SIGNATURE:	
ADDRESS:	UNIT#	
TELEPHONE (DAY):	UNIT# (EVENING):	
NAME:	SIGNATURE:	
ADDRESS:	UNIT#	
TELEPHONE (DAY):	(EVENING):	
NAME:	SIGNATURE:UNIT#	
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ADDRESS:TELEPHONE (DAY):	(EVENING):	
NAME:	SIGNATURE:	
ADDRESS:	UNIT#	
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NAME:	SIGNATURE:	
ADDRESS:	UNIT#	
TELEPHONE (DAY):	(EVENING):	M.