

APPENDIX A

Pedestrian Report Card Assessment

1. Route 1A from Cherry Street to Arbor Street/Friend Court, Wenham
2. Route 126 and Maple Street, Bellingham



Pedestrian Report Card Assessment (PRCA): Roadway Segment

Roadway Segment Location
Route 1A from Cherry St. to Arbor St./Friend Ct.

Grading Categories	Score	Rating
Safety	2.4	Good
System Preservation	N/A	Poor
Capacity Management and Mobility	2.16	Fair
Economic Vitality	1.5	Poor

Transportation Equity	
High Priority Area	
Moderate Priority Area	
Not a Priority Area	✓

Central Transportation Planning Staff (CTPS) to the Boston Region MPO:
www.ctps.org | 857.702.3700 | ctps@ctps.org

Ryan Hicks, Congestion Management Process Manager:
www.ctps.org/cmp | 857.702.3661 | rhicks@ctps.org

Casey Claude, Bicycle and Pedestrian Program Manager:
www.ctps.org/livability | 857.702.3707 | cclaude@ctps.org

Category Ratings
 Good: Score of 2.3 or more (maximum 3.0)
 Fair: Score is between 1.7 and 2.3
 Poor: Score is 1.7 or less (minimum 0)

Grading Categories: Scoring Breakdown Roadway Segment

Capacity Management and Mobility			
Performance Measure	Weight	Rating	Weighted Score
Sidewalk Presence	3	Fair	6
Crossing Opportunities	2	Good	6
Walkway Width	1	Poor	1
Total	6		13

Economic Vitality			
Performance Measure	Weight	Rating	Weighted Score
Pedestrian Volumes	1	Fair	2
Adjacent Bicycle Accommodations	1	Poor	1
Total	2		3

Category rating = total rating/total weight
 Rating Score:
 Good = 3
 Fair = 2
 Poor = 1

Safety			
Performance Measure	Weight	Rating	Weighted Score
Pedestrian Crashes	3	Good	9
Pedestrian-Vehicle Buffer	1	Poor	1
Vehicle Travel Speed	1	Fair	2
Total	5		12

System Preservation	
Performance Measure	Rating
Sidewalk Condition	Poor

Transportation Equity Priority	
Area Condition	Yes/No
Environmental Justice zone?	No
School or college within one-quarter mile?	Yes
More than 8.9% of population older than 75 years?	No
More than 27.5% of households do not own a vehicle?	No

Category Ratings
 Good: Score of 2.3 or more (maximum 3.0)
 Fair: Score is between 1.7 and 2.3
 Poor: Score is 1.7 or less (minimum 0)

Detailed Performance Measure Information: Roadway Segment

Goal	Performance Measure	Features of Analyzed Locations
Mobility	Sidewalk Presence	Sidewalk is present on one side of the street
	Crossing Opportunities	2 crossing opportunities/0.2 miles =10 crosswalks per mile
	Walkway Width	4-foot wide sidewalks
Economic Vitality	Pedestrian Volumes	15 pedestrians per hour
Safety	Adjacent Bicycle Accommodations	none
	Pedestrian Crashes	Not in HSIP cluster
	Pedestrian-Vehicle Buffer	3 feet buffers
	Vehicle Travel Speed	32 mph
System Preservation	Sidewalk Condition	Sidewalks are in poor condition



Central Transportation Planning Staff (CTPS) to the Boston Region MPO:
www.ctps.org | 857.702.3700 | ctps@ctps.org

Ryan Hicks, Congestion Management Process Manager:
www.ctps.org/cmp | 857.702.3661 | rhicks@ctps.org

Casey Claude, Bicycle and Pedestrian Program Manager:
www.ctps.org/livability | 857.702.3707 | cclaude@ctps.org

Pedestrian Report Card Assessment (PRCA):

Intersection

Intersection Location		
Route 126 and Maple St.		

Grading Categories	Score	Rating
Safety	1.87	Fair
System Preservation	N/A	Poor
Capacity Management and Mobility	1.57	Poor
Economic Vitality	N/A	Fair

Transportation Equity	
High Priority Area	
Moderate Priority Area	
Not a Priority Area	✓

Category Ratings
 Good: Score of 2.3 or more (maximum 3.0)
 Fair: Score is between 1.7 and 2.3
 Poor: Score is 1.7 or less (minimum 0)

Grading Categories: Scoring Breakdown Intersection

Capacity Management and Mobility			
Performance Measure	Weight	Rating	Weighted Score
Pedestrian Delay	3	Poor	3
Sidewalk Presence	2	Fair	4
Curb Ramps	1	Fair	2
Crossing Opportunities	1	Fair	2
Total	7		11

Economic Vitality	
Performance Measure	Rating
Pedestrian Volumes	Fair

Category rating = total rating/total weight
 Rating Score:
 Good = 3
 Fair = 2
 Poor = 1

Safety			
Performance Measure	Weight	Rating	Weighted Score
Sufficient Crossing Time (Index)	3	Poor	3
Pedestrian Crashes	3	Good	9
Pedestrian Signal Presence	1	Poor	1
Vehicle Travel Speed	1	Fair	2
Total	8		15

System Preservation	
Performance Measure	Rating
Sidewalk Condition	Poor

Transportation Equity Priority	
Area Condition	Yes/No
Environmental Justice zone?	No
School or college within a one-quarter mile?	Yes
More than 8.9% of population older than 75 years?	No
More than 27.5% of households do not own a vehicle?	No

Category Ratings
 Good: Score of 2.3 or more (maximum 3.0)
 Fair: Score is between 1.7 and 2.3
 Poor: Score is 1.7 or less (minimum 0)

Detailed Performance Measure Information: Intersection

Goal	Performance Measure	Features of Analyzed Locations
Mobility	Pedestrian Delay	Estimated cycle length = 150 seconds Estimated pedestrian walk/flashing don't walk time = 12 seconds Estimated pedestrian delay = 63.48 seconds
	Sidewalk Presence	Sidewalks present on all approaches
	Curb Ramps	Curb ramps are present on 2 of 3 approaches
	Crossing Opportunities	Crosswalks at 2 of 3 approaches
Economic Vitality	Pedestrian Volumes	Estimated 5 to 6 pedestrians per hour
Safety	Sufficient Crossing Time (Index)	50 feet crossing; 12 seconds allowed; 15 seconds needed
	Pedestrian Crashes	Not in HSIP cluster
	Pedestrian Signal Presence	Pedestrian signals are present on one approach. Concurrent pedestrian signal, right turn on red permitted
	Vehicle Travel Speed	31 mph
System Preservation	Sidewalk Condition	Sidewalks are in poor condition

APPENDIX 6

Support Letters from MassDOT, Wenham, and Bellingham

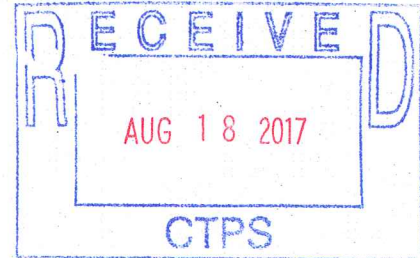


Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, Secretary & CEO
Jonathan L. Gulliver, Acting Highway Administrator



August 10, 2017

Mark Abbott, Manager
Traffic Analysis and Design Group
Central Transportation Planning Staff
Boston Region Metropolitan Planning Organization
10 Park Plaza, Suite 2150
Boston, MA 02116-3968



Dear Mr. Abbott:

I am writing on behalf of MassDOT District 4 to express our support for further traffic analysis of three intersections on Main Street (Route 1A) in Wenham. These intersections are located at Cherry Street, Monument Street and Arbor Street/Friend Court.

The District's Traffic Operations Section had recently worked with the Town on a traffic signal warrant analysis of the three intersections. It was determined that MUTCD Warrants 1, 2 and 3 (volume-related warrants) were met. Since Warrants 1A and 1B, Eight-Hour Vehicular Volume, were satisfied for each of the locations, any of them would be solid candidates for a traffic signal.

To determine the true feasibility of such a project, further study in the form of a Functional Design Report (FDR) is needed. I understand that an FDR may be eligible for funding through a FY18 UPWP study entitled "Safety and Operations at Selected Locations" being conducted by your group. The Town is committed to improving safety in this area of Route 1A and is willing to complete 25% design for a project, if selected for the study. MassDOT District 4, therefore, believes that further study of the locations should be funded and completed.

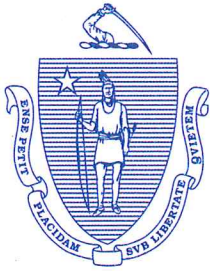
Thank you for your consideration. If you have any further questions on this matter, please contact me at (781)641-8322.

Sincerely,

Paul D. Stedman
District Highway Director

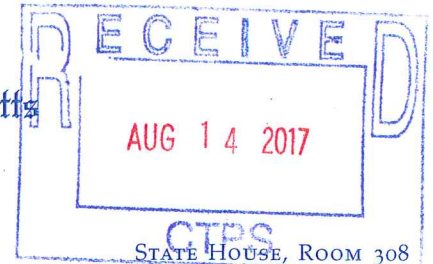
JEG/gb

cc: Peter Lombardi, Wenham Town Administrator
Traffic File



The Commonwealth of Massachusetts

MASSACHUSETTS SENATE
OFFICE OF THE MINORITY LEADER



STATE HOUSE, ROOM 308
BOSTON, MA 02133-1053
TEL. (617) 722-1600
FAX: (617) 722-1310

SENATOR BRUCE E. TARR
MINORITY LEADER
First Essex and Middlesex

August 1, 2017

BRUCE.TARR@MASENATE.GOV
WWW.MASENATE.GOV

Mark Abbott, Manager
Traffic Analysis and Design Group
Central Transportation Planning Staff
Boston Region Metropolitan Planning Organization
Ten Park Plaza, Suite 2150
Boston, MA 02116-3968

Dear Mr. Abbott,

I would like to take this opportunity to express my strong support for the Town of Wenham. In particular, the Board of Selectmen's recent funding request for further traffic analysis regarding three intersections on Main Street in downtown Wenham, located at Cherry Street, Monument Street, and Arbor Street / Friend Court.

Given that the Main Street corridor (Route 1A) is a state road, the town worked with MassDOT District 4 Traffic Operations to complete a traffic signal warrant analysis earlier this year, which resulted in positive findings. With that, I note that all three intersections on Main Street meet the MUTCD Signal Warrants 1, 2, and 3. Noting such, I believe the relative data sufficiently satisfies Warrant 1A and 1B for Eight-Hour Vehicular traffic, with any of these locations satisfying the requirements for signal installation.

Considering such, the town is in need of assistance in determining project feasibility, specifically a Functional Design Report (FDR), which may be funded through a FY18 UPWP Study (Safety and Operations at Selected Locations). When considering the town's demonstrated commitment to addressing public safety concerns related to traffic volume, together with the number of motor vehicle crash incidents in these locations on Route 1A, I firmly believe a comprehensive operational and safety analysis of these three intersections can/should be funded and completed.

I further note, if your office is able to support/fund conducting an FDR, the town agrees to be responsible for completing a 25% design to continue to move forward with this project. This, together with the town's ongoing efforts is just another example of their demonstrated and genuine commitment to public safety.

Accordingly, I seek your careful consideration of the Town of Wenham's request for FDR funding. Thank you for such, and please don't hesitate to contact me directly should you have any questions.

Sincerely,

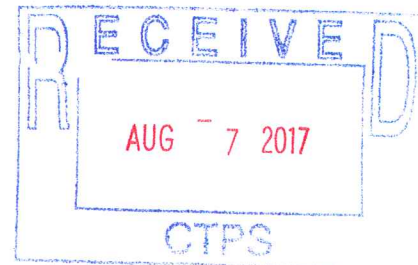
Bruce E. Tarr
State Senator
Minority Leader



Town of Wenham

Town Hall
138 Main Street
Wenham, MA 01984

Selectmen / Town Administrator
TEL 978-468-5520 FAX 978-468-8014



August 1, 2017

Mark Abbott
Manager, Traffic Analysis and Design Group
Central Transportation Planning Staff
Boston Region Metropolitan Planning Organization
Ten Park Plaza, Suite 2150
Boston, MA 02116-3968

Dear Mr. Abbott,

I am writing on behalf of the Board of Selectmen to express our strong support for further traffic analysis regarding three intersections on Main Street in downtown Wenham, located at Cherry Street, Monument Street, and Arbor Street / Friend Court. Since the Main Street corridor is also a state roadway, Route 1A, we worked with MassDOT District 4 Traffic Operations to complete a traffic signal warrant analysis earlier this year.

The attached findings from that report show that these three intersections on Main Street all meet the MUTCD Signal Warrants 1, 2, and 3. Since the data satisfies Warrant 1A and 1B for Eight-Hour Vehicular Volume, our understanding is that any of these locations would be strong candidates to have a signal installed. However, the Town now needs assistance in completing the next step to determine the feasibility of this project, a Functional Design Report (FDR).

According to our Town Administrator, this project may be eligible for funding through a FY18 UPWP study entitled "Safety and Operations at Selected Locations". Given the community's ongoing public safety concerns about traffic volume and accidents along this corridor on Route 1A, we hope that your office is able to support conducting an FDR so that a comprehensive operational and safety analysis of these three intersections can be completed. We understand that, if funded, conceptual alternatives would be included in the scope of work, but that the Town would then be responsible for completing 25% design to continue to move forward with this project.

Thank you for your consideration. Please contact our Town Administrator, Peter Lombardi, at 978-468-5520 x. 2 or plombardi@wenhamma.gov if you have any further questions.

Best regards,

Jack Wilhelm
Chair, Wenham Board of Selectmen



BELLINGHAM PLANNING DEPARTMENT

10 MECHANIC STREET BELLINGHAM, MASSACHUSETTS 02019
(508) 657-2892 Plan-zone@bellinghamma.org

October 17, 2017

Mark Abbot
Metropolitan Planning Organization
Central Transportation Planning Staff
State Transportation Building
10 Park Plaza, Suite 2150
Boston, MA 02116

Re: Technical Assistance Request – Roadway Intersection Redesign – Hartford Avenue and Maple Street


The Town of Bellingham respectfully requests technical assistance from the Central Transportation Planning Staff for the intersection redesign of Hartford Avenue and Maple Street.

Hartford Avenue at Exit 18 hosts a large inventory of commercial uses and, moving eastward, a dense residential area. In addition, a public elementary school, which services all of North Bellingham, and a small community center are located at the intersection of Hartford Avenue and Maple Street.


The intersection of Hartford Avenue and Maple Street operates well for standard motorized vehicles. However, it is over burdened by commercial vehicles. This cannot be avoided due to the proximity to I-495 and the Town's desire to retain significant acreage of industrial zoned parcels along Maple Street (See attached Zoning Map). Current industrial uses along Maple Street consist of a power plant, multiple warehouses exceeding 600,000 square feet of space, and large scale mulch and lumber hauling and production. These bring with them numerous trips by large tractor trailers.

Unfortunately this intersection is severally undersized to function properly for its desired use. The Town has recognized the need to upgrade Maple Street in order to sufficiently maintain industrial uses along this corridor. Through a public/private partnership, the town of Bellingham has begun the redesign process for the southern intersection of Maple Street and Route 140 and will be investing over \$2 Million dollars during the improvement and construction process. In a separate improvement project, the Town has invested over \$1 Million dollars to repave and correct drainage in a large section of Maple Street to better service the zoned uses. Improvement of the Hartford Avenue and Maple Street intersection is an important step in the improvement process to properly upgrade Maple Street to adequately service the industrial uses along this road and to allow large vehicles to access Route I-495 as quickly and safely as possible.

Town Officials will be available to assist and offer comments during the design process and to coordinate any public meetings that are required. Please do not hesitate to contact us if more information is necessary.



James S. Kupfer, MPA, AICP
Town Planner/ Zoning Compliance Officer
10 Mechanic Street
Bellingham, MA 02019
Phone: 508-657-2893
jkupfer@bellinghamma.org



Donald F. DiMartino
DPW Director
26 Blackstone Street
Bellingham, MA 02019
Phone - 508-966-5813
DDiMartino@bellinghamma.org



Town of Bellingham

BOARD OF SELECTMEN

10 Mechanic Street

Bellingham, Massachusetts 02019

Tel: 508-966-5800 * Fax: 508-966-4425

November 6, 2017

Mark Abbot
Metropolitan Planning Organization
Central Transportation Planning Staff
State Transportation Building
10 Park Plaza, Suite 2150
Boston, MA 02116

Re: Technical Assistance Request – Roadway Intersection Redesign – Hartford Avenue and
Maple Street

Dear Mr. Abbot:

The Town of Bellingham Board of Selectmen is writing to express our enthusiastic support for the Town's proposal "Roadway Intersection Redesign – Hartford Avenue and Maple Street".

This intersection is severely undersized to function properly for its desired use. The Town has recognized the need to upgrade Maple Street in order to sufficiently maintain industrial uses along this corridor as well as unlock future investment. Through a public/private partnership, the town of Bellingham has begun the redesign process for the southern intersection of Maple Street and Route 140 and will be investing over \$2 Million dollars during the improvement and construction process. In a separate improvement project, the Town has invested over \$1 Million dollars to repave and correct drainage in a large section of Maple Street to better service the zoned uses. Improvement of the Hartford Avenue and Maple Street intersection is an important step in the improvement process to properly upgrade Maple Street to adequately service the industrial uses along this road and to allow large vehicles to access Route I-495 as quickly and safely as possible.

The support of the Metropolitan Planning Organization and the Central Transportation Planning Staff will be critical to following through on this important project. Thank you in advance for considering our proposal.

Sincerely,

Michael J. Soter, Chairman
Board of Selectmen