BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

Richard A. Davey, MassDOT Secretary and CEO and MPO Chairman
Karl H. Quackenbush, Executive Director, MPO Staff

MEMORANDUM

DATE: **December 19, 2013**

TO: **Boston Region Metropolitan Planning Organization (MPO)**

FROM: **Seth Asante, MPO Staff**

RE: **Federal Fiscal Year (FFY) 2014 Addressing Safety, Mobility, and Access on Subregional Priority Roadways: Selection of Study Locations**

1 BACKGROUND

During the MPO's outreach for developing the Unified Planning Work Program (UPWP) and the Long-Range Transportation Plan (LRTP), Metropolitan Area Planning Council (MAPC) subregional groups and other entities submit comments and identify transportation problems that concern them. These issues often are related to bottlenecks, safety, or lack of safe or convenient access for abutters along roadway corridors in their areas. Such issues can affect not only mobility and safety, but also livability and quality of life, including economic development and air quality.

To address these kinds of concerns, this study was included in the FFY 2014 UPWP.[1] The purpose of this study is to identify roadway segments in the MPO region that are of concern to subregional groups, but which have not been identified in the LRTP regional needs assessment.[2] Typically, these roadways are not major arterials; rather, they are arterial or collector roadways that may carry fewer vehicles per day than major arterials and may be maintained by a city or town.

The study focusses on issues identified by the relevant subregional groups along with their associated recommendations. In addition to mobility, safety, and access, the study will look at transit feasibility, truck matters, bicycle and pedestrian transportation, preservation, and other topics raised by subregional groups.

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[1] *Unified Planning Work Program*, Federal Fiscal Year 2014, endorsed by the Boston Region Metropolitan Planning Organization on July 11, 2013.

[2] A work scope for "Priority Corridors for LRTP Needs Assessment—FFY 2013," dated October 4, 2012, was approved by the MPO and that study is presently underway. The two corridors that were selected for that study are Route 30 from Shoppers World Way to Speen Street, and Route 2 in Concord and Lincoln.

This memorandum presents the review and selection procedure for roadways under study, including the selection criteria, and cites which roadways were selected for study.

2 SELECTION PROCESS

The selection procedure for study locations is comprised of three steps. First, MPO staff identified potential study locations through various sources, which are listed below. Second, MPO staff assembled detailed data on the identified roadways. Third, MPO staff evaluated the identified roadways by applying five selection criteria.

First, the sources used to identify study locations are:

- Soliciting suggestions of study locations during the recent outreach for developing the MPO's FFY 2014 UPWP.
- Reviewing meeting records from the UPWP outreach process for the past five years (2009 to the present) to identify roadways that had been proposed for study by subregions.
- Reviewing the roadways that are being monitored as part of the MPO's Congestion Management Process (CMP) program and identifying those with delay or safety concerns.
- Contacting subregions, MassDOT Highway Division district offices, and municipalities for further information on some of the potential study roadways.

Twenty-nine different roadway sections were identified as potential study locations. Table 1 shows the location, length, functional classification, jurisdiction, and other related information of the roadway sections that were evaluated for this study.

Second, MPO staff assembled detailed data on the identified roadways, including:

- MassDOT's 2011 Road Inventory File and 2007–11 crash database—used to assemble information for each roadway section, such as jurisdiction, average daily traffic (ADT), crash locations, and crashes per mile.
- Related data from MassDOT's project information database, the MPO's FFYs 2014–17 Transportation Improvement Program (TIP) projects, the MPO's planning and other studies, and municipal websites—used for projects, studies, and TIP projects that have been planned or programmed for each roadway section.
- The MPO's CMP roadway travel speed data.

- MBTA bus service performance and passenger load data.

Third, staff evaluated the identified roadways by applying five selection criteria (below):

- *Safety:* Location has a high crash rate for its functional class,[3] or contains areas with a high number of crashes, or with a significant number of pedestrian/bicycle collisions.
- *Multimodal Significance:* Location supports transit, bicycle, or pedestrian activity, or has an implementation project to support one or more of these activities.
- *Subregional Significance:* Location carries a significant proportion of subregional vehicle, bicycle, or pedestrian traffic.
- *Subregional Priority:* Location is endorsed by a subregion and is a priority for the subregion.
- *Implementation Potential:* Location is proposed by the roadway agency or related agencies that have identified prospective funding resources for design and implementation.

Another criterion that was applied was regional equity: Not to select more than one location in a subregion, or in the same area as a location selected in the preceding cycle of this study.

The roadway section selected for this study is described below:

3 ROADWAY SECTION SELECTED FOR STUDY

Based on the above criteria and available budget, the roadway section (highlighted in Table 1) that staff recommended for the MPO's discussion and approval is Washington Street in Newton from Newton Corner to West Newton.

This is a four-lane roadway that serves residents, commuters, and local businesses, and supports transit (MBTA bus service and access to commuter rail stations on the Worcester Line). The City of Newton has expressed interest in a corridor study that focuses on 1) urban design and multiuse roadways with pedestrian and bicycle facilities; 2) improved transportation access and mobility; and 3) safety enhancements.

[3] Location has a segment crash rate (crashes per million vehicle-miles traveled) higher than the statewide average for its functional class.

4 SUMMARY

The proposed location meets the objectives of this study, especially in supporting the transportation improvement priorities of its respective subregions. The work scope for this study assumed that “up to two” arterial segments would be selected. However, currently the MPO staff does not propose studying a second corridor segment because the Washington Street segment would require considerable resources.

MPO staff will submit this proposal to the MPO for discussion and approval. If the MPO approves this selection, staff will meet with officials from Newton and related agencies to discuss the study specifics, conduct field visits, collect data, and perform various analyses for the roadway segment.

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TABLE 1
Locations Evaluated and Selected (Highlighted in Blue) for FFY 2014 Subregional Priority Roadways Study

Roadway	Location	Approx. Length	Functional Class*	Subregion	Community	Jurisdiction	Average Daily Traffic	Safety Conditions	Multimodal Significance	Subregional Significance	Subregional Priority	Implementation Potential	Overall Assessment	Source of Reference	Summary of Comments
Route 35	Route 97 in Wenham to Route 114 (Margin St.) in Peabody	6 miles	5	NSTF	Wenham, Danvers, Peabody	Danvers, Peabody, MassDOT D4	12,000-22,500 (Est.)	X	X	X	X	- -	Medium	UPWP FFYs 2013 & 2014	NSTF cited this roadway during the UPWP outreach for FFYs 2013 and 2014.
Route 62	Conant/ Eliot Street to I-95 Interchange	2 miles	3	NSTF	Danvers	Danvers	18,500-20,500 (2009)	X	X	X	X	- -	Medium	UPWP FFYs 2013 & 2014	NSTF cited this roadway during the UPWP outreach for FFYs 2013 and 2014.
Route 97	Route 1A in Beverly to Topsfield/ Boxford Town Line	5-6 miles	5	NSTF	Beverly, Wenham, Danvers, Topsfield	Beverly, Wenham, Danvers, Topsfield	10,000-20,000 (Est.)	X	X	X	X	- -	Medium	UPWP FFYs 2013 & 2014	NSTF proposed to study this segment in conjunction with the Route 97 corridor in Boxford, Georgetown, and Haverhill (Merrimack Valley Planning Commission).
Route 114	Sections in Middleton	6-8 miles	2	NSTF	Middleton	MassDOT D4	17,500-29,000 (2009)	X	- -	X	- -	- -	Low	UPWP FFY 2012	Route 114 from Middleton Square to Essex/ Forest Street was recently reconstructed and improved (2008 MassDOT Project #600227). Other Route 114 sections in Middleton will be resurfaced in 2013 (MassDOT Project #606126).
Route 127	Gloucester (Route 133) to Beverly (Beverly-Salem Bridge)	14 miles	5	NSTF	Beverly, Manchester, Gloucester	MassDOT D4, Manchester, Beverly	6,000-9,000 (Est.)	X	X	X	X	X	High	UPWP FFYs 2013 & 2014	This section of Route 127 is a part of the 85-mile state-designated Essex Coastal Scenic Byway. The Essex National Heritage Commission (ENHC) recently obtained bond funding for improving the safety, access, and mobility of the byway and is interested in a comprehensive review and planning for potential improvements. This segment was not selected because a FFY 2013 Subregional Priority Roadway Study (ongoing) in the NSFT subregion.
Routes 127A/127	Cape Ann Loop: Gloucester to Rockport via Route 127A; Rockport to Gloucester via Route 127	15 miles	5	NSTF	Gloucester, Rockport	Gloucester, Rockport	8,000 to 22,000 (Est.)	X	X	X	X	X	High	UPWP FFYs 2013 & 2014	FFY 2013 Subregional Priority Roadway Study (ongoing). This is the second of three segments in the byway system that ENHC proposed for a review of safety and mobility issues, focusing on pedestrian and bicycle facilities, including potential "bicycle depot" locations. This section is regarded as the highest priority among the three proposed sections. This segment was not selected because of a FFY 2013 Subregional Priority Roadway Study (ongoing).
Route 133	Gloucester (Route 127) to Ipswich (Route 1A)	11 miles	5, 6	NSTF	Essex, Gloucester, Ispwich	MassDOT D4, Essex, Ipswich	10,500 (2009)	- -	X	X	X	X	Medium	UPWP FFYs 2013 & 2014	This is the last of three sections proposed for study by ENHC. It was cited in the 2013 UPWP outreach. A two-mile section in the Essex downtown area was recently reconstructed (summer 2011).
Route 28	I-95 to Washington Street in Reading	1.5 miles	3	NSPC	Reading	MassDOT D4, Reading	12,500-17,500 (2009)	X	X	X	- -	- -	Medium	LRTP Priority Corridors Study	Route 28 from Washington Street to Route 129 was recently reconstructed (2009, MassDOT Project # 602617).
Route 38	Wilmington	4 miles	3	NSPC	Wilmington	MassDOT D4	16,000 to 18,000	X	X	X	X	- -	Medium	UPWP FFY 2014	Wilmington cited this roadway during the UPWP outreach for FFY 2014. Both Routes 38 and 62 serve as conduits through Wilmington to I-95 and I-93, contain congested signalized intersections, and traffic and pedestrian safety issues. Highlights a dangerous rail crossing on the Route 62 corridor.
Route 38	I-95 Interchange to Elm/ School Street in Woburn	0.75 mile	3	NSPC	Woburn	MassDOT D4, Woburn	18,500-20,000 (2009)	X	X	X	- -	- -	Medium	UPWP FFY 2012	NSPC and Woburn requested a study of the I-95 rotary interchange and the traffic signals at Route 38 and Elm Street. A MassDOT jurisdiction north of I-95 recently reconstructed by developer. It may be suitable for an intersection study at Elm Street.
Route 62	Main Street to the North Reading town line	3.7 miles	5	NSPC	Wilmington	MassDOT D4, Wilmington	7,800 to 13,600	X	X	X	X	- -	Medium	UPWP FFY 2014	Wilmington cited this roadway during the UPWP outreach for FFY 2014. Both Routes 38 and 62 serve as conduits through Wilmington to I-95 and I-93, contain congested signalized intersections and traffic, and pedestrian safety issues. Highlights a dangerous rail crossing on the Route 62 corridor.
Route 60	Route 3/2A (Mass. Ave.) to Route 2 in Arlington	1.5 miles	5	ICC	Arlington	Arlington	25,000 (2009)	X	X	X	- -	- -	Medium	LRTP Priority Corridors Study	A high-crash location at the intersection at Massachusetts Avenue. A CTPS study addressed the problems at this location.
Route 117	Route 20 to Weston Town Line in Waltham	1.5 miles	5	ICC	Waltham	Waltham, MassDOT D4 (I-95 Interchange)	15,000-20,000 (Est.)	X	X	X	- -	- -	Medium	UPWP FFY 2012	During FFY 2012 UPWP outreach, Waltham proposed this roadway for the Priority Corridor study. Major proposals include widening the bridge over Route 128, connecting Route 2 by extending Green Street, and other critical intersection improvements.
Mt. Auburn St. /Route 16	Fresh Pond Parkway to Watertown Square	2.5 miles	3	ICC	Cambridge, Watertown	Cambridge, Watertown	18,000-30,000 (2009)	X	X	X	X	X	High	UPWP FFY 2014	During FFY 2014 UPWP outreach, Watertown proposed to reduce travel lanes and provide multi-uses of the roadway, and improve safety and access. It can be considered in the next round of this study.
Greenough Blvd.	Fresh Pond Parkway to Arsenal Street	1 mile	5	ICC	Cambridge, Watertown	DCR	10,500 (2009)	X	X	X	X	- -	Medium	UPWP FFY 2014	Watertown proposed to reduce travel lanes and provide multi-uses of the roadway. DCR interest is critical for implementation.
Quincy Street	Bowdoin St. to Warren St.	1.5 miles	5	ICC	Boston	Boston	15,000-20,000 (Est.)	X	X	X	- -	- -	Medium	UPWP FFY 2011	During FFY 2011 UPWP outreach, the Dorchester Bay Economic Development Corporation proposed this roadway for the Priority Corridors study. Major developments in the corridor were expected because of the proposed Four Corners Station on the Fairmount commuter rail line.
Edgell Road	Route 9 to Water Street in Framingham	2 miles	5	MetroWest	Framingham	Framingham	15,000-22,000 (Est.)	X	X	X	- -	- -	Medium	UPWP FFY 2008	MetroWest cited this roadway during the FFY 2008 UPWP outreach. Town commissioned a preliminary traffic safety study at four intersections on Edgell Road in 2004.
Route 3A	Henry Turner Bailey Road in Scituate to MBTA commuter rail station in Cohasset	3 miles	3	SSC	Cohasset, Scituate	MassDOT D5	13,000-20,500 (2009)	X	X	X	X	X	**High**	UPWP FFYs 2013 & 2014	FFY 2013 Subregional Priority Roadway Study (ongoing). SSC and Towns of Cohasset and Scituate strongly support a corridor study that focuses on safety improvements and increasing transportation access and mobility for all modes (bicycle, pedestrian, transit, and motor vehicles). This segment was not selected because of a FFY 2013 Subregional Priority Roadway Study (ongoing).
Route 27	Canton Street to Depot Street	1 mile	3	TRIC	Sharon	Sharon	13,500 (2009)	X	X	X	- -	- -	Medium	UPWP FFY 2012	TRIC cited this roadway in the UPWP FFY 2012 outreach.
Route 27	Downtown Stoughton	0.75 mile	3	TRIC	Stoughton	Stoughton	16,000-18,000 (2009)	X	X	X	X	- -	Medium	UPWP FFY 2013	TRIC cited this roadway in the UPWP FFY 2013 outreach.
Route 228	In the vicinity of Route 3 as it	2 miles	5	SSC	Norwell,	MassDOT D5,	21,700 (2011)	X	X	X	X	X	High	UPWP FFY	SSC cited this roadway during the UPWP outreach for FFY 2014. This segment was

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	crosses Norwell, Hingham, and Rockland				Hingham, Rockland	Rockland, Norwell, Hingham								2014	not selected because a FFY 2013 Subregional Priority Roadway Study (ongoing) in the SSC subregion.
Route 53	Between Route 123 and Route 139	4 miles	3	SSC	Hanover	MassDOT D5	22,500 (2011)	X	X	X	X	- -	Medium	UPWP FFY 2014	SSC cited this roadway during the UPWP outreach for FFY 2014. This north-south corridor is a direct connection to and from Route 3 Exit 13, serves many south shore communities, and a major route between Route 123 and Route 139.
Route 3A/ Summer Street /George Washington Blvd	Otis Street to Nantasket Avenue	3 miles	5	SSC	Hingham, Hull	MassDOT D5	12,600 (2011)	X	X	X	X	- -	Medium	UPWP FFY 2014	SSC cited this roadway during the UPWP outreach for FFY 2014. This corridor serves as a major entrance to point into Hull and Nantasket Beach.
Route 129	Between Marblehead and Lynn	5.5 miles	3	NSTF	Lynn, Marblehead, Swampscott	Lynn, Marblehead, Swampscott	24,200 (2011)	X	X	X	X	- -	Medium	UPWP FFY 2014	NSTF cited this roadway during the UPWP outreach for FFY 2014. High traffic volumes between Marblehead and Lynn are creating bottlenecks in this corridor.
Routes 114, 1A, 127	Swampscott to Gloucester	15 miles	5, 3	NSTF	Swampscott, Marblehead, Salem, Beverly, Manchester, Gloucester	MassDOT D4, Swampscott, Marblehead, Salem, Beverly, Manchester, Gloucester	7,100 to 27,300 (2011)	X	X	X	X	- -	Medium	UPWP FFY 2014	NSTF cited this roadway during the UPWP outreach for FFY 2014. Study should include how to improve bike facilities and improve bike to rail connections in this heavily traveled and tourist area and build on the Essex Coastal Scenic Byway to the region.
Washington Street	West Newton to Newton Corner	2	5	ICC	Newton	Newton	14,100 (2011)	X	X	X	X	X	**High**	Newton	The City of Newton has expressed interest in a Washington Street corridor study to provide multi-uses of the roadway. The roadway current has high vehicle, pedestrian, and bicycle crashes and would need facilities to accommodate all roadway users safely.
Routes 1A	Lynn	3.8	2	ICC	Lynn	DCR	24,100 (2011)	X	X	X	X	- -	Medium	City Lynn and MAPC	The City of Lynn has plans to redevelop its waterfront and has expressed interest in a Route 1A corridor study to provide multi-uses and make the waterfront accessible to pedestrians and bicyclists. DCR interest is critical for implementation.

*Functional classification: 2 = principal arterial; 3 = rural minor arterial or urban principal arterial; 5 = urban minor arterial or rural major collector; 6 = urban collector or rural minor collector.
Selection Criteria:
Safety Conditions: Location has a high crash rate for its functional class or contains areas with a high number of crashes or with a significant number of pedestrian/bicycle crashes.
Multimodal Significance: Location supports transit, bicycle, or pedestrian activity or has an implementation project to support one or more of these activities.
Subregional Significance: Location carries a significant proportion of subregional vehicle, bicycle, or pedestrian traffic.
Subregional Priority: Location is endorsed by a subregion and is a priority for the subregion.
Implementation Potential: Location is proposed by the roadway agency or related agencies that have identified prospective funding resources for design and implementation.
CTPS Central Transportation Planning Staff. DCR Department of Conservation and Recreation. FFY Federal Fiscal Year. ICC Inner Core Committee. LRTP Long-Range Transportation Plan. MAPC Metropolitan Area Planning Council. NSPC North Shore Planning Council. NSTF North Shore Task Force. SSC South Shore Coalition. SWAP SouthWest Advisory Planning Committee. TRIC Three Rivers Interlocal Council. UPWP Unified Planning Work Program.
Source: CTPS.