



BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

Stephanie Pollack, MassDOT Secretary and CEO and MPO Chairman
Karl H. Quackenbush, Executive Director, MPO Staff

TECHNICAL MEMORANDUM

DATE: April 2, 2015
TO: Boston Region Metropolitan Planning Organization (MPO)
FROM: Seth Asante and Katrina Crocker
RE: Federal Fiscal Year (FFY) 2015 Priority Corridors
for Long-Range Transportation Plan (LRTP) Needs Assessment:
Selection of Study Locations

1 BACKGROUND

This memorandum presents the results of Task 2 of the work program for Priority Corridors for LRTP Needs Assessment: FFY 2015.¹ MPO staff indicated in Task 2—screen and select study locations—that we will present the results to the MPO for discussion.

The new LRTP currently in development identifies existing needs for all transportation modes in the MPO region.² The needs cited in the LRTP can guide the process of deciding which projects to fund in future Transportation Improvement Programs (TIPs). The following are among the current mobility requirements of the region:

- Maintaining and modernizing roadways with high levels of congestion and safety problems
- Increasing the quantity and quality of walking and bicycling
- Improving efficiency of transit service and adherence to schedules

Based on previous and ongoing transportation planning work—including the MPO's Congestion Management Process (CMP) and MPO planning studies—the LRTP identified several priority arterial roadway segments that require maintenance, modernization, safety, and mobility improvements. This study was included in the federal fiscal year (FFY) 2015 Unified Planning Work Program (UPWP).³

¹ Karl H Quackenbush, CTPS Executive Director, work program to the Boston Region Metropolitan Organization, "Priority Corridors for LRTP Needs Assessment: FFY 2015," October 16, 2014.

² Charting Progress to 2040: The New Long-Range Transportation Plan of the Boston Region Metropolitan Planning Organization (in development, should be completed by June 2015).

³ Unified Planning Work Program, Federal Fiscal Year 2015, endorsed by the Boston Region Metropolitan Planning Organization on June 26, 2014.

By focusing on arterial segments rather than intersections, planners can evaluate multimodal transportation needs (complete streets) comprehensively. A holistic approach to analyzing problems and forming recommendations ensures that all public transportation users' needs—including pedestrians, bicyclists, and motorists—are considered. Ultimately, this would result in roadways where it is safe to cross the street and walk or cycle to shops, schools, train stations, or for recreation; and where buses can run on time. Typically, the recommended improvements are within a roadway's right-of-way. They take into account the needs of abutters and users, and the interests and support of stakeholders.

2 SELECTION PROCEDURE

The study selection process is comprised of three steps. First, MPO staff assembled data about the arterial segments identified in the new LRTP and used them to screen the segments. Next, MPO staff examined the arterial segments more closely by applying specific criteria. Finally, staff scored and rated the arterial segments according to low, medium or high priority.

2.1 Gather Data

MPO staff identified 52 arterial segments in 38 communities in the MPO region. The data assembled are as follows:

- MassDOT's 2013 Road Inventory File and 2008–2012 crash database—used to assemble the following information for each arterial segment in each community: roadway jurisdiction, National Highway System (NHS) status, average daily traffic (ADT), high-crash locations, and crash rates
- MPO CMP arterial congestion data—Used to determine average travel speeds, travel time index (travel time in the peak period divided by travel time at free-flow conditions) and speed index (average travel speed divided by the speed limit) on each arterial segment
- MPO bike network gap data and MassDOT bike facilities—Used to identify bicycle needs, connectivity, and accommodation
- MBTA bus service performance and passenger load data—Used to determine the percentage of bus trips failing to adhere to schedule (late service) or passenger load standards (crowding)
- MBTA subway line and commuter data—Used to identify segments serving MBTA stations
- MPO Environmental Justice (EJ) areas and zones data—Used to identify EJ areas
- Select data from MassDOT's project-information database, the MPO's 2015–2018 TIP projects, MPO planning and other studies; and municipal websites for projects, studies, and TIP projects planned or programmed for each arterial segment

Table 1 (attached) presents the data assembled for each arterial segment and indicates municipality and jurisdiction, MassDOT district office, crash rates per million vehicle miles traveled, number of top-200 high-crash locations, Highway Safety Improvement Program (HSIP) eligible crash clusters, travel time index, transit services and their performance, EJ areas/zones, and any studies or projects. It also cites the results of applying the selection criteria, and the priority rating, performed in the second step of this process (below).

2.2 Apply Criteria

MPO staff examined the arterial segments more closely by applying the five criteria cited below:

- *Safety Conditions, 0-4 points (each bullet counts as 1 point)*
 - Location has a higher-than-average crash rate for its functional class
 - Location contains a HSIP-eligible crash cluster
 - Location contains a top-200 high crash location
 - Location has a significant number of pedestrian and bicycle crashes (two or more per mile) or contains one or more HSIP-eligible bike/pedestrian cluster
- *Congested Conditions, 0-2 points (each bullet counts as 1 point)*
 - Travel time index is at least 1.3
 - Travel time index is at least 2.0
- *Multimodal Significance, 0-3 points (each bullet counts as 1 point)*
 - Location currently supports transit, bicycle, or pedestrian activities
 - Location needs to improve transit, bicycle, or pedestrian activities
 - Location has high truck traffic serving regional commerce
- *Regional Significance, 0-4 points (each bullet counts as 1 point)*
 - Location is in National Highway System
 - Location carries a significant portion of regional traffic (ADT >20,000)
 - Location lies within 0.5 miles of EJ transportation analysis areas or zones
 - Location is essential for the region's economic, cultural, or recreational development
- *Implementation Potential, 0-3 points (each bullet counts as 1 point)*
 - Location is proposed or endorsed by its roadway administrative agency (agencies)

- Location is proposed or endorsed by its subregion and is a priority for that subregion
- Location has strong support from other stakeholders

Another criterion applied was regional equity: That is, it was important not to select 1) more than one location in a subregion and 2) a location in same subregion as in the preceding cycle of this study.

2.3 Score and Rate

Arterial segments with a total score of eight or less points were rated low priority. Those with a score of nine to 11 points were rated medium priority. Roadways with a total score 12 or more points were rated high priority. Fourteen arterial segments were given high priority by MPO staff based on safety, operations, multimodal and regional significance, and support from agencies and communities. Available funding resources determined the number of segments selected.

The high priority segments were examined more closely—arterials with projects either recently completed, in construction, design, under study, or programmed in the TIP, were excluded from further consideration for this cycle of the priority corridors study. Based on this evaluation, the segment described below was selected for study.

3 SELECTED ARTERIAL SEGMENTS FOR STUDY: LYNNWAY/ROUTE 1A IN LYNN

MPO staff recommends that the following corridor be evaluated for improvements: Lynnway/Route 1A in Lynn from the General Edward Bridge to the Nahant Rotary and Broad Street/Route 1A from Exchange Road to the Lynnway, which is about 2.5 miles long. The Lynnway/Route 1A is a six-lane principal arterial roadway with a median, which is under Department of Conservation and Recreation (DCR) and MassDOT jurisdiction. Currently, the roadway presents a barrier to connecting the Lynn downtown area to businesses and developments along the waterfront. Safety for pedestrians and bicyclists crossing the Lynnway is a major concern that affects development of the waterfront. The City of Lynn, DCR, MassDOT, and the Metropolitan Area Planning Council (MAPC) have expressed their support for and willingness to participate in the study.

4 SUMMARY

The recommended arterial segment meets the objectives of this study, especially by supporting the transportation improvement priorities of the MPO's LRTP. The

work scope for this study assumed that “as many as two” arterial segments would be selected. However, the MPO staff does not propose studying a second arterial segment because the Lynnway/Route 1A segment is relatively long, and would require considerable resources to evaluate alternatives.

Staff will submit this proposal to the MPO for discussion and approval. If the MPO approves this selection, staff will meet with officials from Lynn, DCR, MassDOT, and MAPC to discuss the study specifics, conduct field visits, collect data, and perform various analyses.

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**TABLE 1
ARTERIAL SEGMENTS CONSIDERED FOR STUDY
Priority Corridors for Long-Range Transportation Plan Needs Assessment Study
(Arterial Segment Selected for Study is Highlighted in Green)**

Arterial Segment	Community	MAPC Subregion	MassDOT District	Jurisdiction	National Highway System	Function Class	Distance (Miles)	Crash Rate (MVT)	Top 200 High-Crash Locations 2010-2012	HSIP-Eligible Crash Clusters 2010-2012 (Number)	Travel Time Index	Transit Service	Crowded or Late MBTA Bus Service	Environmental Justice Areas and Zones	Study, Project, or TIP Project	Safety Conditions	Congested Conditions	Multimodal Significance	Regional Significance	Implementation Potential	Score	Overall Assessment	Summary of Comments
Route 1A/Lynnway	Lynn	ICC	4	DCR, Town, MassDOT	Yes	2, 3, and 5	3.1	3.6	0	7	1.36	35 MBTA bus stops MBTA Routes 426, 439, 441, 442, 448, 449 MBTA Commuter Rail at River Works and Lynn/Central Square Ferry service	Yes	Yes The entire segment lies within EJ Areas and EJ Zones.	TIP Project #1321 Route 1A Lynnway at Blossom Street, conceptual TIP Project #1322 Route 1A Lynnway intersection at Market Street, conceptual	3	1	2	4	3	13	High	The City of Lynn has plans to redevelop its waterfront and has expressed interest in a Route 1A corridor study to provide multiple uses and make the waterfront accessible to pedestrians and bicyclists. DCR supports a study of this location. MAPC supports a study of this location. MassDOT Highway District 4 supports a Route 1A corridor study in Lynn to identify operations and equipment needs at signalized intersections and pedestrian and bicycle upgrades; they consider the segment to be a priority corridor. This corridor is proposed to come under MassDOT jurisdiction and a study would be helpful to MassDOT.
Route 16 (Revere Beach Parkway and Mystic Valley Parkway for part)	Medford	ICC	4	DCR and MassDOT	Yes	2, 3	1.3	4.2	0	2	2.59	MBTA Routes 90, 97, 99, 100, 106, 108, 110, 112, and 134 MBTA Rapid Transit on the Orange Line at Wellington and on the Red Line at Porter Square MBTA Commuter Rail at Chelsea, Malden Center, West Medford, and Porter Square	Yes	Yes EJ Areas and Zones are located at the ends of the segment in Somerville and Everett and 0.2 mi away in Medford.	DCR has announced a \$500,000 comprehensive study of the parkway system for bike lanes. The goals of the study include updated traffic information, assessment of parkway conditions, and assessment and understanding of deficiencies along the heavily cycled parkways. In addition, the Wynn Everett DEIR includes intersection improvements and mitigated traffic operations for Revere Beach Parkway and Mystic Valley Parkway.	3	2	3	4	1	13	High	MassDOT District 4 believes that mobility and safety in this corridor can be improved; the district considers Route 16 to be a priority corridor in need of pedestrian and bicycle improvements as well as operations and equipment upgrades at signalized intersections. A study of Wellington Circle for short- and long-term solutions is important. (District 4 suggests coordinating with Wynn Everett on funding this potential study.)
Route 16	Newton	ICC	6	City and MassDOT	Yes	3	4.3	4.3	2	5	1.52	MBTA Routes 59, 170, 505, 553, 554, and 556 MBTA Green Line Rapid Transit MBTA Commuter Rail at West Newton	Yes	Yes An EJ Zone lies adjacent to the segment.	MassDOT Project #606780 Bridge Rehabilitation, Route 16 (Washington Street) over I-90, MBTA/CSX Corporation and Access Road Conceptual TIP #1067 Washington Street (Phase 2), from Commonwealth Avenue to Perkins Street	4	1	2	4	2	13	High	Location was suggested in 2014 LRTP outreach through verbal comments at a 495 Metrowest Partnership Meeting.
Route 9	Framingham	MetroWest	3	MassDOT	Yes	2	2.4	3.1	1	6	2.23	MWRTA Routes 1, 7, 9, 2, and 3	--	Yes Over half the route lies within or adjacent to an EJ Zone or EJ Area.	MAPC Land Use/Route 9 Corridor Study (fall 2013). MassDOT Project #603865 is located in Framingham at the intersection of Route 9 and Temple Street; in preliminary design MassDOT project #608006 Pedestrian Hybrid Beacon Installation at Route 9 and Maynard Road; 25% project plans MassDOT project #604991 Resurfacing and Related Work on Route 9, includes wheelchair ramp upgrades, additional sidewalks/repairs, and signal improvements; completed in 2011 MassDOT project #602522 Bridge Replacement, Route 9 over the Sudbury River, completed 2009. MassDOT and TIP project #605228 Superstructure Replacement, Route 9 over Reservoir Outlet; construction ends spring 2016	3	2	3	4	1	13	High	According to MassDOT District 3, most of the intersections on this corridor have already been studied.
Route 114	Salem	NSTF	4	City and MassDOT	Yes	2, 3	1.7	10.8	2	7	1.35	18 MBTA bus stops MBTA Routes 450, 451, 455, 456, 459, and 465 MBTA Commuter Rail at Salem and Beverly Ferry service	Yes	Yes Half the segment abuts EJ Zones and the tip on an EJ Area touches the segment.	Transportation Improvement Study for Route 1A, 114, and 107 and Other Roadways in Downtown Salem, 2005 CTPS Study. MassDOT Project #605332 Bridge Replacement (Route 114) North Street over North River; in preliminary design	4	1	2	4	2	13	High	Location suggested in 2012 UPWP outreach via a NSTF letter, which suggested that a study [on Routes 114/1A and Route 127 from Swampscott to Gloucester] would include how to improve bike facilities and improve bike-to-rail connections in this heavily traveled tourist region. This builds on NSTF's primary recommendation for that year and the anticipated popularity of the Essex Coastal Scenic Byway in the region.
Route 60	Arlington	ICC	4	Town	Yes	3	0.9	4.2	1	1	1.34	Eight MBTA bus stops MBTA Routes 67, 62, 76, 77, 78, 79, 80, 84, and 350	Yes	Yes	CTPS and MAPC Community Transportation Technical Assistance Program evaluated the high-crash location at the intersection at Massachusetts Avenue. MassDOT Project #606885 will connect the two legs of the Minuteman Bikeway and improve traffic operations and safety and pedestrian safety in the Arlington Center area. The critical segment in the Arlington Center area has a project programmed in the FFY 2014 TIP.	4	1	3	3	1	12	High	--

Arterial Segment	Community	MAPC Subregion	MassDOT District	Jurisdiction	National Highway System	Function Class	Distance (Miles)	Crash Rate (MVMT)	Top 200 High-Crash Locations 2010-2012	HSIP-Eligible Crash Clusters 2010-2012 (Number)	Travel Time Index	Transit Service	Crowded or Late MBTA Bus Service	Environmental Justice Areas and Zones	Study, Project, or TIP Project	Safety Conditions	Congested Conditions	Multimodal Significance	Regional Significance	Implementation Potential	Score	Overall Assessment	Summary of Comments
Alewife Brook Parkway	Cambridge	ICC	6	DCR, MassDOT	Yes	2	0.8	7.3	0	2	2.41	MBTA Routes 79, 350, 62, 67, 74, 76, 78, 84, and 351 MBTA Rapid Transit on the Red Line MBTA Commuter Rail at Porter Square	Yes	Yes Most of the segment lies within or adjacent to EJ Areas and EJ Zones.	Alewife Studies, Phase II, CTPS Study DCR announced a comprehensive study of the parkway system for bike lanes. MassDOT Project #605637 Improvements at Route 2 and Route 16. The purpose of this project is to perform minor widening, eliminate a merge condition, and improve throughput capacity and vehicle queue storage at the intersection of Route 2 and Route 16 (Alewife Brook Parkway); under construction. Conceptual TIP #987 would acquire Minuteman Path right-of-way in Watertown to connect Minuteman Path from Arlington, Cambridge, and Watertown to Dr. Paul Dudley White bike path in Boston.	3	2	2	4	1	12	High	The Fresh Pond Residents Alliance identified Fresh Pond Parkway and Alewife Brook Parkway as locations in need of transportation improvements. Concerns include pedestrian safety of young students walking to Shady Hill School due to high traffic volumes, environmental issues, and livability.
Route 16 (Revere Beach Parkway)	Everett	ICC	4	DCR, MassDOT	Yes	2	1.7	3.1	0	6	1.38	MBTA Routes 97, 99, 106, 110, 112, 104, 105, and 109 MBTA Orange Line Rapid Transit at Wellington, Assembly MBTA Commuter Rail at Chelsea	Yes	Yes The entire segment lies within EJ Areas and EJ Zones.	DCR has announced a \$500,000 comprehensive study of the parkway system for bike lanes. The goals of the study include updated traffic information, assessment of parkway conditions, and assessment and understanding of deficiencies along the heavily cycled parkways. The Wynn Everett DEIR includes intersection improvements and mitigated traffic operations for Revere Beach Parkway and Mystic Valley Parkway. MassDOT Project #604660 Revere Beach Parkway (Route 16) over the Malden River (Woods Memorial Bridge) and over MBTA and Rivers Edge Drive Bridge; completed in 2010	2	1	3	4	2	12	High	During MPO outreach meeting, participants noted that traffic volumes on Route 16 in Everett have increased since the completion of the Big Dig, with increased side street congestion and potential access problems for emergency vehicles. MassDOT District 4 believes that mobility, operations, and safety in this corridor can be improved. The district considers Route 16 to be a priority corridor in need of pedestrian and bicycle improvements as well as operations and equipment upgrades at signalized intersections. They also suggest including the Chelsea section and coordinating with Wynn Everett on mitigation at Santilli Circle.
Route 107	Lynn	ICC	4	Town and MassDOT	Yes	3	1.3	14.6	3	8	1.19	29 MBTA bus stops MBTA Routes 424, 426, 436, 441, 442, 450, 455, 456, 459, 429, and 435 MBTA Commuter Rail at River Works, Lynn/Central Square, and Swampscott Ferry service	Yes	Yes The entire segment lies within EJ Areas and EJ Zones.	MassDOT Project #604952 Bridge Replacement, Route 107 over the Saugus River MassDOT Project #601392 Reconstruction, Route 107 (Western Avenue) from the Fox Hill Bridge to Brookvale Street; completed in 2006 MassDOT Project #26710 Bridge Replacement, Route 107 over the Saugus River (Fox Hill Bridge); completed spring 2013 MassDOT Project #603938 Western Avenue Bridge over Saugus River (Fox Hill Bridge) TIP Project #374 Lynn Garage (transit)	4	0	3	4	1	12	High	--
Route 3A	Quincy	ICC	6	City, DCR, and MassDOT	Yes	3	2.3	5.9	1	5	1.31	28 MBTA bus stops MBTA Routes 201, 202, 210, 211, 212, 217, 275, 276 and 217 MBTA Red Line Rapid Transit at Quincy Center, Wallaston, and North Quincy MBTA Commuter Rail at Quincy Center	Yes	Yes The entire segment lies within or near EJ Zones and EJ Areas.	MassDOT Project #604382 Route 3A (Washington Street) Bridge over the Fore River; under construction A FFY 2012 CTPS safety and operations study addressed problems at Route 3A and Coddington Street intersection. DCR announced a comprehensive study of the parkway system for bike lanes.	4	1	2	4	1	12	High	--
Route 16	Wellesley	MetroWest	6	Town and MassDOT	Yes	4	4.5	7.5	3	5	1.45	MBTA Commuter Rail at Wellesley Square, Wellesley Hills, and Wellesley Farms MWRTA Route 8	--	Yes The southern end of the segment lies in an EJ Zone, and a second Zone is less than 0.5 mi from the middle.	MassDOT Project #94762 Bridge Rehabilitation, Route 16 (Washington Street) over Route 9, including relocation of retaining wall; completed summer 2010	4	1	2	3	2	12	High	The location was suggested in 2014 LRTP outreach through verbal comments at a 495 Metrowest Partnership Meeting.
Route 18	Weymouth	SSC	6	MassDOT	Yes	3	4.2	7.4	6	10	1.44	9 MBTA bus stops MBTA Route 225 MBTA Commuter Rail available at South Weymouth	Yes	Yes EJ Zones lie adjacent to the segment.	Programmed TIP (March 2008) and MassDOT Project #601630 Reconstruction and Widening on Route 18 (Main Street), from Highland Place to Route 139; construction ends spring 2016 MassDOT Project #603161 Signalization and Improvements on Route 18 (Three Locations) at West Street, Park Avenue, and Columbian Street; complete spring 2009 MassDOT Project #603738 Traffic Signal Improvements on Route 18 at Pond Street and Pleasant Street; complete summer 2006	4	1	3	4	0	12	High	According to MassDOT District 6, a MassDOT project is underway, and no project is needed at this time.

Arterial Segment	Community	MAPC Subregion	MassDOT District	Jurisdiction	National Highway System	Function Class	Distance (Miles)	Crash Rate (MVMT)	Top 200 High-Crash Locations 2010-2012	HSIP-Eligible Crash Clusters 2010-2012 (Number)	Travel Time Index	Transit Service	Crowded or Late MBTA Bus Service	Environmental Justice Areas and Zones	Study, Project, or TIP Project	Safety Conditions	Congested Conditions	Multimodal Significance	Regional Significance	Implementation Potential	Score	Overall Assessment	Summary of Comments
Route 28	Randolph	TRIC	6	MassDOT and Town	Yes	3	3.2	5.7	1	8	1.46	50 MBTA bus stops MBTA Routes 240 and 238 MBTA Commuter Rail at Holbrook/ Randolph BAT Route 12	Yes	Yes The entire segment lies within EJ Zones and EJ Areas.	MassDOT Project #603716 Resurfacing and Related Work on a Section of Route 28; completed 2007/2008 Conceptual TIP #1002 Route 28 (N. Main Street) Bridge Conceptual TIP #1010 Route 28 (N. Main Street) and Liberty Street intersections Conceptual TIP #1011 Route 28 (N. Main Street) and West Street intersection FFY 2008 Safety and Operations Analyses at Intersections Study Arterial Coordination Study, CTPS Study, 2010	4	1	2	4	1	12	High	MassDOT District 6 says that a corridor study would be beneficial.
Route 1	Walpole	TRIC	5	MassDOT	Yes	3	3.3	1.3	2	2	1.38	MBTA Commuter Rail at Sharon and Walpole	--	Yes One EJ Zones lies adjacent to the southern end of the segment. However, most of the segment is not near EJ Zones or Areas.	MassDOT's I-95 South Corridor Study provides a comprehensive evaluation of the I-95 and Route 1 corridors south of Route 128 and included a recommended plan of short-term and long-term improvements. MassDOT project #603825 Resurfacing and Related Work on a Section of Route 1; completed spring 2005	2	1	3	4	1	12	High	The location has MassDOT projects and studies.
Fresh Pond Parkway	Cambridge	ICC	6	DCR	Yes	2	1.3	3.4	0	4	1.51	MBTA Routes 75, 71, 72, 73, 74, and 78 MBTA Red Line Rapid Transit MBTA Commuter Rail at Porter Square	Yes	Yes Two EJ Zones are located within 0.5 mi of the segment.	Alewife Studies, Phase II, CTPS Study DCR announced that the agency will conduct a traffic study of several intersections along Mount Auburn Street and Fresh Pond Parkway, in partnership with the City of Cambridge and the MBTA. The study will focus on safety measures, bus prioritization, and accessibility. Conceptual TIP #987 would acquire Minuteman Path right-of-way in Watertown to connect Minuteman Path from Arlington, Cambridge, and Watertown to Dr. Paul Dudley White bike path in Boston.	3	1	2	4	1	11	Medium	The Fresh Pond Residents Alliance identified Fresh Pond Parkway and Alewife Brook Parkway as locations of in need of transportation improvements. Concerns include pedestrian safety of young students walking to Shady Hill School due to high traffic volumes, environmental issues, and livability.
Route 16 (Revere Beach Parkway)	Chelsea	ICC	6	DCR and MassDOT	Yes	2	1.0	2.9	2	3	1.77	MBTA Route 112 and 111 MBTA Commuter Rail at Chelsea	Yes	Yes The entire segment lies within EJ Areas.	The Lower North Shore Transportation Improvement Study, 2000 CTPS Study DCR announced a comprehensive study of the parkway system for bike lanes.	3	1	3	4	0	11	Medium	--
Route 99	Everett	ICC	4	City, DCR, and MassDOT	Yes	3	2.4	2.6	0	3	2.40	40 MBTA bus stops MBTA Routes 97, 104, 105, 109, 110, 112, 99, and 106	Yes	Yes The entire segment lies within EJ Areas and EJ Zones.	MassDOT Project #602383 reconstructed Route 99 with a traffic signal upgrade, from Second Street to the Malden city line in 2008. MassDOT Project #601580 reconstructed Route 99 from Sweetser Circle to Second Street in 2004. MassDOT Project #602382 reconstructed Route 99 from Sweetser Circle to the Alford Street Bridge in 2013.	2	2	2	4	1	11	Medium	Not recommended for study because the MassDOT projects listed completely reconstructed Route 99 with signal improvements from Alford Street Bridge to the Malden city line.
Route 9	Newton	ICC	6	MassDOT	Yes	2	3.1	1.9	0	1	1.73	Six MBTA bus stops MBTA Routes 60, 52, and 59 MBTA Green Line	Yes	Yes An EJ Zone in Brookline is 0.3 mi from the segment.	MassDOT Project #605096 Bridge Betterment, Route 9 over Centre Street; in preliminary design MassDOT Project #604327 Resurfacing and Related Work on Route 9 (Boylston Street) from the Wellesley/Newton city line to Newton/Brookline city line; completed in 2012 MassDOT Project #601704 Reconstruction and Signal Improvements on Walnut Street, from Homer Street to Route 9; in design MassDOT Project #605096 Bridge Replacement, Route 9 over Centre Street; in preliminary design MassDOT Project #606635 Reconstruction of Highland Avenue, Needham Street and Charles River Bridge, from Webster Street to Route 9; 25% project plans MassDOT Project #604327 resurfaced this segment, including updates to the guardrail and improvements to the existing drainage structures; construction was completed in 2012.	2	1	3	4	1	11	Medium	According to MassDOT District 6, improvements were recently made to accommodate new development. An analysis of the new existing conditions would be helpful to compare with the future projected conditions.
Route 16 (Revere Beach Parkway)	Revere	ICC	4	DCR and MassDOT	Yes	2	1.5	2.4	0	2	1.43	MBTA Routes 110, 116, 117, 119, 424, 426, 428, 448, 449, 450, 455, and 459 MBTA Rapid Transit on Blue Line MBTA Commuter Rail at Chelsea	Yes	Yes The entire segment lies within EJ Zones (EJ Areas are also very close by).	DCR has announced a \$500,000 comprehensive study of the parkway system for bike lanes. The goals of the study include updated traffic information, assessment of parkway conditions, and assessment and understanding of deficiencies along the heavily cycled parkways. The Wynn Everett DEIR includes intersection improvements and mitigated traffic operations for Revere Beach Parkway and Mystic Valley Parkway.	2	1	3	4	1	11	Medium	MassDOT District 4 believes that mobility, operations, and safety in this corridor can be improved. The district considers Route 16 to be a priority corridor in need of pedestrian and bicycle improvements as well as operations and equipment upgrades at signalized intersections. The signals in the corridor are not interconnected and there is traffic congestion. The district also suggests including the Chelsea section and Bell (Mahoney) Circle.

Arterial Segment	Community	MAPC Subregion	MassDOT District	Jurisdiction	National Highway System	Function Class	Distance (Miles)	Crash Rate (MVT)	Top 200 High-Crash Locations 2010-2012	HSIP-Eligible Crash Clusters 2010-2012 (Number)	Travel Time Index	Transit Service	Crowded or Late MBTA Bus Service	Environmental Justice Areas and Zones	Study, Project, or TIP Project	Safety Conditions	Congested Conditions	Multimodal Significance	Regional Significance	Implementation Potential	Score	Overall Assessment	Summary of Comments
Route 1A	Revere	ICC	4	MassDOT	Yes	2	1.5	2.0	0	1	3.17	15 MBTA bus stops MBTA Routes 110, 116, 117, 411, 424, 426, 439, 441, 442, 448, 449, 450, and 455 MBTA Rapid Transit on Blue Line MBTA Commuter Rail at Chelsea and River Works	Yes	Yes The entire segment lies within EJ Areas and EJ Zones.	CTPS Lower North Shore Transportation Improvement Study proposed improvements for Route 1A in Revere in October 2000; an update may be necessary. Conceptual TIP Project #982 Mahoney Circle (Bell Circle) Grade Separation	2	2	2	4	1	11	Medium	--
Route 28	Milton	ICC and TRIC	6	MassDOT, Town, and DCR	Yes	3	3.8	4.4	1	3	1.30	51 MBTA bus stops MBTA Routes 240, 245, 24, 28, 26, 30, 31, and 33 MBTA Red Line Rapid Transit at Mattapan/Ashmont Station BAT Route 12	Yes	Yes EJ Zones and EJ Areas are located at the northern end.	MassDOT Project #607342 Intersection and Signal Improvements at Route 28 (Randolph Avenue) and Chickatawbout Road; in preliminary design MassDOT Project #106901 Roadway Reconstruction on Route 28 (Randolph Avenue) from Reedsdale Road to Milton/Quincy town line; completed 2008 Conceptual TIP #1008 Reconstruct the Intersection of Blue Hills Parkway and Brook Road	3	1	2	3	2	11	Medium	Reedsdale Road and Brooks Road may be candidates for road diets. MassDOT District 6 reports that the route is congested during commute hours. MassDOT has a project that has not advanced at Route 28/Chickatawbout; a safety or corridor study would be helpful.
Route 2	Acton	MAGIC	3	MassDOT	Yes	2	2.1	1.2	1	1	3.35	MBTA Commuter Rail at South Acton and West Concord	--	Yes	MassDOT #604472 Resurfacing and Related Work on Route 2 (includes all of Acton); complete spring 2014 MassDOT project #607748 Intersection and Signal Improvements on Route 2 and Route 111 at Piper Road and Taylor Road; in preliminary design MassDOT #604609 Traffic Sign Replacement and Safety Improvements on Route 2; complete summer 2009 TIP project #606223 Bruce Freeman Rail Trail Construction (Phase II-B) in Acton and Concord to connect the trail across Route 2	2	2	2	4	1	11	Medium	The MAGIC subregion expressed interest in a Route 2 study. A MassDOT road safety audit is scheduled for the Piper Road/Taylor Road intersection; the project is in the preliminary design phase.
Route 9	Natick	MetroWest	3	MassDOT	Yes	2	3.5	3.7	4	11	2.32	MWRTA Routes 1, 4, 9, and 10	--	Yes One EJ Zone is 0.5 mi away.	MAPC Land Use/Route 9 Corridor Study (fall 2013) MassDOT Project #601586 is currently reconstructing the Route 9/Oak Street intersection and should address some of the congestion and safety issues at the intersection. MassDOT Project #605313 will reconstruct the Route 9/Route 27 interchange; 25% project plans. MassDOT project #604991 Resurfacing and Related Work on Route 9, includes wheelchair ramp upgrades, additional sidewalks/repairs, and signal improvements; completed in 2011 MassDOT project #603004 Bridge Replacement, Route 9 over Lake Cochituate; complete autumn 2007	4	2	1	4	0	11	Medium	According to MassDOT District 3, the Route 9 and Oak Street intersection is currently under construction. The Route 9 and Route 27 interchange is currently in design.
Route 3A	Hingham	SSC	5	MassDOT	Yes	3	4.7	2.0	0	1	1.30	MBTA Commuter Rail at Cohasset, Nantasket Junction, West Hingham, and East Weymouth Ferry Service	--	None	There are two approved projects that are not advancing in design: MassDOT Project #603137 Intersection Improvements on Route 3A at Kirby Street. There has been local interest in installing a traffic signal at this intersection; in preliminary design. MassDOT Project #605168 Intersection Improvements at Route 3A/Summer Street Rotary. Design is pre-25%. The Town's consultant prepared preliminary concepts for proposals at this location. There are no design plans, only concepts.	1	1	2	3	3	11	Medium	The location received strong support from: -The Town of Hingham -South Shore Coalition -Representative Garrett J. Bradley (State Rep. Third Plymouth District) -MassDOT District 5
Route 1	Norwood	TRIC	5	MassDOT	Yes	3	4.8	1.3	0	3	2.69	MBTA Commuter Rail at Islington, Dedham Corp Center, Endicott, Norwood Depot, Norwood Central, Windsor Gardens, and Plimptonville	--	Yes One EJ Zone lies adjacent to the southern end of the segment.	MassDOT's I-95 South Corridor Study, provides comprehensive evaluation of the I-95 and Route 1 corridors south of Route 128 that included a recommended plan of short-term and long-term improvements. MassDOT Project #608052 Route 1 at Morse Street (approved by PRC Nov. 2014); in preliminary design MassDOT Project #605857 Route 1 at University Avenue and Everett Street; Town design is at pre-25% MassDOT #605321 Bridge Preservation, Route 1 over the Neponset River; in design MassDOT project #603825 Resurfacing and Related Work on a Section of Route 1; complete in 2005	1	2	3	4	1	11	Medium	The location has MassDOT projects and studies.

Arterial Segment	Community	MAPC Subregion	MassDOT District	Jurisdiction	National Highway System	Function Class	Distance (Miles)	Crash Rate (MVT)	Top 200 High-Crash Locations 2010-2012	HSIP-Eligible Crash Clusters 2010-2012 (Number)	Travel Time Index	Transit Service	Crowded or Late MBTA Bus Service	Environmental Justice Areas and Zones	Study, Project, or TIP Project	Safety Conditions	Congested Conditions	Multimodal Significance	Regional Significance	Implementation Potential	Score	Overall Assessment	Summary of Comments
Route 138	Milton	ICC and TRIC	6	MassDOT	Yes	2	3.6	4.5	0	4	1.58	MBTA Route 245 MBTA Commuter Rail at Route 128 Station MBTA Red Line Rapid Transit at Mattapan Station	Yes	Yes Half of the segment is contained within EJ Zones.	MassDOT project #607763 Intersection and Signal Improvements at Two Locations: Route 138 (Blue Hill Avenue) at Atherton Street and Bradlee Road and Route 138 (Blue Hill Avenue) at Milton Street and Dollar Lane	3	1	2	3	1	10	Medium	Congestion issues have been identified on this route, from the I-93 interchange to Mattapan Square.
Route 2	Concord	MAGIC	4	MassDOT	Yes	2	5.2	1.7	1	5	2.68	MBTA Commuter Rail at West Concord, Concord, and Lincoln	--	Yes. One EJ Zone lies adjacent to the segment.	MassDOT project #602894 Crosby's Corner (Route 2 at Route 2A) Improvements; under construction MassDOT Project #602091 Concord Rotary; in preliminary design MassDOT Project #604069 Bridge Replacement over Sudbury River; in preliminary design MassDOT Project #602626 Roadway Reconstruction; completed in 2006 MassDOT Project #604630 Resurfacing and Related Work on Route 2; completed in 2010 MassDOT Project #604472 Resurfacing and Related Work on Route 2; completed in 2014 FFY 2013 Priority Corridors for LRTP Needs Assessment Study (Concord and Lincoln) Programmed (March 2014) TIP project #606223: Bruce Freeman Rail Trail Construction (Phase II-B) in Acton and Concord, will connect the trail across Route 2	2	2	2	4	0	10	Medium	Route 2 was suggested during MPO outreach as a route experiencing congestion that affect MAGIC communities as well as Cambridge. There are many projects and studies conducted for this corridor including the Route 2 (Crosby's Corner) improvements and Concord Rotary upgrade and improvements.
Routes 4 and 225	Lexington	MAGIC	4	MassDOT	Yes (part)	3, 5	0.7	2.5	0	2	1.30	Nine MBTA bus stops MBTA Route 62	Yes	None	MassDOT section from I-95 to Hartwell Ave was the subject of a Town study (Hartwell Avenue Traffic Mitigation Plan -- Bedford Street Concept Plan), a and a road safety audit was performed for this segment in November 2011 CTPS FFY 2008 Safety and Operations at Intersections Study, Massachusetts Avenue at Maple Street	2	1	2	3	2	10	Medium	MAGIC subregion and the Towns of Lexington and Bedford requested that this corridor be included in the FFY 2012 UPWP for a study.
Route 16	Holliston	MetroWest	3	Town and MassDOT	Yes	3	2.3	4.4	0	3	1.46	MWRTA Route 6	--	None	MassDOT Project #605745 Reconstruction of Route 16 from Quail Run to the Sherborn town line; in preliminary design MassDOT Project #602462 will enhance safety and improve efficiency by installing a new traffic signal at the intersection of Route 16 at Route 126 and at Oak Street in Holliston. 2011 CTPS Study, Route 126 Corridor: Transportation Improvement Study 2008 CTPS Study, Washington Street (Route 16/126) at Hollis Street	3	1	1	3	2	10	Medium	The 495 Metrowest Partnership expressed interest in a Route 16 study. The section that experiences the most crashes is the Town Center portion (under Town jurisdiction). A road safety audit was performed for the Town Center portion in December 2012.
Route 135	Wellesley	MetroWest	6	Town and MassDOT	Yes	3	3.0	6.8	0	1	1.30	MBTA Commuter Rail at Natick, Wellesley Square, and Wellesley Hills MWRTA Route 8	--	Yes Most of the segment lies adjacent to EJ Zones.	No projects	3	1	2	3	1	10	Medium	
Route 20	Weston	MetroWest	6	MassDOT	Yes	3	3.3	2.3	0	3	2.43	MBTA Route 70 MBTA Commuter Rail at Waltham and Kendal Green	Yes	Yes An EJ Zone is located 0.1 mi from the end of the segment.	No projects	1	2	2	4	1	10	Medium	A congestion study was suggested through UPWP/LRTP outreach in 2012, 2013, and 2014 by MAGIC; a formal letter was submitted and verbal comments were made at a MAPC subregion meeting. The location was resubmitted in comment on Draft FFY 2014 UPWP.
Route 129	Wilmington	NSPC	4	MassDOT and Town	Yes	3	2.9	5.7	0	5	1.30	MBTA Commuter Rail at Wilmington, North Wilmington, Anderson/ Woburn, and Reading	--	None	MassDOT Project #601732 Rehabilitation, Route 129 (Lowell Street) from Route 38 (Main Street) to Woburn Street. The project includes full depth reconstruction and widening, handicap accessible sidewalks, new tree plantings and bicycle accommodation within the newly paved shoulders. The intersection of Route 129 and 38 was realigned with new traffic signals and the bridge over Maple Meadow Brook was replaced; completed in 2009. MassDOT Project #608051 will reconstruct Route 38 from Route 62 to the Woburn city line and will add bike lanes, sidewalk, turn lanes, and signal upgrades; in preliminary design.	3	1	2	3	1	10	Medium	--

Arterial Segment	Community	MAPC Subregion	MassDOT District	Jurisdiction	National Highway System	Function Class	Distance (Miles)	Crash Rate (MVT)	Top 200 High-Crash Locations 2010-2012	HSIP-Eligible Crash Clusters 2010-2012 (Number)	Travel Time Index	Transit Service	Crowded or Late MBTA Bus Service	Environmental Justice Areas and Zones	Study, Project, or TIP Project	Safety Conditions	Congested Conditions	Multimodal Significance	Regional Significance	Implementation Potential	Score	Overall Assessment	Summary of Comments
Route 1A	Salem	NSTF	4	Town	Yes	2	0.8	7.7	0	0	1.32	16 MBTA bus stops MBTA Routes 455 and 459 MBTA Commuter Rail at Salem Ferry Service	Yes	Yes The entire segment lies within EJ Zones and EJ Areas.	CTPS Lower North Shore Transportation Improvement Study proposed improvements for Route 1A in Revere in October 2000; an update may be necessary.	2	1	2	4	1	10	Medium	--
Route 1A	Swampscott	NSTF	4	MassDOT and Town	Yes	2	1.7	4.8	1	3	1.30	27 MBTA bus stops MBTA Routes 441 and 448 MBTA Commuter Rail at Swampscott and Lynn/ Central Square Ferry service	Yes	No	MassDOT project #607761 Intersection and Signal Improvement at Route 1A (Paradise Road) at Swampscott Mall; preliminary design	4	1	2	2	1	10	Medium	--
Memorial Drive	Cambridge	ICC	6	DCR	Yes	2	4.2	2.9	0	6	1.30	MBTA Routes 747, 1, 47, 64, 66, 70, 70A, 71, 73, 86, and 701 MBTA Rapid Transit available on the Red and Green Lines MBTA Commuter Rail at North Station, Back Bay, Yawkey, Porter Square, and Belmont Ferry service	Yes	Yes Most of the segment lies within or adjacent to EJ Areas and EJ Zones.	DCR announced a comprehensive study of the parkway system for bike lanes on December 18, 2014. There are a number of projects near Memorial Drive, but none for Memorial Drive itself.	2	1	2	4	0	9	Medium	The HSIP-eligible bicycle crash cluster with EDPO 1167 is primarily located along Massachusetts Avenue.
Route 62	Bedford	MAGIC	4	Town and MassDOT	No	5	0.9	7.1	0	1	1.31	Three MBTA bus stops MBTA Route 62	Yes	None	Great Road Project: Master Plan and Conceptual Design, prepared by Vanasse Hagen Brustlin Inc. (VHB) for the Town of Bedford in 2011. The plan is to improve pedestrian and bicycle access, recommend streetscape improvements that will highlight the "Center" of Bedford while taking into consideration traffic flow through the area, crosswalk locations, intersection and traffic control improvements, property access and parking.	3	1	2	2	1	9	Medium	--
Route 9	Wellesley	MetroWest	6	MassDOT	Yes	2	5.2	3.3	2	11	1.31	MBTA Commuter Rail at Wellesley Hills and Wellesley Farms MWRTA Route 1	--	None	MassDOT Project #601586 Intersection Improvements at Route 9 (Worcester Street) and Oak Street, from 1500 feet West of Oak Street to 300 feet East of Overbrook Drive; construction ends spring 2015 MassDOT Project #607340 Resurfacing on Route 9, from (Approx.) Dearborn Street to the Natick town line; in preliminary design MassDOT Project #606530 Drainage Improvements along Route 9 Boulder Creek Culvert (Design Only); 25% project plans CTPS Study, Route 9 Corridor in Wellesley, 2003 MAPC Land Use/Corridor Study	2	1	2	3	1	9	Medium	MassDOT District 6 reports that the Town is interested in having MAPC do a planning study along this roadway. MassDOT has a preliminary assessment of this corridor that will develop into 25% design plans for roadway improvements.
Route 3A	Weymouth	SSC	6	MassDOT	Yes	3	1.9	3.7	0	3	1.14	30 MBTA bus stops MBTA Routes 220, 221, 222 MBTA Commuter Rail at Quincy Center, Weymouth Landing/ East Braintree, and West Hingham Ferry service	Yes	Yes An EJ Zone in Quincy is 0.2 mi from the segment.	Advertised (2008) TIP and MassDOT Project #604382 Route 3A (Washington Street) Bridge; construction ends winter 2016/2017 MassDOT Project #602703 Bridge Rehabilitation, Route 3A (Lincoln Street) over the Weymouth Back River; complete autumn 2006	3	0	2	4	0	9	Medium	MassDOT District 6 and Town of Weymouth interest are critical for implementation.
Route 138	Canton	TRIC	6	MassDOT	No	3, 2	2.6	3.4	0	2	2.26	MBTA Commuter Rail at Route 128, Canton Junction and Canton Center	--	None	MassDOT Project #603883 Reconstruction on Route 138, from I-93 to Dan Road; in preliminary design MassDOT Project #605807 Improvements on Route 138 from Randolph Street to Washington Street; completed 2011 MassDOT Project #602745 Improvements and Signalization, Route 138 at Washington Street and at Randolph Street; completed spring 2009 Route 138 Corridor Study, CTPS Study	2	2	2	2	1	9	Medium	Congestion issues identified on this route, from the I-93/I-95 interchange to Mattapan Square. MassDOT District 6 says that the area around Dunkin Donuts, I-95 being evaluated by consultant for private company. There is a congested area back onto highway that is very congested.

Arterial Segment	Community	MAPC Subregion	MassDOT District	Jurisdiction	National Highway System	Function Class	Distance (Miles)	Crash Rate (MVMT)	Top 200 High-Crash Locations 2010-2012	HSIP-Eligible Crash Clusters 2010-2012 (Number)	Travel Time Index	Transit Service	Crowded or Late MBTA Bus Service	Environmental Justice Areas and Zones	Study, Project, or TIP Project	Safety Conditions	Congested Conditions	Multimodal Significance	Regional Significance	Implementation Potential	Score	Overall Assessment	Summary of Comments
Route 1	Sharon	TRIC	5	MassDOT	Yes	3	1.8	1.0	0	2	1.38	MBTA Commuter Rail at Sharon and Walpole	--	None	MassDOT's I-95 South Corridor Study, provides comprehensive evaluation of the I-95 and Route 1 corridors south of Route 128 that included a recommended plan of short-term and long-term improvements. MassDOT project #603622 Bridge Rehabilitations, Route 1/Route I-95; completed in 2010 MassDOT project #603825 Resurfacing and related work on a Section of Route 1; completed in 2005	2	1	3	2	1	9	Medium	Segment has MassDOT projects and studies.
Route 2	Lincoln	MAGIC	4	MassDOT	Yes	2	3.0	0.7	0	2	2.68	MBTA Commuter Rail at Concord and Lincoln	--	None	MassDOT project #602894 Crosby's Corner (2 at 2A) Improvements; under construction MassDOT Project #604629 Resurfacing and Related Work on Route 2; completed in 2010 FFY 2013 Priority Corridors for LRTP Needs Assessment Study (Concord and Lincoln)	1	2	2	2	1	8	Low	Route 2 was suggested during MPO outreach as a route experiencing congestion that affects MAGIC communities as well as Cambridge. There are many projects and studies conducted for this corridor including the Route 2 (Crosby's Corner) improvements.
Route 135	Natick	MetroWest	3	Town	Yes	3	2.1	7.6	0	4	1.33	MWRTA Routes 10 and 11 MBTA Commuter Rail at Natick and West Natick	--	None	MassDOT Project #600573 reconstructed Route 135 in Natick in 2008. More extensive improvements were proposed in the downtown area, on East Central Street between North Main Street and Union Street including signal upgrades, new sidewalks, pavement rehabilitation, and shoulders. 2010 CTPS Study--West Central Street (Route 135) at Speen Street	3	1	2	1	1	8	Low	Congestion in the downtown area, likely focus area would be on Route 135 at Route 27 intersection and Route 135 at Speen Street intersection because of the crash history of both locations.
Route 114	Peabody	NSTF	4	Peabody and MassDOT	Yes	2	1.1	2.5	0	1	1.30	Three MBTA bus stops MBTA Routes 435, 465 Ferry service	Yes	Yes	No projects	1	1	2	3	1	8	Low	Route 114 in Peabody was listed as a potential corridor in need of signal progression and improvements to accommodate pedestrians and bicyclists.
Route 16	Natick	MetroWest	3	Town	Yes	3	2.6	1.4	0	0	1.19	--	--	Yes	No projects	0	0	2	3	2	7	Low	The 495 Metrowest Partnership expressed interest in a Route 16 study. Specific issues in this segments include improvements to accommodate pedestrians and bicyclists.
Route 3A	Cohasset	SSC	5	MassDOT	Yes	3	3.1	3.7	0		1.09	MBTA Commuter Rail at Nantasket Junction, Cohasset, and North Scituate	--	None	FFY 2013 Subregional Priority Corridor Study. MassDOT Project #608007 Corridor Improvements and Related Work on Justice Cushing Highway (Route 3A), from Beechwood Street to the Scituate town line, includes new traffic signal equipment and pedestrian and bicycle accommodation; preliminary design The corridor is within the limits of MassDOT Project #605664 Resurfacing and Related Work on Route 3A (Duxbury town line northerly to Scituate town line); no construction funding identified	2	0	2	2	1	7	Low	FFY 2013 Subregional Priority Corridor study was conducted within the segment. MassDOT District 5 comments note two approved projects: #608007 and #605664.
Route 3A	Marshfield	SSC	5	MassDOT	Yes	3	7.3	2.1	0	0	1.09	GATRA bus MBTA Commuter Rail at Greenbush	--	None	The corridor is within the limits of MassDOT Project #605664 Resurfacing and Related Work on Route 3A (Duxbury town line, northerly to Scituate town line), no construction funding identified. Work includes patching and micro-surfacing, shoulder reconstruction, and drainage structures.	0	0	2	2	1	7	Low	--
Route 16	Sherborn	SWAP	3	Town	Yes	3	4.3	1.7	0	1	1.35	--	--	None	2002 CTPS Study--Traffic Congestion in SWAP Subregion: Sherborn Town Center Traffic Flow Improvement Study Conceptual TIP #915 Washington Street (Route 16)	1	1	1	2	2	7	Low	Location was suggested in 2014 LRTP outreach at a 495 Metrowest Partnership meeting. The section that experiences most crashes and congestion is the town center portion, where Route 16 and Route 27 combine and split.
Route 1	Westwood	TRIC	6	MassDOT	Yes	3	1.1	1.1	0	0	1.30	--	--	None	MassDOT Project #603162 128 Add-a-Lane Bridges (Bridge III), Route 1 and 1A over I-95/128; completed 2012	0	1	2	3	1	7	Low	MassDOT District 6 supports a congestion or safety study of corridor.
Route 62	Concord	MAGIC	4	Town and MassDOT	Yes	3	1.0	2.6	0	1	1.31	MBTA Commuter Rail at Concord and West Concord	--	None	No projects	2	1	1	1	1	6	Low	--

Arterial Segment	Community	MAPC Subregion	MassDOT District	Jurisdiction	National Highway System	Function Class	Distance (Miles)	Crash Rate (MVMT)	Top 200 High-Crash Locations 2010-2012	HSIP-Eligible Crash Clusters 2010-2012 (Number)	Travel Time Index	Transit Service	Crowded or Late MBTA Bus Service	Environmental Justice Areas and Zones	Study, Project, or TIP Project	Safety Conditions	Congested Conditions	Multimodal Significance	Regional Significance	Implementation Potential	Score	Overall Assessment	Summary of Comments
Route 9	Southborough	MetroWest	3	MassDOT	Yes	2	0.8	1.7	0	1	1.83	MWRTA Route 7	--	None	MAPC Land Use/Route 9 Corridor Study (fall 2013) The CTPS Safety and Operations at Intersections Study evaluated congestion and safety issues at the Route 9/Oak Hill Road/Central Street intersection in FFY 2012. MassDOT's I-495/Route 9 study. The western section of Route 9 in Southborough between the I-495 interchange and Crystal Pond Road was evaluated for short-term and long-term improvements as part of this study. MassDOT project #607172 Resurfacing and Related Work on Route 9, from Westborough to just west of White Bagley Road; construction ends spring 2016	1	1	2	2	0	6	Low	Most of the intersections on this corridor have already been studied, as MassDOT District 3 has noted.
Route 129	Reading	NSPC	4	Town and MassDOT	Yes	3	2.9	4.0	0	0	1.56	11 MBTA bus stops MBTA Route 136 MBTA Commuter Rail at Wakefield, Reading, Anderson/Woburn, Wilmington, and North Wilmington	Yes	None	No projects	1	1	2	1	1	6	Low	--
Route 3A	Scituate	SSC	5	MassDOT	Yes	3	4.8	0.9	0	0	1.04	MBTA Commuter Rail at Greenbush, North Scituate, and Cohasset	--	None	FFY 2013 Subregional Priority Corridor Study The corridor is within the limits of MassDOT project #605664 Resurfacing and Related Work on Route 3A (Duxbury town line northerly to Scituate town line), no construction funding identified. Work includes patching and micro-surfacing, shoulder reconstruction, and drainage structures.	0	0	2	1	1	6	Low	The FFY 2013 Subregional Priority Corridor study was conducted within the segment. MassDOT District 5 comments note project #605664.

***Selection Criteria**

Projects and Studies: Segment does not have recent studies or projects in design, construction, or programmed in the TIP.
Safety Conditions: Segment has a high crash rate for its functional class, contains a HSIP-eligible crash location, a top-200-high-crash location, and/or a significant number or HSIP-eligible clusters of pedestrian or bicycle crashes.
Congested Conditions: Segment has a Travel Time Index of at least 1.3 and/or of at least 2.0, i.e., experiences delays during peak periods.
Multimodal Significance: Segment supports transit or bicycle or pedestrian activities, has a need to improve these activities, and/or has high truck traffic serving regional commerce.
Regional Significance: Segment is in the National Highway System, carries a significant proportion of regional traffic, lies within 0.5 miles of Environmental Justice Transportation Analysis Areas or Zones, and/or is essential for its regional economic, cultural, or recreational development.
Implementation Potential: Segment is proposed or endorsed by its roadway administrative agency (agencies), is proposed or endorsed by its subregion and is a priority for the subregion, and/or has strong support from other stakeholders.

****Functional Classification**

2 = principal arterial, 3 principal arterial other (rural minor arterial or urban principal arterial), 5 minor arterial (urban minor arterial or rural major collector)

Acronyms and Abbreviations

AAADT = Annual average daily traffic. ADA = Americans with Disabilities Act. ADT = Average daily traffic. BAT = Brockton Areas Transit Authority. CTPS = Central Transportation Planning Staff. DCR = Department of Conservation and Recreation. DEIR = Draft Environmental Impact Report. EJ = Environmental justice. ENHC = Essex National Heritage Commission. EPDO = Equivalent property damage only. FFY = Federal fiscal year. GATRA = Greater Attleboro Taunton Regional Transit Authority. HSIP = Highway Safety Improvement Program.*** ICC = Inner Core Committee. LRTP = Long-Range Transportation Plan. MAGIC = Minuteman Advisory Group on Interlocal Coordination. MAPC = Metropolitan Area Planning Council. MassDOT = Massachusetts Department of Transportation. MBTA = Massachusetts Bay Transportation Authority. MetroWest = MetroWest Regional Collaborative. MPO = Boston Region Metropolitan Planning Organization. MVMT = Million vehicle miles traveled. MWRTA = MetroWest Regional Transit Authority. NSPC = North Suburban Planning Council. NSTF = North Shore Task Force. PRC = MassDOT Project Review Committee. RSA = Road safety audit. RTA = Regional transit authority. SSC = South Shore Coalition. SWAP = South West Advisory Planning Committee. TIP = Transportation Improvement Program. TRIC = Three Rivers Interlocal Council. UPWP = Unified Planning Work Program.

***HSIP-eligible crash clusters are defined by MassDOT as crash clusters that rank within the top five percent of crash clusters for each Regional Planning Agency, based on the Equivalent Property Damage Only (EDPO) index. In the EDPO index, property damage only crashes are awarded one point each, crashes involving injuries are given five points each, and fatal crashes are given ten points each. In the Boston region the 896 intersections in the top five percent have crash clusters with a minimum EDPO value of 42.

Source: Central Transportation Planning Staff.

Score	#	%
5	0	0%
6	4	8%
7	5	10%
8	3	6%
9	6	12%
10	9	17%
11	11	21%
12	9	17%
13	5	10%
14	0	0%
Sum	52	100%