MEMORANDUM

DATE: **October 31, 2019**
TO: **Municipal TIP Contacts**
FROM: **Matt Genova, TIP Manager**
Boston Region Metropolitan Planning Organization
RE: **Project Proponent Guidance and Questionnaire**

Are you interested in obtaining federal funding for your municipality's transportation construction project? This memorandum is your guide to initiating the project, advancing it through the design review process at the Massachusetts Department of Transportation (MassDOT), and getting it evaluated by the Boston Region Metropolitan Planning Organization (MPO) for possible inclusion in the Transportation Improvement Program (TIP).

PROJECT INITIATION AND SUBMITTAL STEPS

Step 1: Plan your project

- If you have an idea for a project or questions about how to initiate it, advance it, and/or who to talk to at MassDOT, contact the TIP Manager, Matt Genova, at mgenova@ctps.org or 857.702.3702.

- This project proponent guide is geared towards roadway corridor and intersection projects, and bicycle and pedestrian improvement projects (including on-road and off-road facilities). If you would like to submit another type of project for MPO funding, contact Matt Genova using the contact information above.

Step 2: Initiate your project

- To initiate a roadway corridor, intersection, bicycle or pedestrian project, an important first step is to contact your local MassDOT District Office. To identify the District Office for your municipality, visit the MassDOT Find Your Highway District Office web page. The project development engineers at the District Office will meet with you to discuss your potential project and will inform you of what to expect during the project development process, including the benefits and impacts of your project and the associated design requirements.

- You will then need to complete two forms (the Project Need Form [PNF] and the Project Initiation Form [PIF]) and submit these forms to MassDOT. More information is available on the MassDOT Highway initiating a project web page. The PNF and the PIF should be submitted through MaPIT, an online project initiation system. MaPIT requires a GeoDOT account, which you can request here.

- Once a project is initiated and the PIF is approved by MassDOT, projects are reviewed by MassDOT's Project Review Committee (PRC) on a quarterly basis. The next PRC meeting is on December 19, 2019. After being approved by the PRC, projects can be evaluated by the MPO and considered for funding in the TIP.

- Project development tools and guides, including the MassDOT's *Project Development and Design Guide*, can be found here: MassDOT Highway project development tools.

Step 3: Notify MPO staff about your project

- Each year, usually during October and early November, MPO staff compile a Universe of potential TIP projects. MPO staff will notify municipal TIP contacts in advance of project Universe development. If your municipality plans to submit a new project for consideration during this TIP development cycle, contact TIP manager, Matt Genova, at mgenova@ctps.org or 857.702.3702 **before November 15, 2019**.

- Once MPO staff develop a draft Universe of potential TIP projects, they will submit it to municipal TIP contacts for review. You can use this opportunity to do the following:
  - Notify MPO staff of any projects you wish to submit that are not included in the draft Universe;
  - Confirm previously submitted projects that should still be included; and
  - Identify any projects in the Universe for which your municipality is no longer pursuing MPO funding.

Step 4: Work with MPO staff to score your project

- After your project is approved by MassDOT's PRC, the MPO will score it based on a 134 point scale that takes into account the project's impact on the following MPO goal areas:
  - Safety (30 possible points)
  - System preservation and modernization (29 possible points)
  - Capacity management and mobility (29 possible points)
  - Clean air and sustainable communities (16 possible points)
  - Transportation equity (12 possible points)
  - Economic vitality (18 possible points)

- Detailed information on the TIP evaluation criteria can be found here: TIP Evaluation Scoring Rubric.

- To enable MPO staff to score your project, follow the instructions in the next section titled, "Data Needs for Scoring Your TIP Project."

- Other information about TIP development, including important dates and key MPO meetings, can be found here: FFYs 2021–25 TIP Development page.

Data Needs for Scoring your TIP Project

If your municipality would like your project considered for the upcoming TIP programming cycle, there are **two things you must do by December 4, 2019.**

1. **Send available project documents to Matt Genova,** TIP Manager, at mgenova@ctps.org. Please also copy Matt Archer, Specialist Planner, at marcher@ctps.org. You can also submit documents by US mail, to Central Transportation Planning Staff (Attention: Matt Genova), State Transportation Building, 10 Park Plaza, Suite 2150, Boston, MA 02116.

   These project documents should include the following:
   - PNF, as generated by MaPIT
   - PIF, as generated by MaPIT
   - Functional Design Report, if available
   - A detailed map of the project area with the location of planned improvements and project limits
   - An operations analysis of the roadway and/or intersections in the project area
   - Highway Capacity Manual data sheets with future no-build and future build scenarios

   Other project documents, such as Roadway Safety Audit reports and slides from project-related presentations, are also helpful.

   If you have previously submitted a project for consideration and/or have updated versions of any of these documents, please submit them to Matt Genova (mgenova@ctps.org) and Matt Archer (marcher@ctps.org).

2. **As complete as possible, please provide the requested project data and answer the supplemental questions beginning in the next section.** Although not all of the questions will apply to your project, please include answers to those that do. Questions that do not apply to your project can be answered with "N/A."

Thank you for taking the time to provide the requested documents and complete the questionnaire. In addition to aiding MPO staff in TIP evaluations, your answers will also inform our performance-based planning and programming (PBPP) work. More information about the PBPP process can be found on the MPO's Performance-based Planning and Programming web page.

If you have any questions about the requested data in the supplemental questionnaire, please contact Matt Genova. Your questions and feedback will help MPO staff to improve this guide for future TIP development cycles.

Requested Project Information

General Project Information

Data Item	Data and Comments
MassDOT Project ID Number	609437
Project Name	Boston Street Reconstruction
Municipality	Salem
TIP Contact	
Project Design Status	pre-25%
Current Total Cost Estimate	$12,451,583
Current Total Funds Requested from MPO	

1. Summarize the proposed improvements to be included in the project. For example, include information about proposed changes to the roadway cross sections, improvements at intersections, or if the project will create a new roadway or bicycle/pedestrian facility. The questions included in the "Supplemental Project Information" section will provide more opportunities to describe specific aspects of the project.

Major improvements to the corridor include incorporating complete streets design elements such as off-road bicycle facilities throughout the length of the corridor (either as separated bike lanes or a shared-use path), and ADA/AAB compliant sidewalks, pedestrian ramps, and crosswalks. The proposed cross-section for Boston Street includes one-lane of travel in each direction with additional turn lanes at signalized intersections (where warranted), on-street parking for portions of the corridor, and off-road bicycle facilities. Currently there are no bicycle facilities on Boston Street and this will provide a new bicycle through connection between Peabody and Downtown Salem. In addition, this project will add a new traffic signal at the intersection of Boston Street at Aborn Street and will upgrade existing traffic signals at the intersections of Boston Street at Essex Street, Boston Street at Bridge Street / Proctor Street / Goodhue Street, at Boston Street and Grove Street / Nichols Street.

2. Briefly describe the goals of the proposed project.

The proposed improvements to the corridor will improve mobility for vehicles, bicycles, and pedestrians between Salem and Peabody and will create separated bicycle facilities between the two municipalities that do not currently exist today. it will also design ADA compliant bus stops, and improve safety at 2 known high crash locations - Bridge Street and Essex Street.

Affected Roadways and Facilities in Project Area

3. Describe the roadway or facility segments that will be improved as part of the proposed project. Include both the primary roadway corridor and any cross streets. If the project will improve an existing off-road bicycle/pedestrian facility, include the facility in this table. New facilities can be described in the "Supplemental Project Information" section.

	Primary Roadway/ Facility	**Intersecting /Secondary Roadway 1**	**Intersecting/ Secondary Roadway 2**	**Intersecting /Secondary Roadway 3**
Roadway/Facility Name (include Route number, if applicable)	Boston Street	Essex Street (		
Length (in miles or linear feet)	0.84 miles	0.17 miles		
Limits (cross streets)	Peabody Town Line - Essex St	Pine St - Dalton Pkwy		

	Primary Roadway/ Facility	Intersecting /Secondary Roadway 1	Intersecting/ Secondary Roadway 2	Intersecting /Secondary Roadway 3
Average Daily Traffic (including percent of truck traffic, if available)	22,300	19,500		
Existing Through Lanes	One	One		
Existing Turn Lanes	One	One		
Future Through Lanes (as included in proposed project)	One	One		
Future Turn Lanes (as included in proposed project)	One	One		

Supplemental Project Information

Safety

4. Describe the existing pedestrian facilities, including the length (linear feet or miles) of existing pedestrian features, and the existing pedestrian safety concerns or issues in the project area.

Under existing conditions, non ADA compliant sidewalks are provided on both sides of Boston Street (0.83 miles) and both sides of Essex Street (0.17 miles). The majority of curb ramps at crosswalks are not ADA/AAB compliant. Although some crosswalks are signalized, most mid-block pedestrian crossings have no curb ramps or are places in locations where a pedestrian would cross into a driveway apron. At the intersection of Boston Street at Bridge Street / Goodhue Street / Proctor Street, there are crosswalks across each approach but no pedestrian phases or walk/don't walk indications as part of the traffic signal operations.

5. Describe the existing pedestrian use in the project area. (If possible, you may provide a quantitative response; however, qualitative descriptions are fine in the absence of data. “Use” can be defined as the number of users or the high-traffic time periods of the day.)

Pedestrian use along the corridor is lower than would be expected in a dense area such as Salem. Pedestrian volumes along the Boston Street sidewalks were observed to be approximately 30 pedestrians or fewer during the weekday morning and weekday evening peak hours. Crosswalk use at four mid-block crossings across Boston Street were counted during the weekday morning and weekday evening peak hours and based on those observations each crosswalk saw 7 or fewer pedestrians during the weekday morning peak hour and 16 or fewer pedestrians during the weekday evening peak hour. Pedestrian usage is higher on the eastern segment of the corridor where the neighborhood is denser.

6. Describe proposed pedestrian improvements, including the length (linear feet or miles) of new pedestrian features in the project area and where they will be located. Describe the desired (or anticipated) pedestrian use in the project area and how the proposed project will address existing safety concerns or issues with a specific focus on proposed pedestrian safety countermeasures.

Proposed pedestrian accommodations include five-foot wide sidewalks on both sides of Boston Street (0.83 miles) and Essex Street (0.17 miles) and fully ADA/AAB compliant curb ramps at all crosswalk locations. An additional signalized pedestrian crossing will be provided at Aborn Street and an RRFB will be provided at the crosswalk east of Federal Street. These two crossing treatments will replace antiquated pedestrian-activated signals that currently exist near these locations. In addition, pedestrian signals and an exclusive pedestrian phase will be added at the intersection of Boston Street at Bridge Street / Proctor Street / Goodhue Street where no pedestrian phases or signals currently exist. Bridge Street provides direct access to the Salem Intermodal Station (less than one-mile from Boston Street). The proposed pedestrian volumes are expected to be higher than today as the pedestrian infrastructure is improved and additional development occurs along the corridor.

7. Describe the existing bicycle facilities, including the length (linear feet or miles) of existing bicycle features, and the existing bicycle safety concerns or issues in the project area.

Under existing conditions, there are no dedicated bicycle facilities in the study area and bicyclists share the road with vehicles. The project location is not included in any local, regional, or state biking routes. Existing safety issues include the mixing of bicycles and higher-speed motor vehicles on a shared roadway and the lack of bicycle accommodations at the signalized intersections.

8. Describe the existing bicycle use in the area. (If possible, you may provide a quantitative response; however, qualitative descriptions are fine in the absence of data. “Use” can be defined as the number of users or the high-traffic time periods of the day.)

The existing bicycle use in the area is minimal. Based on peak hour traffic counts, approximately 1-4 through bicyclists were observed on Boston Street during the weekday morning and weekday evening peak hours.

9. Describe proposed bicycle improvements, including the length (linear feet or miles) of bicycle features in the project area and where they will be located. Describe the desired (or anticipated) bicycle use in the project area and how the proposed project will address existing safety concerns or issues with a specific focus on proposed bicycle safety countermeasures.

Under proposed conditions, dedicated bicycle facilities will be provided throughout the entire corridor on Boston Street (0.83 miles) and Essex Street (0.17 miles). Most of the corridor will feature either five-foot wide protected bike lanes on each side of the roadway at sidewalk level or a shared-use path on one side of the roadway. Protected bicycle crossings will be provided at the signalized intersections to safely transition from separated bicycle lanes to shared-use paths. The bicycle improvements will tie into the proposed bicycle improvements on Bridge Street that are being developed independently from this project, and into the existing unmarked bike lanes on Main Street in Peabody. Separating bicycles from motor vehicle traffic through the corridor is expected to reduce the potential for crashes involving bicycles, as the mixing of low-speed bicycles and higher-speed motor vehicles will be eliminated. It is expected that the bicycle usage in the study area will greatly increase with the construction of low-stress bicycle facilities and a designated bicycle connection between Downtown Salem and Peabody Center.

10. Is the roadway in the project area deficient for truck traffic? If yes, provide a description of the issues or concerns, particularly those relating to truck safety and mobility.

The existing roadways are not specifically deficient for truck traffic.

11. Describe any improvements that the project will make to railroad crossings and how those improvements are expected to improve safety.

There are no railroad crossings in the project area.

System Preservation and Modernization

12. Identify any bridges or culverts that will be improved by the project, specifically by the facility carried and the feature crossed, and include MassDOT Bridge Department Numbers and/or Bridge Identification Numbers. Describe the existing condition of the bridges (including deficiencies) and the bridge improvements that will be included in the project. Also, note if the project will involve the construction of any new bridges or culverts, and if these will carry bicycle, pedestrian, and/or motor vehicle traffic.

there are no bridges or culverts within project limits.

13. Describe the existing pavement condition on the roadways included in the project. Provide International Roughness Index (or IRI) values and other details about pavement deficiencies, if feasible. If pavement condition varies within the project area, note where pavement condition may be good, fair, or poor, or if specific roadway segments have recently been paved. Also, note if the project improvements include paving an off-road bicycle/pedestrian facility.

pavement, sub base and subgrade were tested as part of design development, and the overall pavement was determined to be structurally inadequate based on at all locations. cobble, rail and ties, and deteriorated Portland Cement Concrete were encountered under the current pavement and will require removal as part of the roadway reconstruction. Boston Street, from the Peabody city line to Bridge Street was recently micropaved, due to the deterioration of roadway surface.

14. Describe the existing sidewalk conditions included in the project. Note whether sidewalks exist on one or both sides of the roadway segments included in the project. If sidewalk condition varies in the project area, note where conditions are good, fair, or poor, or where sidewalk improvements have recently been made. Also, note any improvements that will support compliance with the Americans with Disabilities Act (ADA).

Sidewalks currently exist on both sides of Boston Street and Essex Street. The sidewalks are generally in fair condition, with a section in poor condition on the south side of Boston Street between Pope Street and Fowler Street. An approximately 450 foot segment of sidewalk was recently reconstructed and is in good condition on the north side of Boston Street between Grove Street and Bridge Street. The majority of curb ramps at crosswalks are not ADA/AAB compliant and there are locations along the corridor where sidewalk width is also non-compliant. Although some crosswalks are signalized, most mid-block pedestrian crossings have no curb ramps or are places in locations where a pedestrian would cross into a driveway apron.

15. Describe the existing signals in the project area and what improvements will be made to signals. Also, note if any new signals will be added as part of the project.

The existing signals are generally in fair to poor condition and one signal (at the intersection of Boston Street at Bridge Street / Goodhue Street / Proctor Street) does not include any pedestrian features. There are two traffic signals at mid-block crossings that are only activated by pedestrian push-button activation. These two signals are antiquated and are proposed to be removed and replaced with more current pedestrian accommodations. The existing traffic signals at the intersections of Boston Street at Grove Street / Nichols Street, Boston Street at Bridge Street / Goodhue Street / Proctor Street, and Boston Street at Essex Street are proposed to be reconstructed and re-timed with adequate clearance times and pedestrian accommodations (if necessary) and a new traffic signal is proposed at the intersection of Boston Street at Aborn Street.

16. Describe any proposed improvements included in the project that are likely to result in improvements to transit assets (bringing a transit asset into a state of good repair, for example) or that address an identified need in a transit asset management plan.

The study area is served by MBTA Bus Route 465 which travels down Boston Street. Bus stops are located on either side of the roadway at Pope Street and Nichols Street. Curb bump-outs will be constructed at each bus stop to provide additional waiting space for passengers waiting for the bus and to allow easier operations for the buses without forcing them to enter and exit the traffic stream at each stop. Bus Stops will be designed to meet ADA/AAB guidelines.

17. Describe land uses and businesses or community buildings (including police, fire, and hospitals) within one-quarter mile of the project roadway, and how the proposed project will improve access to these facilities.

The land use along Boston Street and Essex Street is a mix of residential and commercial. Specific businesses within a quarter mile of the project roadways include two pharmacies, several restaurants and take-out food businesses, several auto-shops/used car dealerships, and other small businesses. The proposed project will improve access to the businesses by providing designated bicycle facilities which will allow customers to bike to each business. Community buildings include a fire station on Essex Street, a new senior community center on Bridge Street, and the Collins Middle School on Highland Avenue. Access to the fire station will be improved by updating the emergency signal and pavement markings on Essex Street for vehicles to safely exit the fire station. Access to the senior center will be enhanced by updating the pedestrian accommodations near the center and providing pedestrian phasing at the intersection of Boston Street at Bridge Street / Goodhue Street / Proctor Street. Pedestrian and bicycle access to the middle school will be improved with the proposed enhancements.

18. Does the project improve critical transportation infrastructure (defined as a bridge or other infrastructure identified in a hazard mitigation plan)?

it will also improve the drainage system by installing a new system which will include catchbasins and trunkline. there are no known flooding areas within project limits

19. Describe any existing issues caused by the facility not being designed to current seismic standards and how the proposed project would address these issues.

n/a

20. Describe any existing or anticipated flooding problems (resulting from the facility's location in a floodplain or area that may be affected by sea level rise) and how the proposed project would address these issues to help the facility function better during flood events or under projected sea level rise conditions.

    Examples of best management practices to help a facility function during flooding events or sea level rise include, but are not limited to, replacement of a failing culvert, headwall replacement, scour protection at a structure, or erosion prevention along a bank or a shoreline.

The project is located approximately 100 feet south of a 100-year flood zone that includes most of Bridge Street, Goodhue Street, and the North River. The project itself is not located in a 100-year flood zone.

21. Does the project help implement part of a hazard mitigation or climate adaptation plan?

n/a

Capacity Management/Mobility

22. Describe any aspects of the project that improve intermodal connections to transit. These aspects could include adding or increasing service; improving transit accessibility in accordance with the ADA; improving existing or adding new connections (bicycle, pedestrian, or transit) to transit; adding new parking (automobile or bicycle) at transit lots that are at capacity.

The study area is served by MBTA Bus Route 465 which travels down Boston Street. Bus stops are located on either side of the roadway at Pope Street and Nichols Street. Curb bump-outs will be constructed at each bus stop to provide additional waiting space for passengers waiting for the bus and to allow easier operations for the buses without forcing them to enter and exit the traffic stream at each stop. Bus Stops will be designed to meet ADA/AAB guidelines. In addition, the project will add a new bicycle connection to MBTA Bus Route 465, as the off-road bicycle accommodations will be constructed alongside the bus stops on Boston Street.

23. Does the project close gaps in the bicycle and pedestrian network or otherwise improve bicycle and pedestrian connectivity?

The project will close a gap in the bicycle network by tying into the proposed bicycle improvements on Bridge Street that are being developed independently from this project and into the existing unmarked bike lanes on Main Street in Peabody. This will provide a new bicycle connection between Downtown Salem, the Boston Street neighborhood, and Peabody Center with the full segment in Salem being separated from motor vehicles. The pedestrian network will be improved by designing all crosswalks and ramps to meet ADA/AAB guidelines and adding pedestrian accommodations at the intersection of Boston Street at Bridge Street / Goodhue Street / Proctor Street.

24. Are the proposed improvements prioritized in a state or regional modal plan or by a regional assessment tool (for example, the State Pedestrian Transportation Plan or the Pedestrian Report Card Assessment Tool)?

The proposed improvements were designed with the state and regional model plans and assessment tools in mind. The project will improve the pedestrian and bicycle network through the study area by developing a continuous off-road bicycle network and enhancing the existing pedestrian network by ensuring all crosswalks and ramps are ADA/AAB compliant and that all signalized intersection have sufficient pedestrian accommodations.

Clean Air and Sustainable Communities

25. Describe any components of the project (such as stormwater best management practices or drainage improvements) that improve existing conditions related to stormwater runoff and water quality by exceeding Massachusetts Department of Environmental Protection stormwater standards, Total Maximum Daily Load requirements, or reducing impervious cover.

Boston Street roadway pavement width will be reduced in most areas., thereby reducing impervious areas and creating more green space. The drainage system will be reconstructed to meet MassDEP stormwater standards to the greatest extent practicable.

26. Describe any components of the project that enhance or improve cultural resources and/or open space. These components could include drainage improvements and/or stormwater best management practices that will improve the quality of cultural resources or open space in the vicinity of the project area.

A monument that is currently located in the middle of the Boston Street intersection with Essex Street will be relocated within a greenspace at the intersection of Essex Street at Dalton Parkway. An accessable park will be designed around the monument for pedestrians to use, improvnig the quality of cultural resources and open space within project limits.

27. Describe any components of the project that enhance or improve wetland resources. These components could include drainage improvements and/or stormwater best management practices that will improve the quality of wetland resources in the vicinity of the project area.

the storm water system within project limits will be reconstructed to meet MDEP's stormwater standards to the greatest extent practicable. there are no wertlands within project limits. however the stormwater system will be designed to remove TSS to the receiving wetland.

28. Describe any components of the project that enhance or improve wildlife preservation areas or protected habitats. These components could include drainage improvements and/or stormwater best management practices that will improve the quality of wildlife preservation areas or protected habitats in the vicinity of the project area.

the stormwater quality will be improved with the construction of a new drainage system.

Economic Vitality

29. Describe any other investments, besides TIP funding, that are contributing to the construction of the project, including funding from federal, state, local, or private sources. Other investments may include, federal earmarks, MassWorks grants, municipal contributions (toward construction, not design), and private contributions.

Other

30. If you have any other notes or comments you would like to make about the project, please provide them here.