



EXECUTIVE SUMMARY

Federal Fiscal Years 2018-22 Transportation Improvement Program

INTRODUCTION

The Boston Region Metropolitan Planning Organization's five-year transportation capital investment plan, the Transportation Improvement Program (TIP), is the near-term investment program for the region's transportation system. Guided by the Boston Region MPO's vision, goals, and objectives, the TIP prioritizes investments that preserve the current transportation system in a state of good repair, provide safe transportation for all modes, enhance livability, and improve mobility throughout the region. These investments fund major highway reconstruction, arterial and intersection improvements, maintenance and expansion of the public transit system, bicycle path construction, and improvements for pedestrians.

The Boston Region MPO is a 22-member board with representatives of state agencies, regional organizations, and municipalities; its jurisdiction extends from Boston north to Ipswich, south to Duxbury, and west to Interstate 495. Each year, the MPO conducts a process to decide how to spend federal transportation funds for capital projects. The

Central Transportation Planning Staff (CTPS), which is the staff to the MPO, manages the TIP-development process.

MPO staff coordinate the evaluation of project requests, propose programming of current and new projects based on anticipated funding levels, support the MPO in developing a draft TIP document, and facilitate a public review of the draft before the MPO endorses the final document.

FEDERAL FISCAL YEARS 2018-22 TIP OVERVIEW

The federal fiscal years (FFYs) 2018-22 TIP consists of transportation investments programmed in the Highway Program and Transit Program. These investments reflect the MPO's goal of targeting a majority of transportation resources to preserve and modernize the existing roadway and transit system and maintain them in a state of good repair.

This TIP also devotes a significant portion of funding for the targeted expansion of the rapid transit system and new shared-use paths. In addition, a number of the infrastructure investments in this TIP address

needs identified in the MPO's Long-Range Transportation Plan (LRTP), *Charting Progress to 2040*, or implement recommendations from past studies and reports that were funded through the MPO's Unified Planning Work Program (UPWP) <http://www.bostonmpo.org/upwp>.

The TIP also supports the strategic priorities of the Massachusetts Department of Transportation (MassDOT):

- **Reliability:** Maintain and improve the overall condition and reliability of the transportation system
- **Modernization:** Modernize the transportation system to make it safer and more accessible and to accommodate growth
- **Expansion:** Expand diverse transportation options for communities throughout the Commonwealth of Massachusetts

FFYs 2018–22 TIP INVESTMENTS

Transit Program

The Transit Program of the TIP provides funding for projects and programs that address the capital needs prioritized by the three transit agencies in the region: the Massachusetts Bay Transportation Authority (MBTA), the Cape Ann Transportation Authority (CATA), and the MetroWest Regional Transit Authority (MWRTA). The Transit Program is predominantly dedicated to achieving and maintaining a state of good repair for all assets throughout the transit system.

Highway Program

The Highway Program of the TIP funds the priority transportation projects advanced by MassDOT and the cities and towns within the 101-municipality MPO region. The program is devoted primarily to preserve and modernize the existing roadway network by resurfacing highways, replacing bridges, and reconstructing arterial roadways.

In Massachusetts, Federal-Aid Highway Program funding is portioned out by MassDOT, which allocates funding to Grant Anticipation Notes (GANs) payments, various statewide programs, and the state's MPOs. The "Regional Target" funding provided to the MPOs can be programmed for projects at the discretion of each MPO.

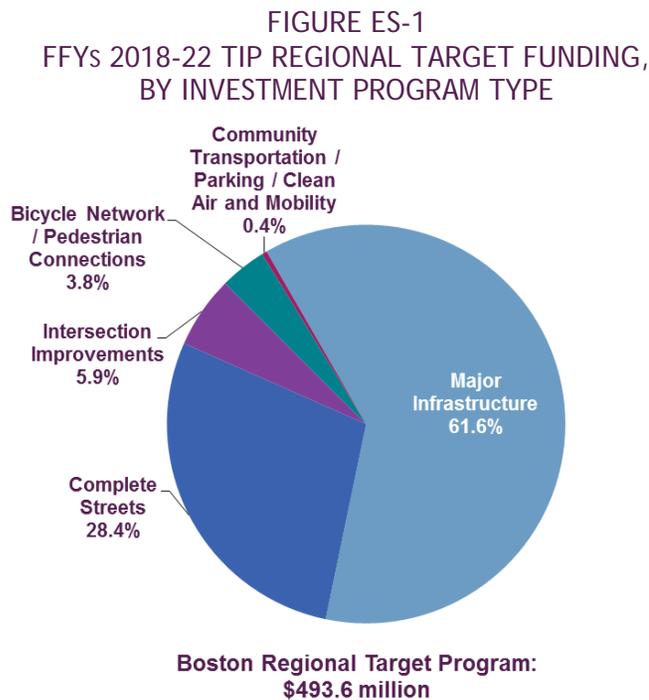
REGIONAL TARGET PROGRAM DETAILS

During FFYs 2018–22, the Boston Region MPO plans to fund 32 projects and programs with its Regional Target funding:

- 15 Complete Streets projects, including the reconstruction of Ferry Street in Everett
- Seven Major Infrastructure projects, including the reconstruction of Rutherford Avenue in Boston
- Six Intersection Improvements projects, including improvements to Derby, Whiting, and Gardner Streets in Hingham
- Three Bicycle Network and Pedestrian Connections projects, including the extension of the Canal Street Rail Trail in Salem

- One Community Transportation Program, which will support first-mile/last-mile connections across the region

Figure ES-1 shows how the Regional Target funding for FFYs 2018–22 is distributed across the MPO’s investment programs. As the chart shows, the Boston Region MPO’s Target Program is devoted primarily to modernizing and expanding the transportation network through Major Infrastructure and Complete Streets investments.

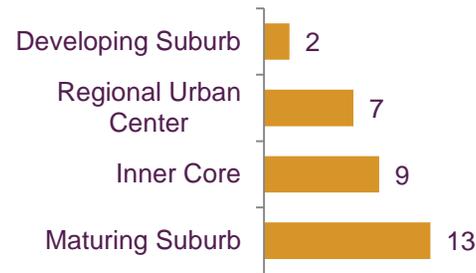


Data Source: CTPS

These investments will be implemented in 31 cities and towns throughout the MPO region, ranging from

high-density, built-out Inner Core communities to Developing Suburbs with large expanses of vacant developable land. Figure ES-2 identifies the type of communities—as defined by the Metropolitan Area Planning Council (MAPC)—that will receive these investments.

FIGURE ES-2
MPO MUNICIPALITIES CONTAINING FFYs 2018-22 TIP PROGRAM PROJECTS, BY MAPC COMMUNITY TYPE



Data Source: CTPS

- Developing Suburb investments consist of roadway reconstruction and corridor improvements in Hopkinton and Walpole
- Regional Urban Center investments include intersection improvements in Beverly and Norwood; roadway reconstruction and corridor improvements in Framingham, Lynn, Milford, and Woburn; and a rail trail extension in Salem
- Inner Core investments include corridor reconstructions in Boston, Brookline, Chelsea, Everett, Newton, and Watertown, and the Green Line Extension in Cambridge, Medford, and Somerville

- Maturing Suburb investments include intersection improvements in Acton, Hingham and Marblehead; rail trail extensions in Bedford and Sudbury; corridor reconstructions in Ashland, Holbrook, Hull, Natick, Needham, and Southborough; corridor widening in Weymouth; and interstate widening in Needham and Wellesley

FINANCING THE FFYs 2018–22 TIP

Transit Program

The Federal Transit Administration (FTA) allocates the funds programmed in the TIP Transit Program by formula. The three regional transit authorities in the Boston Region MPO area that are recipients of these funds are the MBTA, CATA, and MWRTA. The MBTA, with its extensive transit program and infrastructure, is the recipient of the preponderance of the region’s federal transit funds.

Under the federal transportation legislation, Fixing America’s Surface Transportation (FAST) Act, funding is allocated by the following categories:

- **Section 5307 (Urbanized Area Formula Grants):** Provides grants to urbanized areas to support public transportation based on the levels of transit service, population, and other factors
- **Section 5337 (Fixed Guideway/Bus):** Seeks to maintain public transportation systems in a state of good repair through replacement and rehabilitation capital projects

- **Section 5339 (Bus and Bus Facilities):** Provides funding to replace, rehabilitate, and purchase buses and related equipment, and to construct bus-related facilities
- **Section 5309 (Fixed-Guideway Capital Investment Grants):** Provides grants for new and expanded rail, bus rapid transit, and ferry systems that reflect local priorities to improve transportation options in key corridors
- **Section 5310 (Enhanced Mobility of Seniors and Individuals with Disabilities):** Provides funding to support transportation to meet the special needs of older adults and persons with disabilities

Highway Program

The TIP Highway Program was developed with the assumption that federal funding for the state would range between \$648 million and \$708 million annually over the next five years (these amounts include the funds that would be set aside as payments for the Accelerated Bridge Program and exclude required matching funds).

The process of deciding how to use this federal funding in the Boston region follows several steps. MassDOT first reserves funding for Grant Anticipation Notes (GANs) debt service payments for the Accelerated Bridge Program; annual GANs payments range between \$62 million and \$117 million annually over the five years of this TIP.

The remaining Federal-Aid Highway Program funds are budgeted to support state and regional (i.e., MPO) priorities. In this planning cycle, \$704 million to \$745

million annually was available statewide for programming (these amounts include both federal dollars and the local match). MassDOT customarily provides the local match (which can also be provided by other entities); thus, projects are typically funded with 80 percent federal dollars and 20 percent state dollars, depending on the funding program.

Next, MassDOT allocates funding across the following funding categories:

- **Reliability Programs:** This includes the Bridge Program—including inspections, systematic maintenance, and National Highway System (NHS) and non-NHS improvements—the Pavement Program, the Roadway Improvements Program, and the Safety Improvements Program
- **Modernization Programs:** This includes the Americans with Disabilities Act (ADA) Retrofit Program, the Intersection Improvement Program, the Intelligent Transportation System (ITS) Program, and the Roadway Reconstruction Program
- **Expansion Programs:** This includes the Bicycle and Pedestrian Program and the Capacity Program

After these needs have been satisfied, MassDOT allocates the remaining funding among the state's MPOs for programming. This discretionary funding for MPOs is suballocated by formula to determine the Regional Target amounts. MassDOT develops these targets in consultation with the Massachusetts Association of Regional Planning Agencies. This TIP assumes that the Boston Region MPO will have

between \$95 million and \$101 million annually for Regional Target amounts.

Each MPO may decide how to prioritize their Regional Target funding. Given that the Regional Target funding is a subset of the Highway Program, the MPO typically programs the majority of funding on roadway projects; however, the MPO has flexed portions of its highway funding to the Transit Program for transit expansion projects. The TIP Highway Program details both the projects that will receive Regional Target funding from the Boston Region MPO and statewide infrastructure projects within the Boston region.

THE TIP DEVELOPMENT PROCESS

Overview

In order to determine which projects to fund through the Regional Target funding process, MPO members collaborate with municipalities, state agencies, members of the public, advocacy groups, and other stakeholders. The MPO's project selection process uses evaluation criteria to help identify and prioritize projects that advance the MPO's goals:

- Safety
- System Preservation
- Capacity Management/Mobility
- Clean Air/Clean Communities
- Transportation Equity
- Economic Vitality

These goals also shape a series of MPO investment programs, which are designed to direct Regional

Target funding towards MPO priority areas over the next 25 years:

- Intersection Improvements
- Complete Streets
- Major Infrastructure
- Bicycle Network and Pedestrian Connections
- Community Transportation/Parking/Clean Air and Mobility

Projects that the MPO will select to receive Regional Target funding through the TIP development process are included in one of the five programs listed above.

Outreach and Data Collection

The outreach process begins early in the federal fiscal year, when cities and towns designate TIP contacts and begin developing a list of priority projects to be considered for federal funding. Each November, MPO staff ask the staff of cities and towns in the region to identify their priority projects.

MPO staff compile the project funding requests into a Universe of Projects, a list of all projects identified as potential candidates to receive funding through the TIP. The Universe includes projects that are fully designed and ready to be advertised for construction, those that are undergoing preliminary engineering and design, as well as projects still in the conceptual or planning stage. MPO staff also collect data on each project in the Universe so that the projects can be evaluated.

Project Evaluation

MPO staff evaluate projects based on how well they address the MPO's goals. To fully evaluate a project, it must be at the 25 percent design stage or the plans must include the level of detail defined in a functional design report. The evaluation results are posted on the MPO's website, allowing project proponents, municipal officials, and members of the public to view them and provide feedback.

TIP Readiness Day

An important step toward TIP programming takes place midway through the TIP development cycle at a meeting, referred to as TIP Readiness Day, attended by MassDOT and MPO staff. At this meeting, MassDOT project managers provide updates about cost and schedule changes related to currently programmed projects. These cost and schedule changes must be taken into account as MPO staff help the MPO board consider updates to the already programmed years of the TIP as well as the addition of new projects in the outermost year of the TIP.

Staff Recommendation and Draft TIP

Using the evaluation results and information about project readiness (when a project likely would be fully designed and ready for construction), staff prepare the First-Tier List of Projects. This list contains those projects that are supported by a project proponent (a municipality or MassDOT) and that could be made ready for advertising within the TIP's time horizon—the next five federal fiscal years. The projects are ranked based on the evaluation results.

MPO staff then prepare a recommendation or a series of programming scenarios for how to program the Regional Target funding in the TIP based on the First-Tier List of Projects and other considerations, such as whether a project was included in the LRTP, addresses an identified transportation need, or promotes a distribution of transportation investments across the region.

The staff recommendation is always financially constrained, subject to available funding. There was approximately \$493 million of Regional Target funding available to the Boston Region MPO for FFYs 2018–22. This year, the MPO discussed programming scenarios for the discretionary Highway Target Program in March, and developed a final draft recommendation in April.

APPROVING THE TIP

The MPO considers the evaluation results, First-Tier List of Projects, and staff recommendation when prioritizing which projects should receive Regional Target funding. In addition to prioritizing the Regional Target funding, the MPO also reviews the Statewide Infrastructure Items and Bridge Programs that are programmed by MassDOT, as well as the capital programs for the MBTA, CATA, and MWRTA, before voting to release a draft TIP for public review.

In April 2017, the MPO voted to release the draft FFYs 2018–22 TIP for a 21-day public comment period, during which the MPO invited members of the public, regional and local officials, and other stakeholders in the Boston region to review the proposed program. During the public comment period, MPO staff hosted extended “Office Hours,” an open-

house style public meeting, to discuss the draft document and elicit additional comments on the draft TIP.

After the public comment period concluded, the MPO reviewed all municipal and public comments and made changes to the document as appropriate. The MPO then endorsed the TIP and submitted it to the Federal Highway Administration (FHWA) and the FTA for approval. MassDOT incorporates the MPO-endorsed TIP into the State Transportation Improvement Program (STIP). The FHWA, FTA and US Environmental Protection Agency (EPA) review the STIP for certification by September 30, the close of the federal fiscal year.

UPDATES TO THE TIP

Even after the TIP has been finalized, administrative modifications, amendments, and adjustments often must be introduced because of changes in project status, project cost, or available revenues. This may necessitate reprogramming a project to a later funding year or programming additional funds for a project.

Notices of administrative modifications and amendments are posted on the MPO’s website. If an amendment is necessary, the Regional Transportation Advisory Council—the public advisory board to the MPO—is informed, and the MPO notifies affected municipalities and other stakeholders via email. The MPO typically holds a 30-day public comment period (in FFY 2017, a 21-day period was used) before taking final action on an amendment. In extraordinary circumstances, the MPO may vote to

shorten the public comment period to a minimum of 15 days.¹ Administrative modifications and adjustments are generally minor and usually do not warrant a public comment period. See Chapter 2 for more details on what qualifies as an adjustment or an amendment and the process of updating the TIP.

STAY INVOLVED WITH THE TIP

Public input is an important aspect of the transportation-planning process. Please visit www.bostonmpo.org for more information about the MPO, to view the entire TIP, and to submit your comments. You also may wish to sign up for our email news updates and notices by contacting us at publicinfo@ctps.org or signing up at www.ctps.org/subscribe.

To request a copy of the TIP in CD or accessible formats, please contact us by any of the following means:

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¹ The MPO's Public Participation Plan was amended in March 2017 to revise the duration of the public comment period from 30 days to 21 days for FFY 2017.