



BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

Gina Fiandaca, MassDOT Secretary and CEO and MPO Chair
Tegin L. Teich, Executive Director, MPO Staff

TECHNICAL MEMORANDUM

DATE: March 16, 2023
TO: Boston Region Metropolitan Planning Organization
FROM: Bradley Putnam and Michelle Scott, MPO Staff
RE: Proposed *Destination 2050* Investment Programs

This memorandum describes the Boston Region Metropolitan Planning Organization (MPO) staff's proposed set of investment programs to be included in *Destination 2050*, the MPO's next Long-Range Transportation Plan (LRTP). Investment programs help the MPO direct funds to priority areas and types of projects in order to achieve its goals. This proposal retains many of the programs that appear in *Destination 2040*, the LRTP adopted in 2019—including the Complete Streets, Intersection Improvements, Major Infrastructure, Bicycle Network and Pedestrian Connections, and Community Connections programs. It adds a new Bikeshare Support program and recommends that the Transit Modernization program established in *Destination 2040* be updated to a more general Transit Transformation program. Staff request that at its March 16, 2023, meeting, the MPO board provide feedback for and/or indicate concurrence with these proposals. This guidance will help staff make recommendations about how to allocate available MPO discretionary funds to projects and programs in the *Destination 2050* plan.

1 INVESTMENT PROGRAM OVERVIEW

The MPO's investment programs, which are established as part of its LRTP, direct shares of the MPO's discretionary funding to priority areas over the LRTP planning timeframe (20 years or more). The projects that are funded through each program may vary by type (such as intersection improvements versus shared-use path construction), scale, parts of the regional transportation system (such as the roadway network or transit network), focus area, funding source, or other factors. These programs are structured so that they help the MPO achieve the vision and goals outlined in its LRTP. They also communicate to potential project proponents—such as municipalities or regional transit authorities—the types of projects that the MPO is interested in funding.

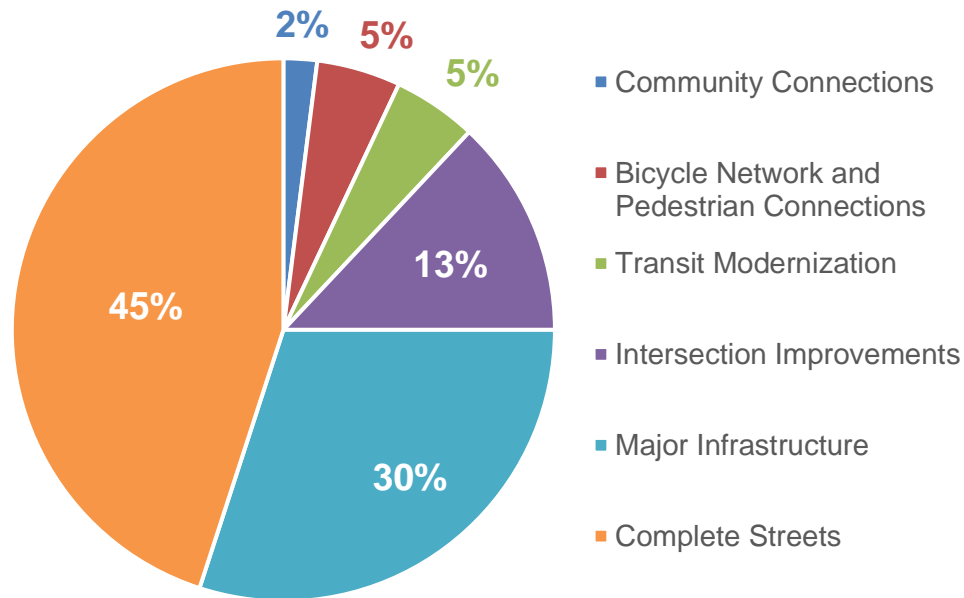
The MPO established several investment programs as part of its *Charting Progress to 2040* LRTP, which was adopted in 2015. During that planning

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process, the MPO was deciding whether to (1) continue past investment practices that directed a large share of discretionary funding to high-cost capital infrastructure improvements, such as interchange upgrades, or (2) to change course and direct more funding to lower-cost, “operations and management” type projects, such as Complete Streets and intersection improvements. The investment programs established in *Charting Progress to 2040* supported the MPO in pursuing this second option by providing a way for the MPO to set goals for funding certain types of projects without necessarily knowing what specific projects might use that funding. These funding goals then guide the MPO as it made annual decisions about which projects to fund in the Transportation Improvement Program (TIP). When developing a particular TIP, the MPO allocates its discretionary dollars to these investment programs by assigning them to projects that meet the investment programs’ criteria.

The MPO revisited its investment programs when developing *Destination 2040* (adopted in 2019) and modified and expanded the set based on new priorities. Figure 1 displays the MPO’s current set of investment programs and the funding goals set for each in *Destination 2040*.

Figure 1
Destination 2040 Investment Programs and Funding Goals



Source: Boston Region Metropolitan Planning Organization staff.

2 INVESTMENT PROGRAM REVIEW PROCESS

As part of the *Destination 2050* development process, MPO staff have undertaken several activities to review and consider updates to the MPO's investment programs. These activities, which have guided the proposals outlined in Section 3, include the following:

- **Reviewing Laws, Plans, Policies, and Needs:** Staff have reviewed the Bipartisan Infrastructure Law—the current federal transportation authorization bill enacted in 2021—to identify changes in federal funding sources, priorities, and guidelines about projects that are eligible to receive federal highway funds. Staff also reviewed (1) recent federal, state, and regional plans and studies, (2) summaries of past public input, and (3) preliminary analysis products from the *Destination 2050* Needs Assessment to understand needs, goals, and values that should inform investment program changes.
- **Consulting MPO Members:** Staff hosted a MPO member workshop on January 19, 2023, to collect feedback about the MPO's existing investment programs and suggestions for improvements. Staff also provided a written survey that captured the workshop's themes and questions for MPO members who could not attend the event or who wanted to provide additional input. MPO member comments collected through these activities suggest that the MPO's existing set of investment programs is comprehensive, well-balanced across project types, clear to project proponents, and well-connected to the MPO's vision and goals. Members also expressed values, concerns, and ideas in responses to questions staff had about specific programs and potential changes.
- **Collecting Additional Stakeholder Input.** Staff gathered additional ideas, needs, and concerns that could inform updates to the MPO's investment programs by participating in Metropolitan Area Planning Council (MAPC) subregional meetings and stakeholder organization events in 2022. Staff also collected input through an LRTP Vision and Priorities Survey, which was open from November 1, 2022, until January 20, 2023. This survey included questions asking respondents to rank their transportation priorities; identify words and phrases that describe their ideal transportation system; and describe aspects of the Boston region's transportation system that need to be improved. Overall, 982 people answered some or all the survey questions. Results from this survey showed that, of the 667 people who ranked their priorities for improving the region's transportation system:

- 72 percent included improving transit access and reliability in their top three priorities.
 - 43 percent included bicycle and pedestrian safety in their top three priorities.
 - 34 percent included bicycle and pedestrian network connectivity in their top three priorities.
 - 33 percent included roadway safety in their top three priorities.
- **Consulting Project Proponents and Implementing Agencies:** Staff have also consulted with implementing agencies and project proponents—such as the Massachusetts Department of Transportation (MassDOT), the Massachusetts Bay Transportation Authority, the Cape Ann Transportation Authority (CATA) and the MetroWest Regional Transit Authority (MWRTA)—to understand their needs and what challenges they face when applying for funding or when implementing or administering projects funded through the MPO’s investment programs. Staff have also consulted with liaisons from the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) to understand opportunities and constraints associated with different federal funding programs. Staff also considered lessons learned from implementing projects through the MPO’s existing set of investment programs in coordination with these partner organizations.

3 PROPOSED MPO INVESTMENT PROGRAMS

3.1 Complete Streets

Overview

The MPO established its Complete Streets investment program as part of the *Charting Progress to 2040* plan adopted in 2015 and continued it as part of the *Destination 2050* plan adopted in 2019. This program modernizes roadways to achieve a variety of MPO goals, such as improving safety, infrastructure condition, and multimodal mobility and access. The corridor projects funded by this program are initiated through the MassDOT Highway Division Project Development Process and designs are reviewed by MassDOT personnel. Complete Street project elements can include the following:

- new or improved sidewalks and other pedestrian accessibility improvements
- bicycle lanes, cycle tracks, and other bicycle facilities on or adjacent to the roadway corridor

- upgrades to roadway geometry and cross sections, which can include road diets
- dedicated bus lanes within a corridor improvement project
- new or improved signals, including those that support transit signal priority
- pavement, bridge, drainage, and streetscape improvements

MPO members have noted that the MPO's Complete Streets program is well-received in Boston region municipalities and helps these municipalities to address safety needs and support bus and bicycle transportation on the region's roadways.

MPO staff do not propose any high-level changes to the Complete Streets Investment Program. When revisiting program criteria and encouraging proponents to submit projects, the MPO could continue to emphasize that it is interested in funding projects that support bus mobility—such as through dedicated bus lanes or transit signal priority—or that ensure that transportation is resilient to weather events and climate change. Similarly, the MPO could encourage projects that support neighborhood connections both along and across corridors. Finally, the MPO could also consider—in accordance with guidance from MassDOT and federal agencies—whether to make some funds available through this program to design Complete Streets projects, in addition to the funds it makes available to cover construction costs.

Program Implementation

Under this proposal, the MPO would continue the Complete Streets program established under previous LRTPs. In *Destination 2050*, this investment program would be in effect from Federal Fiscal Years (FFY) 2024 through 2050.

3.2 Intersection Improvements

Overview

Like the Complete Streets program, the MPO established its Intersection Improvements program as part of *Charting Progress to 2040* and continued it as part of *Destination 2040*. This program supports projects that enhance intersections in ways that improve safety and mobility for pedestrians, bicyclists, buses, and cars. Projects funded by this program are initiated through the MassDOT Highway Division Project Development Process and designs are reviewed by MassDOT personnel. They are distinct from Complete Streets projects in that they are focused on one intersection, or several intersections spread out in an area (as opposed to those aligned in the corridor), but they often include elements similar to those in Complete Streets projects:

- Upgrades to existing signals or new signals
- Changes to roadway geometry, such as new turn lanes
- Striping and lighting, including for bicycle lanes
- Shortened crossing distances for pedestrians
- Improved curb cuts

As with the Complete Streets program, MPO staff do not propose any high-level changes to this program as part of *Destination 2050*. Should the MPO decide to make funding available for design costs as well as construction costs, it could do so through this program as well.

Program Implementation

Under this proposal, the MPO would continue the Intersection Improvements program established under previous LRTPs. In *Destination 2050*, this investment program would be in effect from FFYs 2024 through 2050.

3.3 Major Infrastructure

Overview

The MPO first established a Major Infrastructure program as part of the *Charting Progress to 2040* plan, and it invests in projects that modernize or expand expressways, major arterials, or transit systems to reduce congestion and improve safety. This program supports the MPO's understanding of the share of discretionary funding for large, regional scale roadway and transit projects as opposed to lower-cost, community-level projects. This understanding was important in 2015 as the MPO chose to pursue an "operations and management" approach to spending its transportation dollars—giving priority to low-cost, non-major infrastructure projects.

The roadway-oriented projects funded by the Major Infrastructure program initiated through the MassDOT Highway Division Project Development Process and designs are reviewed by MassDOT personnel. The design for the Green Line Extension Phase 1 project—funded in part with MPO Major Infrastructure program dollars, was overseen by the Massachusetts Bay Transportation Authority (MBTA). The criteria for including projects in the Major Infrastructure program have evolved over time in response to changes in federal guidance and

MPO board deliberations. The current criteria were adopted by the MPO in October 2020 and are listed below.¹

Roadway Projects

Major Infrastructure projects on the roadway network include those that meet at least one of the following criteria:

1. Capital projects that improve facilities that are important to regional travel, which include the following:
 - Interstate highways
 - Principal arterial freeways and expressways
 - All sections of roadways classified as Principal Arterial “Other” that have fully or partially controlled access
2. Projects that cost \$50 million or more

Transit Projects

Major Infrastructure projects on the transit network include those that meet at least one of the following criteria:

1. Capital projects that add new connections to or extend the rail or fixed guideway transit network
2. Projects that cost \$50 million or more

MPO staff do not propose any changes to the criteria for including projects in this program in *Destination 2050*. As with the Complete Streets program, the MPO could continue to encourage projects that support bus mobility, transit access, transportation system resiliency, and neighborhood connectivity. Currently, like other MPO investment programs, the Major Infrastructure program has funded costs to construct projects. The MPO could consider—in accordance with guidance from MassDOT and federal agencies—whether to make some funds available to design projects that would meet the criteria for the major infrastructure program.

Program Implementation

Under this proposal, the MPO would continue the Major Infrastructure program established under previous LRTPs, and projects would fall into this category

¹ Boston Region Metropolitan Planning Organization. “Updates to Policies for Including Projects in the LRTP.” January 26, 2023. Available at https://www.ctps.org/data/calendar/pdfs/2023/0126_MPO_LRTP_Policies_Memo.pdf

based on the criteria established in October 2020 and affirmed in January 2023. In *Destination 2050*, this investment program would be in effect from FFYs 2024 through 2050. When allocating discretionary funding to its investment programs, the MPO can revisit its policies for directing funding to the Major Infrastructure program. The MPO set the following policies when making funding allocation decisions for *Destination 2040*:

- No more than 30 percent of available funding in each five-year time band would be allocated to major infrastructure projects.
- If one major infrastructure project required more than 30 percent of funding in a particular time band, it would not be programmed.

3.4 Bicycle Network and Pedestrian Connections

Overview

The MPO's Bicycle Network and Pedestrian Connections program was established in *Charting Progress to 2040* and continued in *Destination 2040*. Projects funded through this program are intended to expand the region's bicycle and pedestrian network and support safe bicycle and pedestrian access to key destinations. Like roadway projects in the Complete Streets, Intersection Improvement, and Major Infrastructure Programs, Bicycle Network and Pedestrian Connections projects are initiated through the MassDOT Highway Division Project Development Process and designs are reviewed by MassDOT personnel. This program supports the creation of new off-road bicycle and multi-use paths. It can also fund upgrades to bicycle and pedestrian infrastructure, such as

- improved bicycle and pedestrian crossings;
- new or expanded sidewalks;
- enhanced signage and lighting;
- traffic calming features; and
- upgrades for bicyclists and pedestrians such as those in a Complete Streets or Intersection Improvements project.

MPO staff do not propose any high-level changes to this program as part of *Destination 2050*.

Program Implementation

Under this proposal, the MPO would continue the Bicycle Network and Pedestrian Connections program established under previous LRTPs. In

Destination 2050, this investment program would be in effect from FFYs 2024 through 2050.

3.5 Community Connections

Overview

The Community Connections program is the MPO's funding program for first- and last-mile solutions, community transportation, and other small, nontraditional transportation projects. It evolved out of the Community Transportation/Parking/Clean Air and Mobility Program established through *Charting Progress to 2040* and appeared as the Community Connections program in *Destination 2040*. The goals of this program are to

- create first- and last-mile connections between transit and other modes;
- incentivize collaboration between entities; and
- promote mode shift by filling gaps in the transportation system.

The MPO developed the features and guidelines for this program over time, first through a UPWP study designed to create a program framework, then through a pilot funding round. MPO members and staff continue to refine the program's features and guidelines as they learn from experiences funding different types of projects. Under the current framework, municipalities and regional transit authorities (RTA) in or overlapping the Boston region may apply for Community Connections funding, while other entities, such as transportation management associations and nonprofit organizations, may apply in partnership with a municipality or RTA that has agreed to serve as a project proponent and fiscal manager.

The Community Connections program differs from the other MPO programs first established in *Charting Progress to 2040* in that project proponents apply solely to the MPO, as opposed to initiating the project through the MassDOT Highway Division. Community Connections projects are also implemented in a variety of ways. Table 1 lists the project types that are currently eligible for Community Connections funding and approaches used to implement each.

**Table 1
Community Connections Project Types and Implementation Approaches**

Project Type	Implementation Approach
Bikeshare stations and bicycles	Stations and bicycles are purchased through MAPC-managed bikeshare procurement processes. Installations for the Bluebikes system are managed by the Bluebikes operator, Lyft.
Bicycle lane striping	Materials are purchased through MAPC-managed collective purchase agreement
Bicycle parking and shelters	Applicants select a vendor for materials from at least three possible sources.
Bus lanes	Materials are purchased through MAPC-managed collective purchase agreement. Lanes are designated in coordination with the MBTA prior to application to Community Connections program.
Transit signal priority	Signal systems are implemented in coordination with the MBTA. Proponents must provide a letter indicating MBTA support for the project when applying for funding.
New transit service (fixed route, shuttle, microtransit, or other on-demand service)	Transit services administered by a regional transit authority (strongly encouraged) or by MassDOT staff.

MAPC = Metropolitan Area Planning Council. MassDOT = Massachusetts Department of Transportation.

MBTA = Massachusetts Bay Transportation Authority.

Source: Boston Region Metropolitan Planning Organization staff.

The MPO currently funds Community Connections projects solely with federal Congestion Mitigation and Air Quality Improvement (CMAQ) funds. As such, all projects must demonstrate a benefit to the quality of the air in the Boston Region MPO’s area and meet other federal requirements. Currently, the MPO can provide a maximum of three years of funding for transit service pilot projects, and project proponents must provide certain reporting metrics after each year so that the project’s continuing air quality benefit can be confirmed. The local match to federal funding provided by the Community Connections program is expected to increase annually, while the federal share of funding for the project is expected to decline each year. Projects are expected to demonstrate fiscal sustainability for the fourth year of operation and beyond.

Proposed Community Connections Changes

MPO staff recommend that the MPO continue to include the Community Connections program as a whole in the *Destination 2050* plan. As discussed in Section 3.6, staff recommends that the MPO transition to funding bikeshare projects through a new Bikeshare Support program that would begin in FFY 2029. The Community Connections program would continue to fund bikeshare projects until the new Bikeshare Support program begins and would continue funding other types of community scale first- and last-mile projects in FFY 2029 and beyond.

Program Implementation

Under this proposal, the MPO would continue the Community Connections program established under previous LRTPs. In *Destination 2050*, this investment program would be in effect from FFYs 2024 through 2050. (See Section 3.6 for details specific to bikeshare.)

3.6 Bikeshare Support (New Program)

Overview

As previously mentioned, the MPO currently funds new bikeshare stations and bikes through its Community Connections program using CMAQ funds. In 2022, MAPC staff approached MPO staff about the possibility of creating a separate bikeshare program as part of the MPO's set of investment programs. MAPC serves as the regional coordinator for the Bluebikes bike share system and conducted the regional procurement for the services of Lyft, the operator of Bluebikes. Current participating municipalities include Arlington, Boston, Brookline, Cambridge, Chelsea, Everett, Malden, Medford, Newton, Revere, Salem, Somerville, and Watertown. MAPC's procurement for bikeshare services allows all 101 municipalities in the MAPC region to join the system. To date, 13 MPO municipalities have bikeshare stations that are part of the Bluebikes system.

When approaching MPO staff about a bikeshare program, MAPC staff noted that there continue to be municipal requests to join or expand the Bluebikes system, and stations installed at the system's inception are reaching the stage when they will need to be replaced. Of the 443 stations that were included in the system as of 2022, approximately 27 percent were installed in 2013 or earlier. Also, as the volume of trips taken on the system continue to increase from year to year, depreciation of these assets may accelerate. Dedicated funding for bikeshare capital investments from the MPO would help meet these needs and could support long-term planning to maintain, upgrade, and expand the system. MAPC staff have proposed developing a long-term capital plan for the region's bikeshare system, including developing criteria and methodologies to find the best places to expand the system in terms of meeting needs and attracting riders.

MPO and MAPC staff shared this program idea with MPO members as part of the MPO member investment program workshop and survey. Several members expressed support for the idea, although several others highlighted the challenge municipalities face in funding operating costs for their respective portions of the Bluebikes system. While consistent funding from the MPO for capital expenses could enable municipalities to direct money from other sources to operating costs, expanding the system inherently requires more money to support

operations and maintenance. Several members also noted that if and when e-bikes are incorporated into the region's bikeshare system, both capital and operations costs are likely to increase.

MPO and MAPC consulted with MassDOT, FHWA, and FTA staff to understand whether and how the federal programs that provide MPO discretionary funds could support the replacement of bikeshare capital infrastructure or cover operations costs. Current CMAQ program guidelines indicate that while these funds can be used to purchase new stations and bicycles, they cannot be used for replacement costs. Other FHWA funding sources—particularly Surface Transportation Block Grant (STBG) funds—can likely be used to cover bikeshare replacement costs. However, there currently are no federal funding sources that provide MPO discretionary funding that can be used to support bikeshare operating costs.

Proposed Bikeshare Support Program

MPO staff propose that the MPO create a separate bikeshare support program. The MPO would set aside a certain amount of funding in its TIP each year to support capital costs associated with expanding the system and replacing or upgrading existing stations. Staff recommend that a certain portion of the STBG funds or other eligible funds available to the Boston Region MPO be directed to this program to support existing station replacements and infrastructure upgrades, which are not able to be funded with CMAQ dollars under current guidelines. While this program would likely be focused on supporting the Bluebikes system, it could support other bikeshare initiatives in the region on a case-by-case basis. MPO staff would continue to monitor federal guidance to see if there are changes pertaining to the eligibility of bikeshare operating costs for federal funding.

Program Implementation

Staff will explore opportunities to begin funding a standalone bikeshare program as part of developing funding scenarios for the FFYs 2024–28 TIP. If it is not feasible to begin funding the program during this timeframe, the program would go into effect starting in FFY 2029. Prior to that time, MPO communities would continue to apply for funding for bikeshare capital projects through the Community Connections program.

3.7 Transit Transformation (Modified Program)

Overview

Status of the *Destination 2040* Transit Modernization Program

As part of *Destination 2040*, the MPO established the Transit Modernization program, which would direct MPO discretionary funding to transit maintenance and modernization projects identified through coordination with MassDOT, MBTA, MetroWest Regional Transit Authority (MWRTA), the Cape Ann Transit Authority (CATA), and municipalities. By investing in transit modernization and maintenance projects, the MPO could help improve the quality of transit service and encourage ridership, which could help achieve the mobility, air quality, and other goals established in the LRTP. As part of *Destination 2040*, the MPO set a goal of spending five percent of MPO discretionary funds on this program through 2040. MPO staff suggested a variety of possible projects that could be funded through this program, including the following:

- enhancing customer amenities or increasing capacity at transit stations
- enhancing the accessibility of transit stations, including installing high-level platforms or replacing or installing elevators
- investing in climate resiliency to support the future security of transit infrastructure
- making state-of-good-repair improvements to transit assets, including to tracks, signals, and power systems
- modernizing transit fleets through the purchase of vehicles
- upgrading or expanding parking at transit stations
- upgrading bus maintenance facilities

The MPO established annual set-asides for this program starting in FFY 2025; in FFYs 2025–27, existing set-asides amount to \$6.5 million per year in CMAQ funds for a total of \$19.5 million. MPO staff anticipate that these CMAQ funds from the FHWA would be “flexed” to the FTA for distribution to transit agencies. In addition to these set-asides, in FFY 2024, the MPO flexed an additional \$20 million in STBG funds to the Lynn Station project (\$13.6 million) and the Forest Hills Station project (\$6.4 million).² While these investments took place prior to the official launch of the MPO’s Transit Modernization Program (planned for FFY 2025), they fit within the types of projects identified for this program.

² In FFY 2023, the Boston Region MPO also contributed \$34.5 million to the Lynn Station project. This FFY is outside the timeframe of *Destination 2050*.

Revisiting the Transit Modernization Program for *Destination 2050*

The FFY 2023 Unified Planning Work Program (UPWP) includes a study designed to create specific guidelines for the MPO's Transit Modernization program. A scope of this study has not yet been submitted to the MPO board. In the meantime, MPO staff have been consulting with the MBTA, CATA, MWRTA, MassDOT, and other entities about ways to invest in transit modernization and other transit projects as part of investment programs that may be included in *Destination 2050*. Relevant factors include, but are not limited to

- the features and timing of transit agency capital investment processes;
- opportunities and constraints with respect to flexing FHWA funds to FTA;
- the availability of matching funds for capital investments; and
- methods and challenges for implementing or administering different types of projects.

Through the MPO member investment program workshop and survey, MPO staff identified several themes:

- Transit agency and MPO community needs and MPO, transit agency, and Commonwealth goals should inform the types of projects that are brought before the MPO for consideration. Important values include safety, resiliency, and equity.
- Members acknowledged that achieving a state of good repair for the region's transit assets is an ongoing issue, but needs in this area are extensive, especially when compared to the amount of funding the MPO has currently set aside for this program. (Note: Several members expressed openness to increasing the amount of the annual set-aside.) Several members expressed a desire for investments through a transit modernization program to be transformative.
- Several MPO members said that investments should help expand or improve access to the transit network—this could include improving accessibility for people with disabilities as well as access to transit services for people in general. Some expressed concern that a focus on state-of-good-repair limits opportunities for expanding access.
- Several members expressed interest in supporting transit electrification.
- In response to questions about bus-related infrastructure, MPO members expressed support for investments such as bus lanes, bus shelters, customer service and wayfinding improvements, and transit signal priority systems.

MPO staff also looked to feedback from other stakeholders when revisiting *Destination 2040's* Transit Modernization Program. Results from the LRTP Vision and Priorities survey showed that, of people who ranked their priorities for improving the region's transportation system, 72 percent included transit access and reliability in their top three priorities. Survey respondents also identified frequency, reliability, and coverage as top areas for transit improvements. Desired improvements mentioned by attendees at MAPC Subregional Council meetings include, but are not limited to, implementing dedicated bus lanes and electrified transit service, creating transit hubs, and improving transit connections and access to transit stations.

Proposed Transit Transformation Program

MPO staff propose updating the Transit Modernization Program included in *Destination 2040* to a broader Transit Transformation Program for *Destination 2050*. This program could expand beyond the state-of-good-repair and transit infrastructure upgrade themes suggested by the term "modernization" to incorporate the multimodal access and other goals mentioned by MPO members and stakeholders. It could also allow the MPO more flexibility to adapt to lessons learned from its experiences investing MPO funds in transit projects, as well as to respond to new opportunities to direct funds to transit projects that are of interest to the MPO.

For the purposes of the MPO allocating funds to different investment areas, this program would fund transit-related investments with higher costs than those typically included in the MPO's Community Connections program (typically less than \$500,000) but that do not meet the criteria for the Major Infrastructure Program. (Transit projects must add new connections to or extend the rail or fixed guideway transit network, or cost \$50 million or more to be included in the MPO's Major Infrastructure Program.) Table 2 illustrates some examples of project types that could be included in different MPO investment programs, based on their scale, characteristics, or how they may be designed and implemented.

Table 2
Examples of Transit-Related Project Types
by Existing or Proposed MPO Investment Program

Investment Program	Examples of Potential Project Types
Community Connections	<ul style="list-style-type: none"> • Bus lanes implemented by municipalities in coordination with the MBTA • Transit signal priority implemented by municipalities and the MBTA at specific locations
Complete Streets	<ul style="list-style-type: none"> • Bus lanes and transit signal priority systems implemented as part of MassDOT-managed roadway projects, in coordination with the MBTA
Intersection Improvements	<ul style="list-style-type: none"> • Transit signal priority systems implemented as part of MassDOT-managed roadway projects, in coordination with the MBTA
Transit Transformation (proposed)	<ul style="list-style-type: none"> • Station or facility investments costing less than \$50 million • Multimodal access improvements near or at transit stations • Transit system electrification projects costing less than \$50 million • Transit customer amenities (such as bus shelters) implemented at multiple locations
Major Infrastructure	<ul style="list-style-type: none"> • Bus lanes and transit signal priority systems implemented as part of MassDOT-managed roadway projects, in coordination with the MBTA • Fixed guideway extensions (such as the Green Line Extension Phase 1) • Creation of new fixed-guideway stations • Station or facility improvements costing \$50 million or more

Note: This table does not reflect an exhaustive list of potential project types.
 MassDOT = Massachusetts Department of Transportation. MBTA = Massachusetts Bay Transportation Authority.
 Source: Boston Region Metropolitan Planning Organization staff.

As part of this proposal, the MPO could modify the existing UPWP study to define guidelines for a Transit Modernization program to defining guidelines for a more comprehensive Transit Transformation program instead. Through this UPWP study, MPO staff would continue to consult with MPO board members, agencies, municipalities, and other stakeholders to specify project eligibility guidelines, processes for submitting candidate projects, processes for implementing or administering projects, and other considerations. These discussions could inform stakeholder coordination not only for the Transit Transformation program, but other MPO investment programs as well. Specifically, additional coordination is needed between MPO staff, MassDOT OTP and Highway Division, and the MBTA regarding roles, responsibilities, and jurisdictional considerations for projects such as bus lanes and other transit-related improvements on roadways. For these kinds of projects, clarity is needed

on which agency or municipality would lead implementation, project development and delivery, and oversight. These ongoing conversations would ideally help to establish a pipeline of transit-related projects for investment in upcoming TIP years.

Program Implementation

Under this proposal, the MPO would direct FFYs 2024–28 funding set-asides for the Transit Modernization program in consultation with the MPO board, the MBTA, CATA, MWRTA, MassDOT, and other stakeholders, prior to more detailed program guidelines being available. For example, the MPO could work with the MBTA and the region’s municipalities to fund capital investments that support the bus network established through the Bus Network Redesign process. This Transit Transformation program would officially take effect in FFY 2029 and apply through 2050.

3.8 Proposed *Destination 2050* Investment Programs and MPO Goals

Table 3 describes the relationship between staff’s proposed investment programs for *Destination 2050* with the goal areas that the MPO established for the *Destination 2050* plan at its February 2, 2023, meeting.³

4 REQUESTED ACTION AND NEXT STEPS

MPO staff request that MPO members provide feedback about this set of proposed *Destination 2050* investment programs at its March 16, 2023, meeting. Following the meeting, staff would review this feedback, make modifications, and share revised investment program proposals with the MPO board. If MPO members are satisfied with these *Destination 2050* investment programs as presented, staff request that MPO members concur with this set of programs. Staff would then incorporate these programs into recommendations for how the MPO should allocate estimated funds to programs and projects in the *Destination 2050* plan.

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³ Boston Region Metropolitan Planning Organization. “Revisions to the Draft Destination 2050 Planning Framework.” February 2, 2023. Available at https://www.ctps.org/data/calendar/pdfs/2023/0202_MPO_LRTP_Revised_Planning_Framework.pdf

Table 3
Proposed *Destination 2050* Investment Programs and Relationship to MPO Goals

Investment Program	Safety	Mobility and Reliability	Access and Connectivity	Resiliency	Clean Air and Healthy Communities	Equity
Complete Streets	Modernizes roadway geometry and infrastructure to provide safe conditions for people who walk, bike, roll, use assistive mobility devices, travel by car, or take transit.	Provides bicycle and pedestrian facilities and roadway features—such as bus lanes—that improve transit mobility. Improves pavement, bridge, signal, and sidewalk condition.	Upgrades roadway features to improve bicycle, pedestrian, and transit access to key destinations and enhances bicycle and pedestrian network connectivity. Provides multimodal travel options and removes barriers so that all can use the transportation system regardless of ability.	Adapts roadway corridors that are vulnerable to climate change and natural hazards to improve resilience, such as by resizing culverts, elevating low-lying roadways, or improving stormwater drainage.	Reduces greenhouse gas and other emissions by improving bicycle, pedestrian, and transit options in roadway corridors, which can encourage mode shift and reduce vehicle miles traveled.	Improves safety, mobility, reliability, access, infrastructure condition, transportation options, network connectivity, accessibility, and air quality in disadvantaged communities, depending on project location.
Intersection Improvements	Modernizes intersection geometry and infrastructure to provide safe conditions for people who walk, bike, roll, use assistive mobility devices, travel by car, or take transit.	Improves signals and intersection features—such as sidewalks, geometry, and pavement—to improve mobility for people who walk, bike, roll, use assistive mobility devices, travel by car, or take transit.	Improves bicycle and pedestrian network connectivity at intersections. Removes barriers so that all can use the transportation system regardless of ability.	Adapts intersections that are vulnerable to climate change and natural hazards to improve resilience, such as by improving stormwater drainage.	Reduces greenhouse gases and other transportation emissions by improving bicycle and pedestrian facilities, transit mobility, and the overall efficiency of intersections, which can encourage mode shift, reduce vehicle-miles traveled, and reduce excessive idling.	Improves safety, mobility, reliability, infrastructure condition, network connectivity, accessibility, and air quality in disadvantaged communities, depending on project location.
Major Infrastructure	Modernizes roadway or infrastructure geometry and infrastructure to provide safe conditions for people who walk, bike, roll, use assistive mobility devices, travel by car, or take transit.	Provides bicycle and pedestrian facilities and roadway features—such as bus lanes—that improve transit mobility. Improves pavement, bridge, signal, and sidewalk condition.	Upgrades roadway features to improve bicycle, pedestrian, and transit access to key destinations and enhances bicycle and pedestrian network connectivity. Expands the transit network to provide service in new locations. Removes barriers so that all can use the transportation system regardless of ability.	Adapts roadway corridors, intersections, and transit infrastructure elements that are vulnerable to climate change and natural hazards to improve resilience.	Reduces greenhouse gases and other transportation emissions by improving multimodal mobility in roadway corridors or by expanding or creating new connections on the transit network, which can encourage mode shift and reduce vehicle-miles traveled.	Improves safety, mobility, reliability, access, infrastructure condition, transportation options, network connectivity, accessibility, and air quality in disadvantaged communities, depending on project location.
Bicycle Network and Pedestrian Connections	Creates or improves bicycle and pedestrian facilities to provide safe conditions for people who walk, bike, roll, or use assistive mobility devices.	Improves sidewalks and paths, and crossings to improve bicycle and pedestrian mobility.	Enhances bicycle and pedestrian network connectivity, which can help improve access to key destinations. Removes barriers so that all can use the transportation system regardless of ability.	Improves bicycle and pedestrian facilities that are vulnerable to climate change and natural hazards to improve resilience.	Reduces greenhouse gases and other transportation emissions by enhancing bicycle and pedestrian facilities, which can encourage mode shift and reduce vehicle-miles traveled.	Improves safety, mobility, reliability, access, transportation options, network connectivity, air quality, and accessibility, in disadvantaged communities, depending on project location.

Investment					Clean Air and Healthy	
Program	Safety	Mobility and Reliability	Access and Connectivity	Resiliency	Communities	Equity
Community Connections	N/A	Supports bus lanes and transit signal priority implementation to improve bus mobility, and bike lanes to improve bicycle mobility.	Supports first- and last-mile connections by walking, biking, and transit. Provides new transportation options such as shuttle service.	N/A	Reduces greenhouse gases and other transportation emissions by providing non-SOV options for making first- and last-mile connections to transit and key destinations, which can encourage mode shift and reduce vehicle-miles traveled.	Improves transportation options, air quality, and first- and last-mile connections in disadvantaged communities, depending on project location.
Bikeshare Support	N/A	Improves the condition of bikeshare infrastructure.	Expands and enhances the region's bikeshare network to provide another travel option to access to key destinations.	N/A	Reduces greenhouse gases and other transportation emissions by enhancing a non-SOV travel option, which can encourage mode shift and reduce vehicle-miles traveled.	Improves access to and the quality of bikeshare options and air quality in disadvantaged communities.
Transit Transformation	Improves safety for transit passengers and employees by improving stations, facilities, and other transit infrastructure, and by providing safer connections to transit service for people who walk, bike, roll, or use assistive mobility services.	Upgrades infrastructure, stations, and facilities, including by improving customer amenities. Supports the electrification and modernization of transit vehicles and systems, as well as improved mobility and reliability on transit networks.	Improves connections to transit stations and stops. Enhances the quality of transit near key destinations, including housing and economic centers. Removes barriers so that all can access transit services and facilities, regardless of ability.	Adapts transit infrastructure elements that are vulnerable to climate change and natural hazards to improve resilience.	Reduces greenhouse gases and other transportation emissions by electrifying transit systems and by enhancing a non-SOV travel option, which can encourage mode shift and reduce vehicle-miles traveled.	Improves safety, mobility, reliability, transportation options, air quality, and accessibility in disadvantaged communities, depending on project location.

N/A = not applicable. Non-SOV = non single-occupancy vehicle.
Source: Boston Region Metropolitan Planning Organization staff.

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Title VI Specialist
Boston Region MPO
10 Park Plaza, Suite 2150
Boston, MA 02116
civilrights@ctps.org

By Telephone:

857.702.3700 (voice)

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