

# appendix



## Draft Disparate Impact and Disproportionate Burden Policy for the Long-Range Transportation Plan

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### FEDERAL REQUIREMENT

The Federal Transit Administration's (FTA) Title VI Circular 4702.1B, issued October 2012, under the authority of Title VI of the Civil Rights Act of 1964, directs metropolitan planning organizations (MPOs) to analyze the impacts of the distribution of state and federal funds in the aggregate and to identify any disparate impacts on the basis of race, color, or national origin (for example, impacts to minority populations). FTA's Environmental Justice (EJ) Circular 4703.1, issued August 2015, further directs MPOs to identify and address disproportionately high and adverse effects (referred to as disproportionate burdens) of its activities on minority populations and low-income populations. The Federal Highway Administration's (FHWA) *Environmental Justice Reference Guide*, issued in April 2015, also contains the same requirements for MPOs related to identifying disparate impacts and disproportionate burdens.

### PURPOSE OF THE POLICY

As a recipient of federal funding from FTA and FHWA, the Boston Region MPO complies with both agencies' Title VI and EJ requirements. The MPO's Disparate Impact and Disproportionate Burden (DI/DB) Policy allows the MPO to identify potential regionwide future disparate impacts on minority populations and disproportionate burdens on both minority populations and low-income populations in the MPO region (collectively referred to as protected populations) that may result from the set of investment decisions in its Long-Range Transportation Plan (LRTP). DI/DBs are defined by FTA and FHWA as follows.

- **Disparate Impact:** A facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the policy or practice lacks a substantial legitimate justification and where there exists one or more alternative policies or practices that would serve the same legitimate objectives but with less disproportionate effect on the basis of race, color, or national origin.

- **Disproportionate Burden:** A neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations. A finding of a disproportionate burden requires the evaluation of alternatives and mitigation of burdens where practicable. (Note that although EJ guidance covers minority populations as well, disproportionate burdens only address those impacts to low-income populations as minority populations are covered by the more stringent definition of a disparate impact.)

While neither FTA nor FHWA require MPOs to have a DI/DB policy, the policy will allow the MPO to make those determinations in a clear and consistent manner and clearly convey the findings to the public.

This policy is a draft that reflects completion of the first phase of the MPO's development of a DI/DB policy. The MPO will begin phase two in federal fiscal year 2020, which will consist of developing thresholds for metrics that indicate when projected impacts to protected populations are significantly greater than those to non-protected populations. The MPO will incorporate the findings into this policy when that work is complete.

## SCOPE

This policy applies to the analysis of the projected impacts of the set of major infrastructure projects that would have funding programmed in the LRTP for construction over the next 20 years—called the LRTP program of projects. These projects are analyzed for impacts as one group; individual projects are not analyzed for disparate impacts or disproportionate burdens under this policy. Major infrastructure projects are considered by the MPO to be those that cost at least \$20 million and/or increase the capacity of the transportation network. The MPO reserves funds for these projects in the LRTP's Major Infrastructure Program and also sets aside funding in several other investment programs as described in the LRTP. The actual projects funded through these other programs in the near-term (the next five years) are defined in the Transportation Improvement Program (TIP). These projects will be included in the equity analysis that is completed for the projects programmed in the TIP.

## COMPARISON POPULATIONS

Per FTA and FHWA requirements, the analysis to identify disparate impacts and disproportionate burdens (DI/DB analysis) compares the projected impacts on the entire protected population in the MPO region to the projected impacts on the entire non-protected population in the MPO region. Analyzing and comparing impacts on these populations at the neighborhood and municipal scale is not part of this policy as impacts of the program of projects are only identified at the regional population level. Thus, the projected impacts on the minority population in the MPO region are compared to those on the nonminority population, and the projected impacts on the low-income population in the MPO region

are compared to those on the non-low-income population. According to FTA and FHWA, the definitions of these populations are as follows:

- **Minority:** People who identify as Black or African American, Asian, American Indian or Alaska Native, or Native Hawaiian or other Pacific Islander, and/or Hispanic or Latino/a/x
- **Nonminority:** All other people
- **Low-income:** Households for which the median household income is equal to or less than 60 percent of the region’s median, which is \$45,392
- **Non-low-income:** All other households<sup>1</sup>

## IDENTIFYING DISPARATE IMPACTS AND DISPROPORTIONATE BURDENS

The MPO staff use a travel demand model to analyze the projected impacts of the LRTP program of projects over the 20-year horizon on the regionwide minority, nonminority, low-income, and non-low-income populations. Two scenarios projecting to the horizon year of the LRTP are analyzed to assess these impacts: the no-build scenario (in which the program of projects is not implemented) and the build scenario (in which the program of projects is implemented). The results are assessed as weighted regionwide averages.

To identify potential future DI/DBs, the MPO staff analyzes several metrics for both scenarios and compares the results. Based on input from the public, the MPO selected metrics related to accessibility, mobility, and the environment. Due to the evolving nature of the analytical process, the specific metrics used to identify DI/DBs may be updated. The MPO staff has identified each metric’s forecasting error—expressed as an absolute value—for minority, low-income, nonminority, and non-low-income populations. The forecasting error accounts for the uncertainty in the travel demand forecasting process and helps to ensure that outcomes are not incorrectly labeled as potential DI/DBs that are likely due to model forecasting error. The forecasting error is distinct for each population because each populations’ size, geographic distribution, and projected travel behavior differs.

For each population and metric, the applicable forecasting errors are compared to the model output to determine whether the impact likely would be caused by the implementation of the LRTP program of projects or forecasting error. According to the MPO’s policy, any impact that is projected to adversely affect the protected population more than the non-protected population, and where the MPO can be confident that this is not due to model uncertainty, would indicate a potential future DI/DB. Adverse impacts can either be the denial of benefits or the imposition of burdens. For some impacts (such as average travel time) an increase from the no-build to build scenarios will indicate a burden and a decrease will indicate a benefit, while for other impacts the reverse will be true (such as access to jobs).

<sup>1</sup> Minority status is derived from the 2010 Decennial Census. Household income is derived from the 2010–14 American Community Survey.

Upon completion of the second phase of developing the DI/DB Policy, additional thresholds will be incorporated into the policy that will allow the MPO to determine when an impact on the protected population is significantly greater than the impact on the non-protected population, per federal guidance.

The following is an example of how the DI/DB analysis is conducted, using hypothetical outputs of average regionwide travel time.

1. The travel demand model reports the projected results for each metric. Table 1 shows results of a hypothetical analysis of travel time, where the third column shows the model outputs and the fourth column shows the projected change between the no-build and build scenarios.

**Table C-1**  
**Example of Projected Average Travel Time**

Population	Scenario	Average Travel Time (Minutes)	No-build/Build Change (Minutes)
Regionwide minority population	No-build	10.0	
	Build	12.0	+2.0
Regionwide nonminority population	No-build	20.0	
	Build	22.0	+2.0

Source: Boston Region MPO.

2. Next, for each population the no-build scenario output is subtracted from the build scenario output resulting in the projected impact of the LRTP program of projects on each population. The absolute value of the projected impact is compared to the absolute value of the forecasting error for that population. If the absolute value of the projected impact is greater than the absolute value of the forecasting error, there likely would be an impact to that population.

To continue with the travel time example in Table 1, the following calculations would be done for each population:

### Minority Population

Where the forecasting error is  $\pm 1$  minute:

- *Travel time impact = Build scenario – No-build scenario*  
example:  $12 \text{ minutes} - 10 \text{ minutes} = +2 \text{ minutes}$
- *Comparison of the absolute value of the travel time impact |2 minutes| to the absolute value of the forecasting error |1 minute|*  
 $|2 \text{ minutes}| > |1 \text{ minute}|$
- *Result: Since 2 minutes is greater than 1 minute, there likely would be an impact.*

## Nonminority Population

Where the forecasting error is  $\pm 3$  minutes:

- *Travel time impact = Build scenario – No-build scenario*  
example:  $22 \text{ minutes} - 20 \text{ minutes} = +2 \text{ minutes}$
  - *Comparison of the absolute value of the travel time impact |2 minutes| to the absolute value of the forecasting error |3 minutes|*  
 $|2 \text{ minutes}| < |3 \text{ minutes}|$
  - *Result: Since 2 minutes is less than 3 minutes, there likely would not be an impact.*
3. Finally, the regionwide projected impacts on the protected population are compared to the regionwide projected impacts on the non-protected population to determine if there would likely be a DI/DB. There would be a DI/DB if
- the MPO region's protected population is projected to receive less of a benefit than the MPO region's non-protected population; or
  - the MPO region's protected population is projected to experience a greater burden than the MPO region's non-protected population.

In the example above, the MPO's regionwide minority population would be likely to experience an increase in travel time (a burden), whereas the MPO's regionwide non-minority population would not. Therefore, the minority population would be projected to experience, on average, a greater burden than the nonminority population. This would indicate a potential future disparate impact.

## ADDRESSING DISPARATE IMPACTS AND DISPROPORTIONATE BURDENS

If the DI/DB analysis for a given program of projects results in a finding of a potential future disparate impact for at least one metric, the MPO staff will determine whether there is a substantial, legitimate justification for implementing the program of projects as proposed, as required by federal regulations, and present the conclusion to the MPO board. Staff will also determine whether there are one or more alternatives to the program of projects that meet the same goals of the original projects but that have fewer disparate impacts. If there are, staff will present the alternatives to the MPO board. Any proposed alternative(s) will be subject to the same DI/DB Policy and analysis.

Similarly, if the DI/DB analysis indicates that there is a potential future disproportionate burden for at least one metric, the MPO staff will recommend to the MPO board steps to take to avoid, minimize, or mitigate these impacts, where practicable.

For both potential DI/DBs, alternatives may include a mixture of strategies to mitigate, minimize, or otherwise avoid these impacts. Because the LRTP is a long-term planning document and the projected impacts are likely to occur 20 years into the future, these strategies will likely involve programming future TIP projects in order to mitigate the disparate impact(s) and/or disproportionate burden(s). The MPO board also intends to use this policy during the development of future LRTPs, when conducting scenario planning or making decisions about project programming, to avoid DI/DBs prior to project selection.

## PUBLIC PARTICIPATION

Members of the public have had, and will continue to have, opportunities to provide input throughout the revision and implementation of this policy. This current draft DI/DB Policy, as well as the metrics that are analyzed for DI/DBs, reflect public input from outreach conducted in 2018. During the development of future LRTPs, the public will also have the chance to review and comment on the results of the application of the DI/DB Policy to any scenario planning or other project selection process. The MPO board will also provide a meaningful opportunity for public comment on any proposed alternatives recommended by the MPO staff. Finally, MPO staff will conduct further public outreach to support future updates to this policy.

# appendix



## Public Outreach for *Destination 2040*

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### INTRODUCTION

Boston Region Metropolitan Planning Organization (MPO) staff conducted outreach activities throughout the development of the *Destination 2040* Long-Range Transportation Plan (LRTP). Outreach began in October 2017 with the development of the Needs Assessment and continued through the 30-day public comment period for the draft LRTP in July and August 2019. This appendix summarizes the outreach activities and public input received during the different phases of LRTP development: Needs Assessment, vision, goals and objectives revisions, and project and program selection. It concludes with the comments received during the formal 30-day public comment period for the draft LRTP.

The MPO engaged a wide variety of individuals in the development of *Destination 2040*, including:

- Regional Transportation Advisory Council (Advisory Council)
- Municipalities
- Transportation agencies, including the Massachusetts Department of Transportation (MassDOT), the Massachusetts Bay Transportation Authority (MBTA), and regional transit authorities
- Professional groups (for example, planners, and engineers, etc.)
- Community organizations
- Transportation equity groups
- Economic development and business organizations
- Transportation and environmental advocates

MPO staff used a variety of communication and engagement methods to engage the public and solicit feedback from the community which included:

- In-person meetings with the Advisory Council, the Metropolitan Area Planning Council (MAPC) subregional groups, stakeholder organizations, and partner events
- MPO-sponsored events including MPO meetings, Office Hours, and Open Houses
- LRTP website content
- Electronic notifications including emails, social media, MPO blogs, and the MAPC monthly newsletters

The following sections summarize the input received during the development of *Destination 2040*.

## DESTINATION 2040 NEEDS ASSESSMENT OUTREACH

Public outreach was conducted to gather input from the public to identify the transportation needs in the Boston Region MPO that were used to develop the *Destination 2040* Needs Assessment. This section provides a summary of the outreach conducted for the Needs Assessment. A more detailed discussion of the public outreach process is included in Appendix D of the *Destination 2040* Needs Assessment document.

Table D-1 summarizes the in-person meetings, webpage content, emails, social media, and other electronic means that were used in the process. Through in-person and online outreach, MPO staff received more than 2,000 ideas about needs and opportunities for improving the transportation system. MPO staff summarized the comments and included the information by goal area in the Stakeholders/Public Input sections in Chapters 4 through 9 of the Needs Assessment.



**Table D-1**  
**Summary of Communication and Engagement Activities for the Needs Assessment**

Type of Outreach	Date	Event
MPO Meetings	2016 through 2018	Presented work plan, travel demand model results, demographic projections process and results, and draft Needs Assessment recommendations
Regional Transportation Advisory Council Meetings	2018	Gathered input, provided updates, and presented draft recommendations
MAPC Subregional Group Meetings	2017 and 2018	Gathered input on transportation needs and presented draft recommendations
Stakeholder Group Meetings	2017 and 2018	Gathered transportation needs
Partner Events	2017 and 2018	Gathered transportation needs
Office Hours	2017 and 2018	Gathered transportation needs
Open Houses	2018	Gathered transportation needs
Webpage	2017 and 2018	Provided timeline of Needs Assessment development, surveys, and draft recommendations
Electronic Notification	2017 and 2018	Notified stakeholders of milestones and participation opportunities
Emails	2017 and 2018	Notified interested parties about opportunities for engagement
Tweets	2017 and 2018	Followed by transportation advocates, community groups, and government agencies
Electronic Surveys and Comments	2018	Published surveys seeking input on transportation needs

MAPC = Metropolitan Area Planning Council. MPO = Metropolitan Planning Organization.  
 Source: Boston Region MPO.

## DESTINATION 2040 VISION, GOALS, AND OBJECTIVES OUTREACH

Public input from the outreach process for the Needs Assessment was used to revise the vision, goals, and objectives that were included in the previous LRTP *Charting Progress to 2040*. Most of the goals and objectives established in *Charting Progress to 2040* were broad enough to cover the topics and concerns identified from public comments and results from analyses conducted for *Destination 2040*. Several changes were made in order to achieve greater clarity on resilience, transportation modernization, and their relationship to the MBTA's *Focus40* plan. Other changes were made to better align the objectives with the roles and responsibilities of the MPO and to incorporate new planning requirements.

MPO staff published an online survey to seek public feedback on the proposed revisions to the *Destination 2040* vision, goals, and objectives. Table D-2 summarizes the comments received and responses MPO staff provided to the commenters. More detailed information on the revised vision, goals, and objectives can be found in Appendix E in the *Destination 2040* Needs Assessment.

**Table D-2**  
**Summary of Comments and MPO Responses for *Destination 2040* Vision, Goals, and Objectives**

L RTP Goal/Topic	Comment Summary	MPO Staff Response
Economic Vitality	Objective should cross-reference <i>Focus40</i> and add criteria for investments that serve locations like the Longwood Medical Area	Staff proposed change to Economic Vitality objective to prioritize transportation investments that serve “Priority Places” identified in MBTA’s <i>Focus40</i> plan.
System Preservation	More details are needed in the Modernization category. There should be more emphasis on resiliency.	Staff will consider details when reviewing evaluation criteria and performance measures.
Capacity Management and Mobility	There should be more emphasis on multi-person vehicles such as carpooling/vanpooling	Non-single-occupant vehicle travel options are supported in the Capacity Management and Mobility goal for the roadway objective.
Technical Assistance	Include a specific objective to assist communities with regional negotiation of rail trail or other trail acquisition work	Details are covered in the Technical Assistance Program.
Performance Measures	Include a metric to measure emerging technologies	Details are considered when reviewing evaluation criteria and performance measures.

L RTP = Long-Range Transportation Plan. MBTA = Massachusetts Bay Transportation Authority. MPO = Metropolitan Planning Organization.

Source: Boston Region MPO.

## DESTINATION 2040 UNIVERSE OF PROGRAMS AND PROJECTS OUTREACH

In addition to the survey focusing on visions, goals, and objectives, MPO staff also created a survey designed to gauge public opinion on the content of the Universe of Programs and Projects for *Destination 2040*. The survey helped the MPO to understand how well respondents felt the proposed Universe of Programs and Projects helps to accomplish the MPO’s goals and aligns with its vision for the future. Table D-3 summarizes the questions

asked in the survey and what types of programs were important to respondents. Table D-4 shows projects that respondents advocated for as part of the MPO’s existing investment programs. The projects are categorized using the six MPO program categories. More detailed information on the Universe of Programs and Projects can be found in Appendix A of this *Destination 2040* document.

**Table D-3**  
**Summary of Comments for *Destination 2040* Universe of Programs**

Survey Questions	Survey Results and Summary of Comments
How important are the existing and proposed investment programs to you?	<ul style="list-style-type: none"> <li>• More than 70 percent of the respondents think that the proposed Transit Modernization program is important, followed by Bicycle Network and Pedestrian Connections Program and Major Infrastructure Program (Approximately 60 percent).</li> <li>• Almost 100 percent of the respondents think that Intersection Improvements are important or somewhat important.</li> </ul>
The MPO is considering adding the following proposed project types to those eligible for funding under the existing investment programs. How important are the proposed project types to you?	<ul style="list-style-type: none"> <li>• More than 60 percent of the respondents think that flexing MPO discretionary funding to transit modernization projects is important, followed by construction of dedicated bus lanes and associated roadway improvements.</li> <li>• More than half of the respondents believe that climate resiliency improvements are important.</li> </ul>
Please rank all the project types below in order of importance to you	<ul style="list-style-type: none"> <li>• Transit expansion and modernization projects costing more than \$20 million and/or adding capacity to the network ranked the highest among all.</li> <li>• Complete Streets elements such as bicycle and pedestrian network improvements and connections to transit are ranked the second highest.</li> <li>• Flexing MPO discretionary funding to transit modernization projects and parking management are relatively less important.</li> <li>• Education and wayfinding improvements ranked the lowest among all.</li> </ul>
Additional feedback regarding advocating for programs and project types	<ul style="list-style-type: none"> <li>• The majority of respondents advocated for increased transit, Complete Streets, and safe and protected bicycle and pedestrian facilities.</li> <li>• The majority of respondents advocated for implementation of Bus Rapid Transit and other bus-priority measures and climate resiliency.</li> <li>• A few respondents advocated for congestion pricing program and an implementation of a Regional Rail vision for the MBTA commuter rail.</li> <li>• The idea of adding capacity should be broader to consider large-scale maintenance projects that increase throughput and decrease congestion.</li> <li>• Investments should be put in Mattapan/Hyde Park, East Cambridge/East Somerville, and Brighton/Allston to better connect communities to the core of Downtown Boston.</li> <li>• Increase in parking should be paid by user fees and not through the federal funding process.</li> </ul>

MBTA = Massachusetts Bay Transportation Authority. MPO = Metropolitan Planning Organization.  
 Source: Boston Region MPO.

**Table D-4**  
**Summary of Comments for *Destination 2040* Universe of Projects**

Investment Program Categories	Advocated Projects from the Public
Complete Streets Program	<ul style="list-style-type: none"> <li>• Beverly to Middleton: Complete Streets improvements on Route 62 and Route 1A from multimodal transit station in Beverly to downtown Middleton</li> <li>• Revere to Salem: Complete Streets redesign and construction of Highland Avenue (Route 107) from Salem to Lynn and Revere to Wonderland Blue Line Station</li> <li>• Boston: Complete Streets upgrades on Columbia Road, Martin Luther King Boulevard, Dorchester Avenue, Warren Street, and Blue Hill Avenue</li> </ul>
Bicycle and Pedestrian Program	<ul style="list-style-type: none"> <li>• Arlington: Improvements and additions to the Minuteman Bikeway and Route 16</li> <li>• Salem to Danvers: Resurfacing, protected bike lanes, and bus shelters on Route 114 from Salem multimodal transit station to Danvers</li> <li>• Department of Conservation and Recreation or former DCR roadways: Bike paths on DCR roadways including Morrissey Boulevard, Arborway, VFW Parkway, West Roxbury Parkway/Unquity Road/Turtle Pond Parkway/Neponset Valley Parkway, Gallivan Boulevard/Morton Street, Hammond Pond Parkway, Quincy Shore Drive, Furnace Brook Parkway, Blue Hills Parkway/Unquity Road, Revere Beach Parkway, Mystic Valley Parkway, Fellsway</li> <li>• Regionwide: Rail-trail projects including Grand Junction, Mass Central, Dedham (Dedham Square to Readville), Newton Highlands to Needham, and West Roxbury to Needham and Dover</li> <li>• Boston: Charlesgate/Bowker Overpass connecting Muddy River and Charles River Paths</li> </ul>
Transit Projects by Investment Program	<ul style="list-style-type: none"> <li>• Transit Modernization Program</li> <li>• Regionwide: Level boarding and Americans with Disabilities Act improvements to MBTA Commuter Rail stations in Newton</li> <li>• Dedicated Bus Lanes or BRT Projects</li> <li>• Regionwide: High-Occupancy Vehicle/Bus Priority/BRT on Interstates 90 and 93/Route 9, BRT on Route 128, Urban Ring Busway</li> <li>• Major Infrastructure Program</li> <li>• Framingham: Diesel multiple unit operation along spur from downtown Framingham to future Massachusetts Bay Community College campus, Framingham State University campus, Framingham Business Park, and Westborough Business Park</li> <li>• Framingham to Clinton: Commuter rail on the Fitchburg Line</li> <li>• Boston: Orange Line extension to West Roxbury, Red Line extension to Mattapan</li> </ul>

BRT = Bus Rapid Transit. DCR = Department of Conservation and Recreation. MBTA = Massachusetts Bay Transportation Authority. MPO = Metropolitan Planning Organization. VFW = Veterans of Foreign Wars.  
 Source: Boston Region MPO.

During discussions regarding the Universe of Projects and Programs and during the selection of projects and programs for the Recommended Plan, the MPO received comment letters from proponents and the public regarding a number of projects being considered for the LRTP. These projects included the following:

- Interstate 93/Interstate 95 Interchange in Canton (17 letters supporting this project)
- Interstate 93/Interstate 95 Interchange in Woburn, Reading, Stoneham, and Wakefield (three letters supporting this project)
- Concord Rotary in Concord (one letter supporting this project)
- Green Line Extension Phase 2 (three letters opposing the extension of the Green Line to Medford with an additional 152 signatures on a petition also opposing the extension)
- Route 4/225 and Hartwell Avenue in Lexington (two letters supporting this project)
- New Boston Street Bridge in Woburn (three letters supporting this project)
- Washington Street Bridge in Woburn (three letters supporting this project)
- McGrath Boulevard in Somerville (one letter supporting the this project)
- Interchange Reconstruction at Route 128, Exit 19 at Brimbal Avenue in Beverly (three letters supporting this project)

## ADDITIONAL ONGOING OUTREACH ACTIVITIES FOR DESTINATION 2040

### Engaging Organizations that Work with Seniors and People with Disabilities

MPO staff developed the *Coordinated Public Transit-Human Services Transportation Plan (Coordinated Plan)* with the participation of public, private, and nonprofit transportation representatives, human services providers, and with members of the public that coincided with public outreach undertaken for the *Destination 2040* LRTP. MPO staff determined that additional public engagement was needed specifically around the *Coordinated Plan* focused on getting input from organizations that work primarily with seniors and people with disabilities. With a larger aging and immigrant population, there is an increase in demand for public transit options and accommodations for people with non-English language needs. Table D-5 summarizes the public comments received during in-person public outreach events with organizations in the Regional

Coordinating Councils<sup>1</sup> and follow-up online surveys. The comments are summarized using eight unmet transportation need categories. The percentage next to each category represents the percentage of comments received relating to that category. The majority of the comments are related to transportation service improvements, which contributed to 35 percent of the total comments. The second largest share is infrastructure improvements and inter-agency coordination, which contributed to almost 20 percent of the total comments.

**Table D-5**  
**Comments from Outreach with Regional Coordinating Council Organizations**

Unmet Transportation Needs Category	Summary of Comments	Strategies and Potential Priorities
Addressing New Technologies (3 percent)	Expressed difficulties using TNC applications to access the service	Pursue public-private collaborations to provide more reliable and affordable services
Customer Service (5 percent)	<ul style="list-style-type: none"> <li>Better access to information about available transportation services</li> <li>More non-English transit service announcements</li> <li>Better signage and audios</li> </ul>	<ul style="list-style-type: none"> <li>Use technology to provide customers better access to real-time information, such as through applications or at transit stops</li> <li>Provide on-demand transportation services that do not require smart phones</li> </ul>
Education (5 percent)	<ul style="list-style-type: none"> <li>More travel training to help seniors and people with disabilities to use the public transit system</li> <li>More assistance using applications and other web-based tools to find the transportation services</li> </ul>	<ul style="list-style-type: none"> <li>Provide trainings for adult drivers who are giving up their cars to help them transition to using public transit</li> <li>Provide travel training for seniors and people with disabilities to teach them which transportation services are available and how to use them</li> <li>Raise the profile of available transportation services for seniors and people with disabilities through innovative advertising</li> </ul>
Infrastructure Improvements (19 percent)	Better pedestrian infrastructure and amenities at bus stops and transit stations	<ul style="list-style-type: none"> <li>Improve accessibility and comfort at transit stations</li> <li>Ensure that sidewalks and street crossings leading to bus stops are safe and fully ADA compliant</li> <li>Remove snow, provide clearer signage and wayfinding at bus stops</li> <li>Complete incomplete sidewalk networks</li> <li>Build dedicated bus lanes</li> </ul>
Inter-Agency Coordination (18 percent)	Improve coordination of transit services between municipalities and transit services providers	<ul style="list-style-type: none"> <li>Coordinate with RTAs and other transit provider schedules to reduce transfer times</li> <li>Develop collaborations between municipalities, COA, and TNCs</li> <li>Develop more efficient transfer points between RTAs</li> <li>Improve regional coordination between paratransit providers</li> <li>Integrate scheduling among transit and paratransit providers</li> </ul>

<sup>1</sup> Regional Coordinating Councils (RCC) are voluntary coalitions of transportation providers, human service organizations, advocates, and planners who collaborate to identify and address regional community transportation needs. Each RCC provides an open forum for the exchange of information and sets its own priorities based on member interests and regional needs. More information about RCCs can be found at <https://www.mass.gov/service-details/regional-coordinating-councils-for-community-transportation>.

Unmet Transportation Needs Category	Summary of Comments	Strategies and Potential Priorities
Transportation Service Improvements (35 percent)	<ul style="list-style-type: none"> <li>Expand the commuter rail, bus, and paratransit network</li> <li>More first-mile and last-mile connections between transit stations and the passenger's destination or home</li> <li>More reliable employment transportation for people with disabilities</li> <li>Longer operating hours for senior transportation in the evening</li> <li>Better access to medical facilities in nearby communities</li> <li>Better alignment of schedules between transit providers</li> </ul>	<ul style="list-style-type: none"> <li>Provide dedicated transit service that brings seniors and people with disabilities to and from non-medical amenities</li> <li>Provide direct transit service between senior centers and medical centers</li> <li>Provide longer operating hours for COA and senior centers</li> <li>Provide bus service to and from commuter rail and subway stations</li> <li>Provide transit services for medical trips</li> <li>Provide first-mile and last-mile transit service between major transit stations and final destinations</li> <li>Align schedules of bus and commuter rail and subway services to reduce transfer times</li> <li>Provide public transit that connects senior centers and senior living facilities and train stations</li> <li>Add more bus stops at senior housing</li> <li>Provide east-west transit service and between municipalities</li> <li>Provide more transit service to both Boston-area hospitals and hospitals in the suburbs</li> <li>Pursue public-private partnerships to provide on-call transportation (such as with TNCs) to provide for same-day transportation needs</li> <li>Provide more frequent bus service in suburban communities</li> </ul>
Vehicle Improvements (5 percent)	More vehicles (taxis, trains, buses, paratransit, and TNCs) that are accessible to all types of assistive mobility devices	<ul style="list-style-type: none"> <li>Assign more space on public transit vehicles specifically for seniors and people with disabilities</li> <li>Design public transit vehicles so that they are easier to get in and out of</li> <li>Have more wheelchair-accessible vehicles available in taxi and TNC fleets</li> </ul>
Others (10 percent)	<ul style="list-style-type: none"> <li>More affordable transportation options</li> <li>Coordinate with transportation and land use planning and development</li> </ul>	

ADA = Americans with Disabilities Act. COA = Councils on Aging. MPO = Metropolitan Planning Organization. RTA = regional transit authorities. TNC = transportation network companies.  
Source: Boston Region MPO.

## Other Public Outreach Events

MPO staff organizes and participates in ongoing public outreach activities to inform the public about ways to get involved in the MPO's planning process, including the development of the *Destination 2040* LRTP. This section describes the public outreach activities that MPO staff organized and participated in during the development of *Destination 2040*, and



comments received with regard to transportation needs. Table D-6 details the activities conducted and summarizes the comments received in those outreach events.

### Wake Up the Earth Festival

The *Wake Up the Earth Festival* began in 1979 as a group of activists stopping the Interstate 95 expansion into Jamaica Plain. It continues today as a celebration of diverse traditions, cultures, ages and beliefs. MPO staff attended this event on May 4, 2019, to increase public awareness and input for the MPO's certification documents, including the LRTP, the Transportation Improvement Program (TIP), and the Unified Planning Work Program (UPWP).

### Boston's National Bike to Work Day

The *Bike to Work Day* celebrates people who ride in Boston by creating a fun and open atmosphere for bike commuters. MPO staff set up a table at this event on May 17, 2019, to engage conversations on bike connections and gaps. In addition, MPO staff also encouraged public input by informing people about the public comment period for the TIP, UPWP, and the upcoming LRTP.

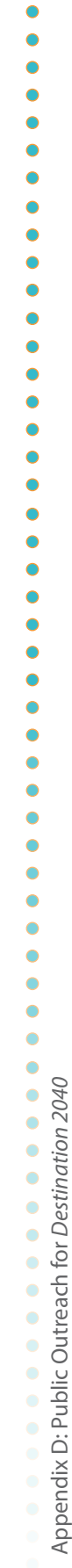
### MassDOT Capital Investment Plan (CIP) Meeting

MassDOT organized ongoing CIP meetings through June 7, 2019, to seek public comments on MassDOT's 2020–24 CIP, which guides investments in the transportation system. MPO staff also participated at the May 21, 2019 meeting at the State Transportation Building.



**Table D-6  
Summary of Other Activities and Comments Received**

Outreach Events	Activities	Summary of comments
Wake up the Earth Festival	<ul style="list-style-type: none"> <li>• Transportation Needs survey</li> <li>• Interactive map activity: Asked people to indicate their favorite places in Jamaica Plain on a neighborhood map and tell us why, and the transportation mode they take to get there.</li> <li>• Game for children: Pin the "T" on the T (as known as the MBTA)</li> <li>• Distributed bookmarks with LRTP and contact information</li> </ul>	<p>Transportation Needs survey</p> <ul style="list-style-type: none"> <li>• The majority of the respondents care most about transit (32 percent) and Complete Streets (28 percent), followed by multi-use paths (24 percent).</li> <li>• The majority of the respondents indicated that they would like to be more involved in transportation issues in their community, but feel they are not able to (39 percent).</li> <li>• The majority of the respondents indicated that if they were able to find more information about transportation issues, they would be more involved (47 percent).</li> <li>• Respondents would prefer to have meetings held in their neighborhood (26 percent).</li> </ul> <p>Interactive map activity</p> <ul style="list-style-type: none"> <li>• People appreciate the close proximity to parks and public space in Jamaica Plain (Franklin Park, Arnold Arboretum) that provides them with opportunities to bike and walk to places</li> <li>• Connection between Jamaica Pond and Arnold Arboretum</li> </ul>



Outreach Events	Activities	Summary of comments
Bike to Work Day	<ul style="list-style-type: none"> <li>Interactive map activity: Asked people to indicate any missing bicycle connections on a map of the Greater Boston area</li> <li>Distributed Bicycle Report Cards and instructions to bikers to collect their opinions on bicycle and pedestrian segments evaluation</li> <li>Distributed bookmarks with comment period and contact information for the MPO documents</li> </ul>	<p>Interactive map activity</p> <ul style="list-style-type: none"> <li>Improve connections between Cambridge and Downtown Boston, especially on Cambridge Street</li> <li>Connect the gaps on the Mystic River Path</li> <li>Connect the Northern Strand and Gateway Park Path</li> <li>Extend the Minuteman Trail to downtown Boston</li> <li>Improve safety on the bike lane along the Emerald Necklace to Fenway</li> <li>Improve connection on Massachusetts Avenue to south of Melnea Cass Boulevard</li> <li>Bike lanes on the Massachusetts Avenue Bridge</li> <li>Connect Everett Bridge to Assembly Row</li> <li>Improve connections on Dorchester Avenue in South Boston</li> <li>Connect Morrissey Boulevard south of UMass Boston</li> </ul>
MassDOT Capital Investment Plan Meeting	<ul style="list-style-type: none"> <li>Boston Region MPO map</li> <li>Distributed UPWP and TIP projects booklet</li> <li>Distributed bookmarks with comment period and contact information for the MPO documents</li> </ul>	<ul style="list-style-type: none"> <li>People asked about the responsibilities of the MPO and details regarding the certification process (LRTP, TIP, UPWP)</li> </ul>

LRTP = Long-Range Transportation Plan. MassDOT = Massachusetts Department of Transportation. MPO = Metropolitan Planning Organization. TIP = Transportation Improvement Program. UMass = University of Massachusetts. UPWP = Unified Planning Work Program.  
 Source: Boston Region MPO.

## COMMENTS RECEIVED DURING THE FORMAL PUBLIC COMMENT PERIOD FOR *DESTINATION 2040*

Table D-7 summarizes the comments received during the 30-day public review and comment period for the *Destination 2040* LRTP. This formal public review and comment period began on July 19, 2019, and closed on August 19, 2019.

**Table D-7**  
**Summary of Written Public Comments Received During the Official Comment Period from July 19, 2019, to August 19, 2019**

Table will be added following the 30-day public comment period.