



2 PROCESS FOR DEVELOPING *CHARTING PROGRESS TO 2040*

OVERVIEW OF THE PROCESS

The process for developing *Charting Progress to 2040* incorporated a number of new elements that brought more information into the decision-making process, for both the MPO and the public. One new element is an interactive web-based needs-assessment application that can be accessed by all interested parties. In addition, MPO staff enhanced its performance-based planning practice for this LRTP and expanded use of contemporary planning tools, such as scenario planning, to inform policy and other types of decisions. Other new components are incorporating more electronic forms of communication into the MPO's approach to public participation, and heightened collaborative engagement with members of the public, both of which were integral to the LRTP development process and helped guide MPO decision making.

All of these new elements helped shape a fresh approach to programming—setting the MPO on a path that will make it more agile as it responds to performance measurement results, and more adept at charting a course for the transportation network of 2040.

Perhaps the most notable change, however, was moving away from the MPO's past practice of programming expensive capital-expansion projects to ease congestion, and adopting a new approach by funding a larger number of small operations-and-management (O&M)-type projects that support bicycle, pedestrian, and transit in addition to roadway improvements.

This chapter discusses the process and rationale for decision making throughout the LRTP's development. The outcomes of these decisions, in terms of identifying needs, analyzing scenarios, selecting projects and programs, and finalizing the LRTP, are discussed in subsequent chapters.

IMAGINING THE FUTURE: VISION, GOALS, AND OBJECTIVES

Early in the process of developing this LRTP, the MPO revisited its vision statement to focus more sharply on the transportation issues of greatest concern to the MPO and the public for the envisioned future transportation system:



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

For each of these issues, the MPO identified problems and their associated needs for the transportation network. This allowed the MPO to set goals that, if accomplished, would result in concrete solutions for the identified problems, and help the region achieve its vision by 2040. The MPO established objectives for each goal (see Figure 2.1).

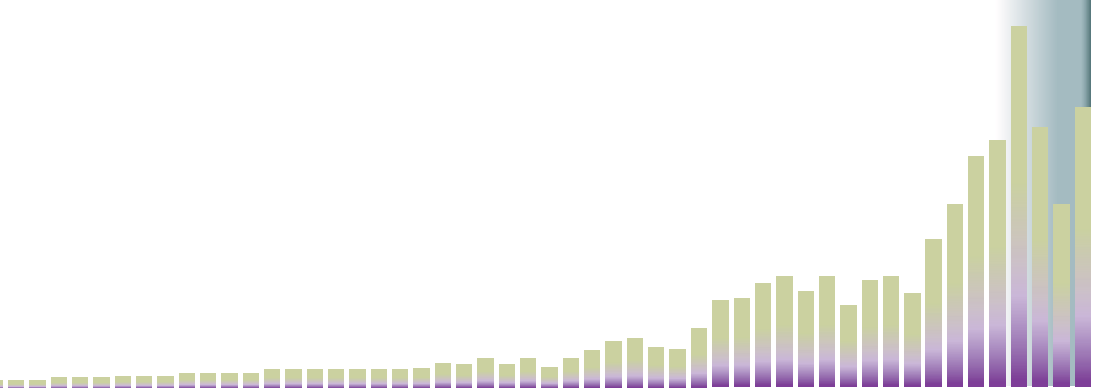
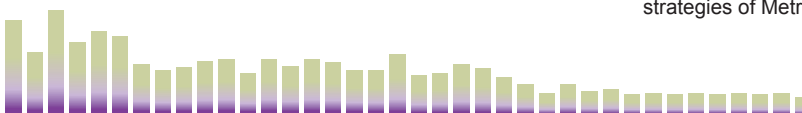


FIGURE 2.1 MPO Vision, Goals, and Objectives

CENTRAL VISION STATEMENT	
<p>The Boston Region Metropolitan Planning Organization envisions a modern transportation system that is safe, uses new technologies, provides equitable access, excellent mobility, and varied transportation options—in support of a sustainable, healthy, livable, and economically vibrant region.</p>	
GOALS	OBJECTIVES
SAFETY	
Transportation by all modes will be safe	<ul style="list-style-type: none"> • Reduce number and severity of crashes, all modes • Reduce serious injuries and fatalities from transportation • Protect transportation customers and employees from safety and security threats (Note: The MPO action will be to incorporate security investments into capital planning.)
SYSTEM PRESERVATION	
Maintain the transportation system	<ul style="list-style-type: none"> • Improve condition of on- and off-system bridges • Improve pavement conditions on MassDOT-monitored roadway system • Maintain and modernize capital assets, including transit assets, throughout the system • Prioritize projects that support planned response capability to existing or future extreme conditions (sea level rise, flooding, and other natural and security-related man-made hazards) • Protect freight network elements, such as port facilities, that are vulnerable to climate-change impacts
CAPACITY MANAGEMENT/MOBILITY	
Use existing facility capacity more efficiently and increase healthy transportation capacity	<ul style="list-style-type: none"> • Improve reliability of transit • Implement roadway management and operations strategies, constructing improvements to the bicycle and pedestrian network, and supporting community-based transportation • Create connected network of bicycle and accessible sidewalk facilities (at both regional and neighborhood scale) by expanding existing facilities and closing gaps • Increase automobile and bicycle parking capacity and usage at transit stations • Increase percentage of population and places of employment within one-quarter mile of transit stations and stops • Increase percentage of population and places of employment with access to bicycle facilities • Improve access to and accessibility of transit and active modes • Support community-based and private-initiative services and programs to meet last mile, reverse commute and other non-traditional transit/transportation needs, including those of the elderly and persons with disabilities • Eliminate bottlenecks on the freight network • Enhance intermodal connections • Emphasize capacity management through low-cost investments; give priority to projects that focus on lower-cost O&M-type improvements such as intersection improvements and Complete Streets solutions
CLEAN AIR/CLEAN COMMUNITIES	
Create an environmentally friendly transportation system	<ul style="list-style-type: none"> • Reduce greenhouse gases generated in the Boston region by all transportation modes as outlined in the Global Warming Solutions Act • Reduce other transportation-related pollutants • Minimize negative environmental impacts of the transportation system • Support land use policies consistent with smart and healthy growth
TRANSPORTATION EQUITY	
Provide comparable transportation access and service quality among communities, regardless of income level or minority population	<ul style="list-style-type: none"> • Target investments to areas that benefit a high percentage of low-income and minority populations • Minimize any burdens associated with MPO-funded projects in low-income and minority areas • Break down barriers to participation in MPO-decision making
ECONOMIC VITALITY	
Ensure our transportation network provides a strong foundation for economic vitality	<ul style="list-style-type: none"> • Respond to the mobility needs of the 25–34-year-old workforce • Minimize the burden of housing and transportation costs for residents in the region • Prioritize transportation investments that serve targeted development sites • Prioritize transportation investments consistent with the compact-growth strategies of MetroFuture

Source: Central Transportation Planning Staff.





Together, the vision, goals, and objectives lay the groundwork for the MPO's performance-based planning practice, which in turn informs all of the work conducted by the MPO, including evaluating and selecting projects and programs for the LRTP, selecting projects for the TIP, and selecting planning studies for the UPWP. The MPO's performance-measurement work is discussed in detail in Chapter 6.

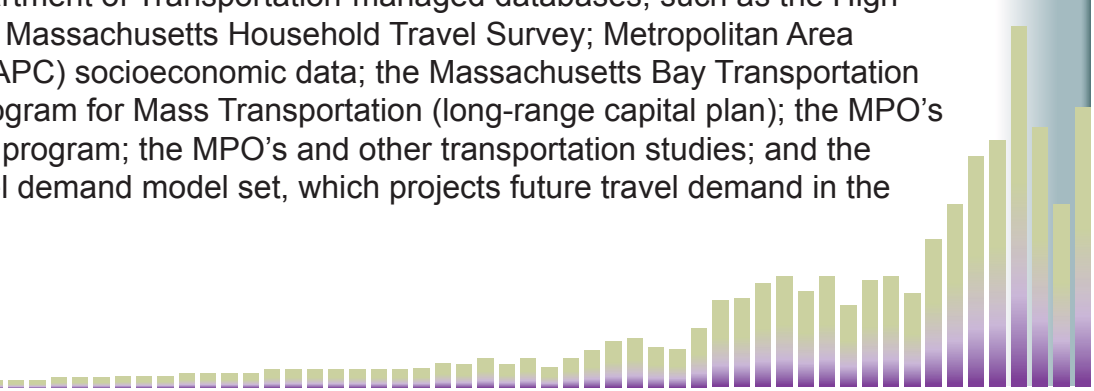
During development of the vision, goals, and objectives, the MPO reached out to members of the general public in a variety of ways (see the

Public Participation section of this chapter) to seek input; then considered this feedback, which is reflected in the final set of goals.

ASSESSING THE REGION'S TRANSPORTATION NEEDS

The second step in developing this LRTP was assessing the region's transportation needs based on an inventory of its transportation issues. This process allowed the MPO to make decisions about which capital projects, as well as which UPWP planning studies, would best meet the identified needs. The assessment of needs established the baseline against which future projections were compared for this plan. This baseline assessment will also be the foundation for performance-based planning, and will allow the MPO to track trends over time and assess progress toward achieving its goals.

The data for the Needs Assessment were drawn from a variety of sources to document current demographics and existing conditions for the region's transportation network. Sources included the MPO's Congestion Management Process (CMP); various Massachusetts Department of Transportation-managed databases, such as the High-Crash Database; the Massachusetts Household Travel Survey; Metropolitan Area Planning Council (MAPC) socioeconomic data; the Massachusetts Bay Transportation Authority (MBTA) Program for Mass Transportation (long-range capital plan); the MPO's transportation equity program; the MPO's and other transportation studies; and the MPO's regional travel demand model set, which projects future travel demand in the



region. See Chapter 3 for a summary of transportation needs identified via the needs-assessment process. For full documentation of the Needs Assessment, as well as an interactive application that provides access to the data, visit the MPO's website at <http://www.ctps.org/map/www/apps/lrtpNeedsAssessmentApp/index.html>.

The MPO made the needs assessment data available to all interested parties via the internet not only to help educate the public and make the planning process more transparent, but also to provide an opportunity for other planners, academics, and the general public to interact with, download, and analyze the data for their own purposes. In addition, being able to access all of the data via the website allows MPO staff to easily update and disseminate this information as new data become available.

ANALYZING FUTURE TRANSPORTATION SCENARIOS

The third step in the LRTP planning process was analyzing and deliberating about the transportation investments that the MPO should make between now and 2040 to help achieve its vision. MPO staff used a variety of analytic tools to shed light on the future outcome of different investment strategies in order to provide information for MPO discussions and decision making. For *Charting Progress to 2040*, staff enlisted a number of new and/or enhanced planning tools and techniques to expand the scope of its traditional analytic methods.

New Tools and Data Sources

The MPO upgraded its regional travel demand model set and inputs to the model with data from the most recent statewide household travel survey, and data from INRIX, a company that obtains real-time traffic data from drivers' mobile devices. For analytic purposes, historical INRIX data provides a level of detail that was previously unavailable. Another new vehicle was TREDIS (Transportation Economic Development Impact System), a suite of tools that provides economic impact forecasts, including the effects of changes in the transportation network on the movement of freight via truck in the region.

The MPO will continue to use these tools as it develops its performance-



based planning practice. They also would be used to explore key policy questions and to help the MPO understand the trade-offs among various capital investments.

Scenario Planning

This LRTP represents a revitalized foray into scenario planning; a technique that, on an analytical level, allows stakeholders to compare the relative effects of different possible transportation solutions on variables of interest.

The MPO's use of scenario planning helped shed light on the relative merits of two different approaches to one of the objectives related to congestion: Using its target funds, should the MPO continue to use a *congestion*

reduction approach by investing in major arterials and express highways? Or, should the MPO adopt a *capacity management* approach by investing in smaller-scale, but more diverse and geographically dispersed, O&M-type projects? To answer these questions, staff compared three scenarios to a base-case scenario using both the regional travel demand model set and off-model analyses, focusing for the most part on highway projects:

1. Current-LRTP Scenario—portrayed the MPO's current capital spending patterns
2. Operations and Management Scenario—took a congestion management approach that focused on lower-cost improvements, such as intersection improvements and Complete Streets
3. High-Capital Investment (High-Cap) Scenario—focused on high-cost capital projects, such as interchange upgrades and major bottleneck reconstruction

Because O&M-type projects generally do not increase capacity and cost less than \$20 million per project, the MPO is not required to list them individually in the LRTP. Therefore, MPO staff developed a set of four O&M programs, each of which comprised a representative group of low-cost projects of a specific nature. These projects were drawn from the MPO's Needs Assessment and from the Universe of Projects (described in the Finalizing the LRTP section). For the purposes of this scenario-planning exercise, five investment programs were analyzed, including four programs that include O&M-type projects and one program that includes major capital investment projects:



1. Intersection Improvements
2. Complete Streets
3. Bicycle Network and Pedestrian Connections
4. Community Transportation and Parking
5. Major Infrastructure

Figure 2.2 provides more detail about these programs. Again, the scenario planning process done as part of this LRTP development focused mainly on highway projects to help the MPO to determine how it should program its target funds. Transit expansion and state of good repair projects were not included in these scenarios at this time because transit investments are based on recommendations from the MBTA, the regional transit agencies, and MassDOT's Rail and Transit Division. Low cost transit improvements were included in both scenarios (i.e. park and ride, shuttle services, and community-based transportation). Major transit projects will be addressed as part of MassDOT's Program for Mass Transportation and the MBTA's Capital Investment Program and in future scenario planning activities done as part of the MPO's performance-based planning program.



The results of the scenario analyses (Figure 2.3) show that there are greater benefits associated with the O&M approach than with large-scale infrastructure projects.

Results of the analysis helped the MPO finalize its goals and objectives and move toward the selection of a set of programs and projects to analyze in order to determine which ones to include in the LRTP. The MPO also adopted the O&M approach to programming in the LRTP. This new policy direction signaled a pivotal change in the MPO's approach to programming transportation investments. See Appendix A for detail about the scenario-planning process and its results.

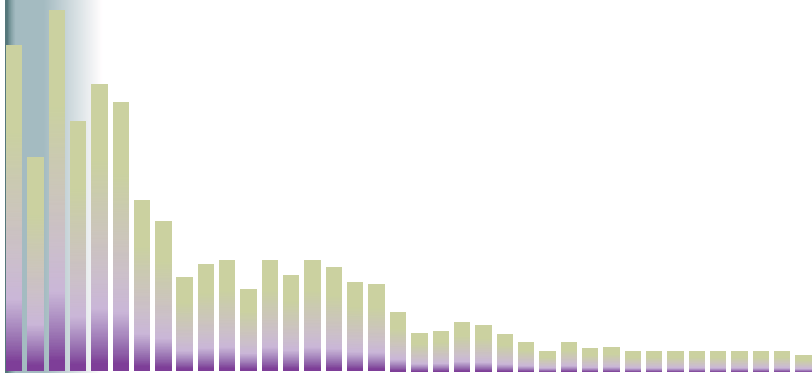


FIGURE 2.2
Investment Programs

PROGRAMS FOR ADDRESSING TRANSPORTATION NEEDS

INTRODUCTION

The five programs included in the scenarios are described on the right. The descriptions provide information about how MPO staff estimated costs for types of projects that the program would fund.

To gauge the scenarios' performance, staff selected a number of indicators that correspond to the MPO's goals. To measure programs and projects that could have a regional impact, add capacity to the system, or change an attribute of the system—for example, change the amount of delay or capacity, add an alternative travel option, and so forth—staff utilized the MPO's regional travel demand model set. Staff used off-model sketch-planning techniques to generate performance data for other projects, particularly those that are lower in cost and have smaller footprints.

KEY: MPO GOALS

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



INTERSECTION IMPROVEMENTS



Description: Modernizes existing signals or adds signals to improve safety and mobility. Improvements could also consist of turning lanes, shortened crossing distances for pedestrians, and striping and lighting for bicyclists. Improvements to sidewalks and curb cuts also will enhance accessibility for pedestrians. Updated signal operations will reduce delay and improve transit reliability.

Sample intersections for this program, which were used to estimate project benefits, were drawn from the TIP Universe of Projects, locations identified in past MPO studies, and the LRTP Needs Assessment. These projects were prioritized—first through determining if they are high-crash locations to address the MPO's safety goal, and then if they are located in high-priority-development, environmental justice, or Title VI areas.

Estimated cost of intersection improvement projects: Average of \$2.8 million per intersection



COMPLETE STREETS



Description: Modernizes roadways to improve safety and mobility for all users. Improvements could consist of continuous sidewalks and bicycle lanes, cycle tracks, and other bicycle facilities, as well as updated signals at intersections along a corridor. Improvements will reduce delay and improve transit reliability. Expanded transportation options and better access to transit will improve mobility for all and encourage mode shift.

Estimated cost of Complete Streets projects: \$6 million per mile



BICYCLE NETWORK AND PEDESTRIAN CONNECTIONS



Description: Expands the bicycle and pedestrian networks to improve safe access to transit, school, employment centers, and shopping destinations. Could include constructing new, off-road bicycle or multi-use paths, improving bicycle and pedestrian crossings, or building new sidewalks.

Sample bicycle and pedestrian projects for this program were selected using evaluated TIP projects, the MPO's Bicycle Network Evaluation, and bicycle travel market information from the 2011 Massachusetts Household Survey.

Estimated cost of bicycle and pedestrian projects: Varies (analysis uses available preliminary cost, or average of \$2 million per mile)



COMMUNITY TRANSPORTATION AND PARKING



Description: Includes a combination of the following types of projects:

- **Community Transportation:** Provides funding to launch locally developed transit services that support first-mile/last-mile connections to existing transit services and other destinations by purchasing shuttle buses and/or funding operating costs.
Estimated cost: Assumed to cost \$5 million over the 25-year life of the plan.
- **Park-and-Ride:** Targets funding to construct additional parking at transit stations that now are at capacity.
Estimated cost: The average cost per parking space is \$35,000.
- **Clean Air and Mobility Program:** Provides funding to projects (such as bike share projects or shuttle bus services) to improve mobility and air quality and promote mode shift.
Estimated cost: Assumed to cost \$50 million over the 25-year life of the plan.



MAJOR INFRASTRUCTURE



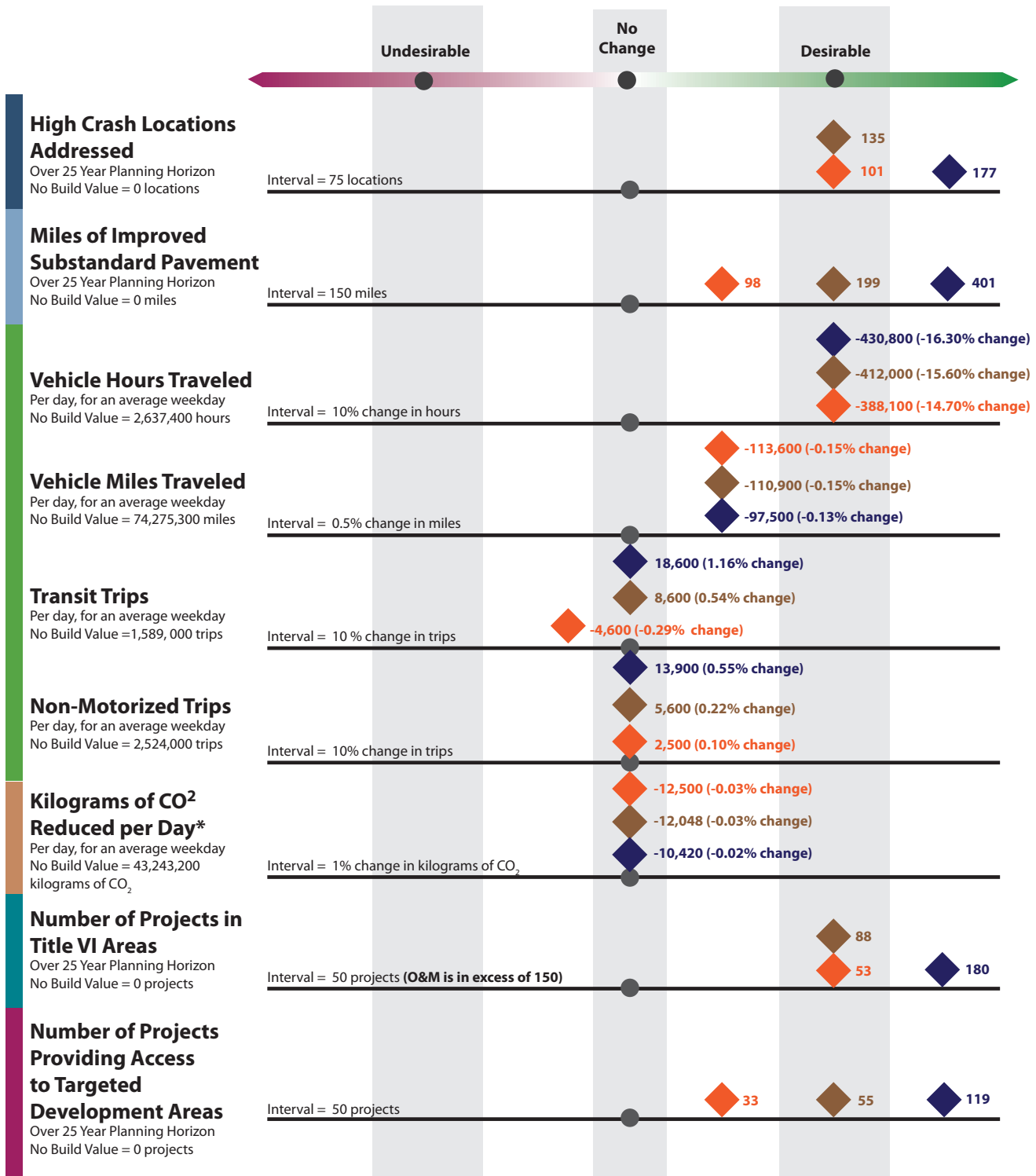
Description: Modernizes and/or expands major highways and arterials to reduce congestion and improve safety. Projects could include constructing expressway interchanges to eliminate weaving and reduce the likelihood of rollovers, adding travel lanes on expressways, or adding/removing grade separations on major arterials. The LRTP also considers transit (Green Line Extension from College Avenue to Mystic Valley Parkway/Route 16) using highway funds flexed to transit and bridge projects.

Estimated cost per project: Costs were associated with each project based on costs in current or past LRTPs, adjusted to current dollars, or costs from studies that were performed for selected locations, also adjusted to current dollars. Assumes eight interstate bottlenecks and five arterial projects.

Source:
Central Transportation Planning Staff

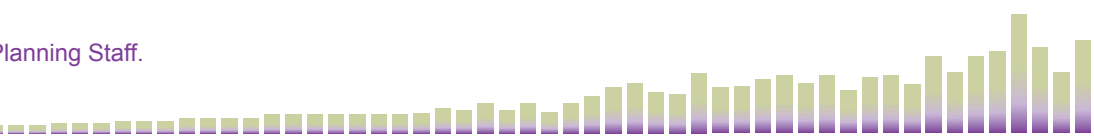
FIGURE 2.3 Scenario Analyses Results

◆ Current L RTP
 ◆ High-Cap
 ◆ O&M



*Emission generated using MOVES 2010B

Source: Central Transportation Planning Staff.



FINALIZING THE LRTP

The final phase of LRTP development included selecting and analyzing projects and programs to include in the LRTP. The previous steps in the planning process discussed in this chapter laid the groundwork for finalizing the LRTP. Also of critical importance to selecting projects and programs was the MPO's public participation process (discussed in the Public Participation section).

Universe of Projects and Programs

The projects and programs selected for the LRTP were drawn from the Universe of Projects and Programs: a comprehensive list of regional highway and transit projects compiled by MPO staff. Each project is associated with one of the five programs used in scenario planning (see Figure 2.2) or a sixth program — transit. The MPO used the Universe to develop the draft list of projects and programs for public review and the final list to include in this LRTP. The Universe of Projects and Programs includes the following projects that:

- Already have been programmed in the LRTP and TIP (excluding the first year of the current TIP) for highway and transit modes
- Are identified as important for meeting the region's transportation needs, as described in the MPO Needs Assessment
- Have emerged as recommended from studies conducted by the MPO and other entities in the region
- Are included in the current MBTA Program for Mass Transportation and in the MBTA Capital Investment Program, and others recommended by the MBTA

The projects in the Universe of Projects and Programs list are sorted by program type, and are cited in Appendix B of this document.

Project Evaluation

The MPO applied its goals and objectives as criteria in a qualitative evaluation of the major infrastructure and capacity-adding highway projects in the Universe of Projects and Programs that had been sufficiently well-defined to allow for analysis. The assessment of how well projects would address the MPO's goals and objectives helped the MPO identify priority projects for its major infrastructure program. See Appendix C for project evaluations and documentation on the evaluation process.

Based on its decision to support the programming of more O&M-type projects, the MPO set aside a specific amount of funding for each of its six investment programs:

Intersection Improvements, Complete Streets, Bicycle Network and Pedestrian Connections, Community Transportation and Parking, Flex to Transit, and Major Infrastructure. The MPO then allocated funding in the six programs across the five-year time bands within this LRTP (federal fiscal years 2016–20, 2021–25, 2026–30, 2031–35, and 2036–40).

Transportation Finances

The finance plan is an important part of the LRTP, which is required to be a financially constrained document. While the financial assumptions for this LRTP include an increase in funding during the first five years of this 25-year LRTP, there is less funding available for the remaining 20 years of the LRTP. The previous LRTP allowed for an increase in revenue of three percent per year; the revenue assumption for this LRTP was reduced to one-and-a-half percent per year. Therefore, the MPO needed to scale back its commitments to projects that were included in the previous LRTP. Project cost increases because of applying inflationary factors (four percent per year) also affected funding availability in the later time bands. The MPO's decision to set aside funding for O&M programs helped the MPO adapt to these funding constraints. See Chapter 4 for detailed information about finances for this LRTP.

Project Selection

The next step in defining the draft list of recommended projects and programs involved balancing two MPO policies. First, the MPO has a policy of maintaining its previous LRTP and TIP programming commitments, which favored funding major infrastructure. Second, as discussed above, during the LRTP development process the MPO adopted the O&M approach to programming, and a new policy of giving priority to low-cost projects. Overall, it is the MPO's intent to ensure that its goals are advanced through project and program selection.

To understand the balance between these policies, the MPO asked staff to develop two funding alternatives for consideration: one that continues to program all of the projects in *Paths to a Sustainable Region* (the previous LRTP) in *Charting Progress to 2040*; and a second alternative that programs approximately half of the MPO's target funds (those over which the MPO has decision-making power) to major infrastructure projects and reserves the rest for O&M programs. These two alternatives were examined and discussed by the MPO over the course of four meetings. The MPO ultimately adopted the second alternative to program half of its target funds to major infrastructure and the other half for O&M programs.

Chapter 5 presents a detailed description of the project selection process, along with a list of the projects and programs selected for this LRTP.

Final Steps

MPO staff performed the following analyses on the MPO's draft list of recommended projects and programs:

- Air Quality Conformity Analysis—ensures that the LRTP is consistent with the Commonwealth's plans for attaining and maintaining air-quality standards (see Chapter 8 for details)
- Transportation Equity (TE) Analysis—ensures that the recommended set of projects and programs provides equitable benefits to both TE and non-TE populations (see Chapter 7 for details)
- Greenhouse Gas Analysis—documents the process for reporting carbon dioxide emissions associated with the projects and programs being included in the LRTP, as required for implementing the Massachusetts Global Warming Solutions Act. (See Chapter 8 and a separate air quality report to be released at the end of August 2015 for details)

The MPO subsequently adopted the draft list of recommended projects and programs for public review. The MPO received comments from the public and reviewed and responded to them. *Charting Progress to 2040* was endorsed by the MPO on July 30, 2015.

PUBLIC PARTICIPATION

Background

In several important ways, the public involvement process for this LRTP was more extensive and effective than any other previously conducted by the MPO. Largely, this was because of the recent update of the Public Participation Plan, which details the MPO's outreach via its Public Participation Program. The updated plan and program reinforced the MPO's commitment to, respect for, and enthusiasm about the needs and interests of members of the public. The MPO is working to make public participation convenient, inviting, and engaging for everyone. It has stepped up activities to break down barriers for people who have traditionally participated only minimally in the 3C process, such as those with limited English proficiency or disabilities.

Updating the LRTP was the MPO staff's first opportunity to implement many of the new activities in the Public Participation Program. Public outreach for the LRTP consisted of public meetings, workshops, and forums throughout the year-and-a-half preceding the MPO's endorsement of the LRTP. Electronic media and web-based tools were important avenues for public outreach and information gathering, and were crucial in expanding the conversation to more people and diverse populations. Translating notices of meetings and other events into several languages and collaborating with MAPC opened

doors to new constituencies and set up communication paths that are both comfortable for members of the public and fruitful for generating input to the MPO. In addition, MPO staff continued to use graphics and other visual presentations to communicate information to the public and seek their feedback.

Public Outreach Methods

PUBLIC MEETINGS, WORKSHOPS, AND FORUMS

While this LRTP was being developed, staff conducted public outreach through a number of different means for a variety of audiences:

- *Regional Transportation Advisory Council:* The Advisory Council is an independent group charged with providing public input to the MPO, and specifically, input for the MPO's certification documents, such as the LRTP. Monthly Advisory Council meetings provide a forum for broad-based and robust discussions of transportation issues. MPO staff briefed the Advisory Council, or its LRTP Committee, on the LRTP nine times within the year-and-a-half before adopting the draft LRTP; in each briefing, staff provided information, answered questions, and recorded Advisory Council members' comments.
- *Fall Forum:* The MPO hosted a fall forum at the Boston Public Library on September 22, 2014, to gather public feedback on the vision, goals, and objectives of *Charting Progress to 2040*. The forum included a presentation on developing the LRTP, followed by a question-and-answer session.

Public notification for that and all other MPO-sponsored events followed the MPO's standard practice: the invitation to participate was distributed through all MPO media, including the MPOinfo email distribution list, website news flashes, press releases, and Twitter. Notices were translated into Spanish, Portuguese, Chinese, and Vietnamese. Invited participants included transportation, environmental, land-use planning agencies, interest groups; state, regional, and municipal officials; transportation equity contacts (which include councils on aging, social service organizations, community-action organizations, and neighborhood groups working in, or supporting, low-income or minority communities); professional and advocacy groups involved in transportation and environmental issues; business organizations; entities involved with the movement of freight; and transit service providers.

- *MAPC Subregional¹ Outreach Meetings:* During the public outreach period for the MPO's vision, goals, and objectives and the Needs Assessment (fall 2014), MPO staff attended meetings of all eight MAPC subregional groups, which are made

1 The MAPC region is geographically divided into eight subregions.

up of municipal officials, and a meeting of the I-495/MetroWest Partnership.² Staff provided information and received a number of comments, which were summarized and presented to the MPO (see Appendix D). Staff also attended five multi-subregional meetings in the spring of 2015 to solicit feedback and additional guidance on the draft LRTP.

- *MAPC Winter Council Meeting:* On February 25, 2015, MAPC devoted its annual winter council meeting to a discussion of the LRTP. Attendees participated in an interactive exercise to experience the challenges of meeting the region's transportation needs with existing resources and to weigh in on transportation priorities for the region. Feedback from the exercise was summarized and presented to the MPO (see Figure 2.5 below and information in Appendix D).
- *Focus-Group-Style Open House:* The MPO held a public Open House specifically designed to facilitate ad hoc focus group participation in accordance with the participants' interests. MPO staff facilitated discussions at topic-related stations to engage interested participants in conversation about transportation issues, needs, and solutions. Topic stations included:
 - Climate Change, the Environment, and Air Quality
 - Active Transportation Modes/Sustainability
 - Transportation Equity
 - Transit and Community Transportation
 - Freight Planning
 - Funding Investment Strategies

Participants in the Focus-Group-Style Open House had the opportunity to provide recommendations about the MPO's funding allocations among various investment programs.

- *Draft LRTP Input Meetings:* The MPO sponsored two workshops in June 2015, during the public comment period on the draft LRTP, one held in Boston and the other in Everett.

ELECTRONIC MEDIA AND TOOLS

In keeping with contemporary communication techniques, staff utilized electronic media and other tools to engage the public and solicit their feedback:

2 The I-495/MetroWest Partnership is a public-private collaboration of businesses, municipalities, and other stakeholders that meet to cultivate sustainable growth in the MetroWest region.

- *Charting Progress to 2040 Webpage*: The MPO’s website is a vital medium to provide the public with information and collect feedback. This webpage contains background information about how the LRTP was developed and how the public could be involved throughout the process, as well as materials that were used in developing the LRTP.
- *Interactive Online Needs Assessment Application*: This tool allows the public to view, download, and map transportation and socioeconomic data used by the MPO and its staff to evaluate the region’s transportation needs. It also allows interested parties to submit comments about the region’s transportation needs.
- *Online Surveys*: MPO staff developed online surveys to solicit feedback, first on the draft vision, goals, and objectives, and then, in the spring of 2015, on various issues related to the draft LRTP. Staff analyzed results from the responses received from the first survey, which were analyzed, reported to the MPO, and used by the MPO as it defined its vision, goals, and objectives (see Incorporating Feedback from the Public section below and Appendix D).

During the public comment period for the draft *Charting Progress to 2040* LRTP, a series of seven mini-surveys, administered during May and June 2015, were circulated to collect feedback on the MPO’s list of recommended projects and programs. They captured specific feedback from participants at MPO-sponsored or MAPC-sponsored meetings, and online participants, many of whom may have been unable to attend one of the meetings (see Appendix D).

- *Other Electronic Media*: Staff utilized a number of other electronic tools to distribute information and collect input, including the News Flash feature of the MPO’s website, to publicize public participation opportunities and new materials; an email distribution list, MPOinfo, to distribute LRTP-related information and notices; *TransReport*, the MPO’s electronic newsletter; Twitter, to quickly communicate LRTP-related news; press releases emailed to news outlets; and the comment section of the website to solicit public input.

Incorporating Feedback from the Public

VISION, GOALS, AND OBJECTIVES

Public feedback on the MPO’s vision, goals, and objectives was obtained through the fall forum, subregional outreach meetings, and the online surveys described above, as well as from written comments submitted through the website and via email. Several trends identified from the public feedback were reflected in the final vision, goals, and objectives, such as:

1. A more transformative vision that reflects and supports new technologies
2. A more direct link between the goals of congestion reduction and transportation options/healthy modes



- Promotion of increased transit choices, improved transit reliability, and transit that goes beyond the needs of typical commuters in the transportation options/healthy modes goal

A snapshot of the feedback on the vision, goals, and objectives generated from the first online survey is shown in Figure 2.4. The ranking of the goals makes clear that the public's top priority is transportation options/healthy modes, as well as safety. It also shows that, overall, the MPO's vision aligns well with the public's vision for the future of transportation in the region.

FIGURE 2.4
Public Ranking of Goals
 (Raw scores in parentheses; a lower score indicates a higher priority.)

-
- 1. Transportation Options/Healthy Modes (132)**
 - 2. Safety (175)**
 - 3. Greenhouse Gas (GHG)/Air Pollution/Environment (253)**
 - 4. System Preservation (263)**
 - 5. Transit Equity (265)**
 - 6. Congestion Reduction (267)**
 - 7. Economic Vitality and Freight Movement (317)**
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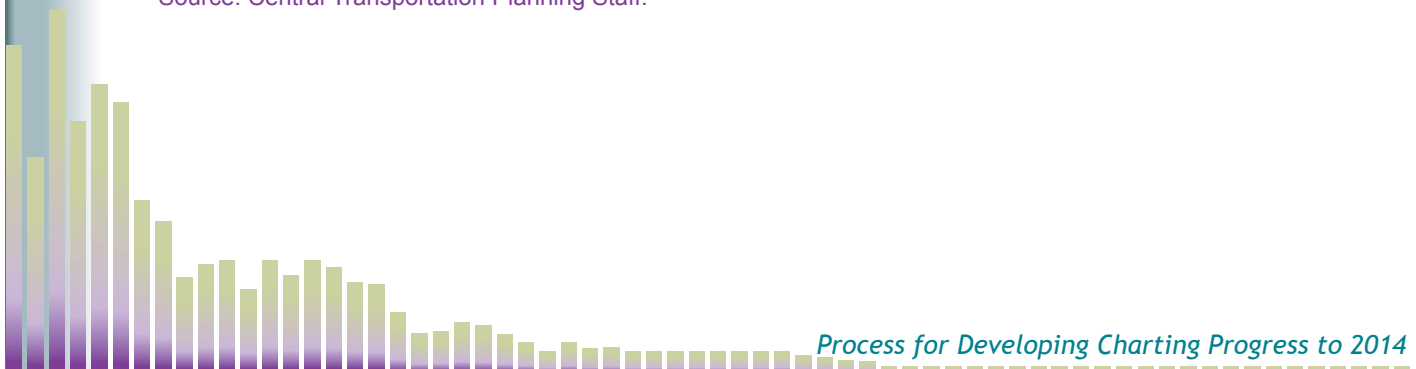
When asked the following question:

How well does the MPO's proposed vision for transportation in the region align with your own vision?

Members of the public on average felt the MPO's vision match their vision as well (3.9 out of 5).



Source: Central Transportation Planning Staff.



REGIONAL NEEDS

The overwhelming majority of public comments on regional needs were related to transit and non-motorized modes, which is consistent with the public's prioritization of the transportation options/health modes goal. Many respondents:

- Saw areas of need for all modes, including bike/pedestrian infrastructure, increased train and bus transit options, more commuter rail service, expanded ferry service, and better links to existing transit
- Commented on the need for more transit in suburban environments, first-mile-last-mile transit connections, increased parking at transit stations, and transit service that accommodates an aging population
- Expressed concern about pedestrian safety in the region
- Voiced concern about congestion on arterials throughout the region

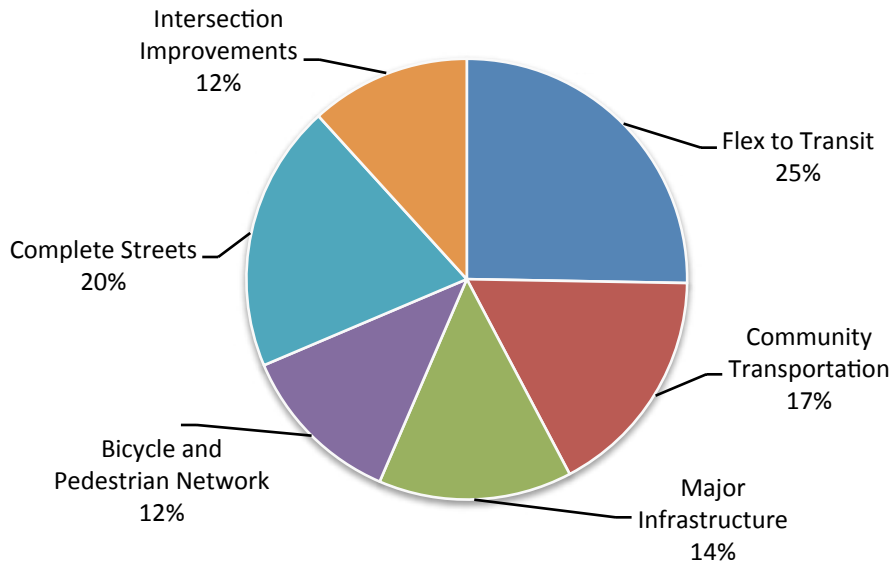
See Appendix D for a full summary of comments on regional needs.

INVESTMENT STRATEGIES

At the MAPC winter council meeting, participants at 15 tables completed an exercise in which they had to decide how much funding to allocate to each LRTP program. Overall, the average of the allocations of the “tables” suggests a more balanced allocation of funding for transportation investments than the MPO has practiced (see Figure 2.5). Responses from all the tables:

- Demonstrated a preference for increasing the share of resources directed to the Community Transportation and Parking program (17 percent, on average), an increase from the MPO's past two percent investment
- Showed a preference for spending substantially less on Major Infrastructure (14 percent, on average) a decline from the 54 percent that the MPO has allocated in the past
- Indicated a preference for allocating a substantial portion of the MPO's budget to the Flex to Transit program (25 percent, on average), an increase from the MPO's past allocation of three percent to transit (from highway funding) in the past

FIGURE 2.5
Average Allocation of Funding for MPO Projects



Source: Central Transportation Planning Staff.

See Appendix D for details on the winter council meeting results and a summary of comments received during the LRTP development process.

In addition, a second online survey, consisting of seven mini-surveys was released between May 15 and July 15, 2015, to collect additional feedback from the public on investment strategies. Respondents were asked their views about transportation needs in the region and where they think funding should be allocated. A summary of the survey results is provided in Appendix D.