

# 1 CHAPTER ONE

## The 3C Process

### INTRODUCTION TO THE 3C PROCESS

Decisions about how to spend transportation funds in a metropolitan area are guided by information and ideas from a broad group of people, including elected officials, municipal planners and engineers, transportation advocates, other advocates, and other interested persons. Metropolitan planning organizations (MPOs) are the bodies responsible for providing a forum for this decision-making process. Each metropolitan area in the United States with a population of 50,000 or more has an MPO, which decides how to spend federal transportation funds for capital projects and planning studies.

In order to be eligible for federal funds, metropolitan areas are required to maintain a continuous, comprehensive, and cooperative (3C) transportation-planning process that results in plans and programs consistent with the objectives of the metropolitan area.<sup>1</sup> The 3C transportation-planning process in the Boston region is the responsibility of the Boston Region MPO, which has established the following objectives for the process:

- Identify transportation problems and develop possible solutions.

- Balance short- and long-range considerations so that beneficial, incremental actions adequately reflect an understanding of probable future consequences and possible future options.
- Represent both regional and local considerations as well as both transportation and non-transportation objectives and impacts when analyzing project issues.
- Assist agencies responsible for implementing projects in effecting timely policy and project decisions with adequate consideration of environmental, land-use, social, fiscal, and economic impacts, and with adequate opportunity for participation by other agencies, local governments, and members of the public.
- Help implementing agencies to prioritize transportation activities in a manner consistent with the region's needs and resources.
- Comply with the requirements of Fixing America's Surface Transportation Act (FAST Act); Americans with Disabilities Act (ADA); Clean Air Act; Title VI of the Civil Rights Act of 1964; Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations; Executive Order 13330: Human Services Transportation Coordination; and

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<sup>1</sup> Section 134 of the Federal-Aid Highway Act and Section 5303 of the Federal Transit Act, as amended.

Executive Order 13166: Improving Access to Services for Persons With Limited English Proficiency.

## THE BOSTON REGION MPO

The Boston Region MPO is a 22-member board consisting of state agencies and regional and municipal organizations. Its jurisdiction extends from Boston north to Ipswich, south to Duxbury, and west to Interstate 495. There are 101 cities and towns that make up this area. Those municipalities are divided into eight subregional areas (as shown in Figure 1-1).

As part of its 3C process, the Boston Region MPO annually produces the Transportation Improvement Program (TIP) and the Unified Planning Work Program (UPWP). These documents, along with the Long-Range Transportation Plan (LRTP), are required for the MPO to be certified as meeting federal requirements, which, in turn, is a prerequisite for receiving federal transportation funds.

This TIP was developed and approved by the permanent and elected MPO voting members. The permanent voting members are:

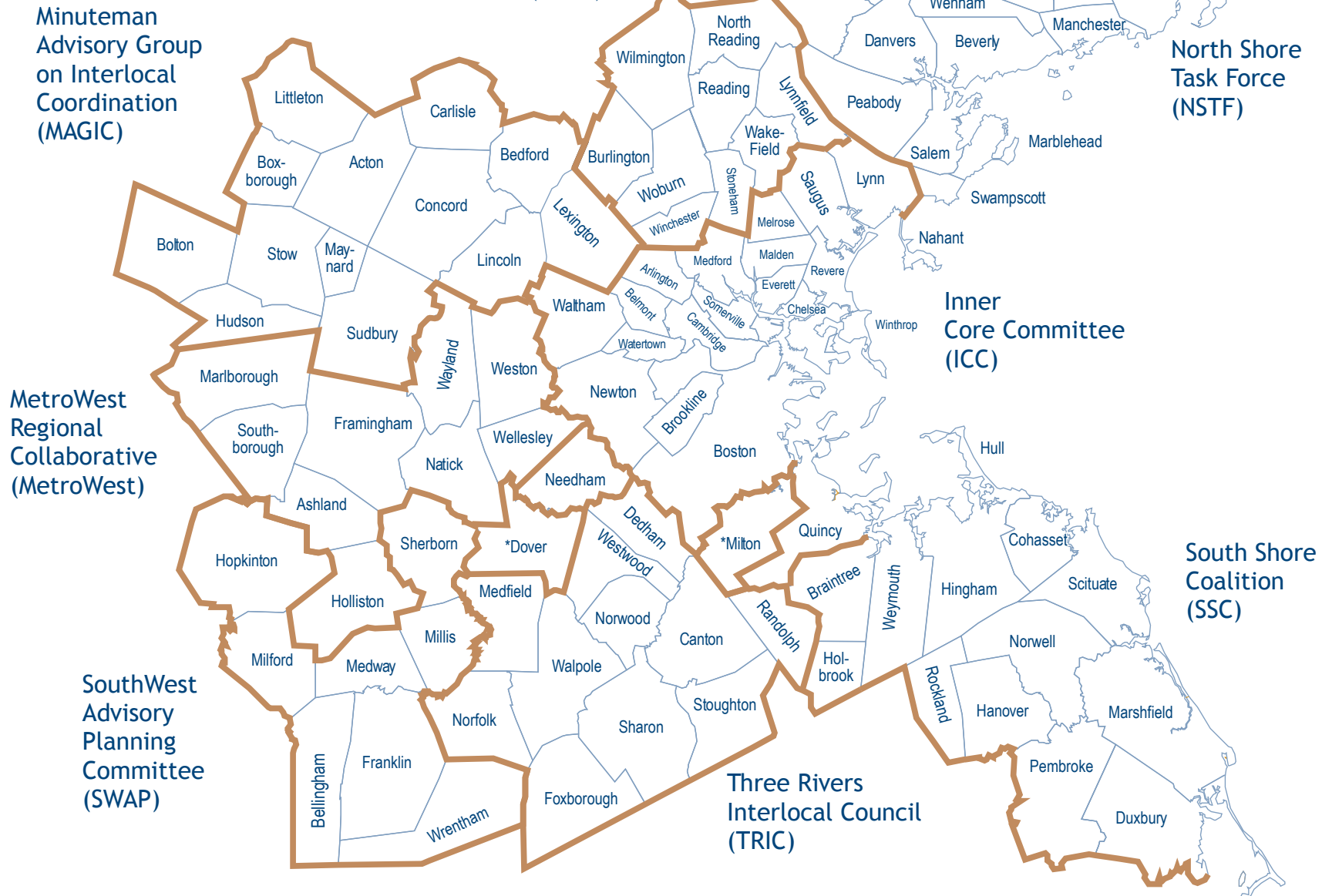
- Massachusetts Department of Transportation (MassDOT)
- Metropolitan Area Planning Council (MAPC)
- Massachusetts Bay Transportation Authority (MBTA)
- MBTA Advisory Board
- Massachusetts Port Authority (Massport)
- City of Boston

- Regional Transportation Advisory Council (Advisory Council)

Municipal MPO members are elected by chief elected officials of the 101 municipalities in the MPO region to represent the entire region. There are seats designated for at-large cities and towns, which may be filled by any city and town in the region, as well as seats for cities and towns within specific subregions. The elected municipal MPO voting members and their respective seats are:

- Town of Arlington: At-Large Town
- Town of Bedford: Minuteman Advisory Group on Interlocal Coordination
- City of Beverly: North Shore Task Force
- Town of Braintree: South Shore Coalition
- City of Everett: At-Large City
- Town of Framingham: MetroWest Regional Collaborative
- Town of Lexington: At-Large Town
- Town of Medway: SouthWest Advisory Planning Committee
- City of Newton: At-Large City
- Town of Norwood: Three Rivers Interlocal Council
- City of Somerville: Inner Core Committee
- City of Woburn: North Suburban Planning Council

**Figure 1-1:  
Metropolitan Area Planning Council (MAPC)  
Subregional Groups**



\*Several communities are represented by more than one subregional group: Dover is in TRIC and SWAP; Milton and Needham are in ICC and TRIC.

In addition, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) participate in the MPO as advisory (nonvoting) members. Figure 1-2 is an organization chart of MPO membership and of the MPO's staff, the Central Transportation Planning Staff (CTPS).

More details about the MPO's members are cited below. Apart from MassDOT and the City of Boston, which hold three seats and two seats, respectively, each entity holds one seat each.

*MassDOT* was established under Chapter 25 (“An Act Modernizing the Transportation Systems of the Commonwealth of Massachusetts”) of the Acts of 2009. It includes four Divisions: Highway, Rail and Transit, Aeronautics, and Registry of Motor Vehicles. The MassDOT Board of Directors, comprised of 11 members appointed by the Governor, oversees all four divisions and all MassDOT operations, including the Massachusetts Bay Transportation Authority (MBTA).

- The *MassDOT Highway Division* has jurisdiction over the roadways, bridges, and tunnels of the former Massachusetts Highway Department and the Massachusetts Turnpike Authority. It also has jurisdiction over many bridges and parkways previously under the authority of the Department of Conservation and Recreation (DCR). The Highway Division is responsible for the design, construction, and maintenance of the Commonwealth's state highways and bridges. It is also responsible for overseeing traffic safety and engineering activities for the state highway system. These activities include

operating the Highway Operations Control Center to ensure safe road and travel conditions.

- The *Rail and Transit Division* oversees MassDOT's freight and passenger rail program and provides oversight for Massachusetts's 15 Regional Transit Authorities (RTAs), as well as for the intercity bus services, MBTA paratransit (THE RIDE), and the Massachusetts Mobility Management Center, a resource that helps communities develop the capacity to better serve people with mobility challenges.

MassDOT has three seats on the MPO, including one for the Highway Division.

The *MBTA* has the statutory responsibility within its district, under the provisions of Chapter 161A of the Massachusetts General Laws (MGLs), of preparing the engineering and architectural designs for transit development projects, constructing and operating transit development projects, and operating the public transportation system. The MBTA district comprises 175 communities, including all of the 101 cities and towns of the Boston Region MPO area. Starting in April 2015, as a result of an action plan to improve the MBTA, a five-member Fiscal and Management Control Board (FMCB) was created to oversee the MBTA's finances and management and to increase accountability over a three-to-five-year period. By statute, the MBTA FMCB consists of five members, one with experience in transportation finance, one with experience in mass transit operations, and three who are also members of the MassDOT Board.

The *MBTA Advisory Board* was created by the State Legislature in 1964 through the same legislation that created the MBTA. The Advisory Board consists of representatives from the 175 cities and towns that compose the MBTA district. Cities are represented by either the city manager or mayor, and towns are represented by the chairperson of the board of selectmen (a New England variation on the city council). Specific responsibilities of the Advisory Board include providing public oversight of MBTA expenditures; reviewing and offering advice on the MBTA's long-range plan, the Program for Mass Transportation (PMT); evaluating the MBTA's annual budget; evaluating proposed fare changes and substantial changes in transit service; and consulting with the MBTA about service quality standards.

*Massport* has the statutory responsibility under Chapter 465 of the Acts of 1956, as amended, of planning, constructing, owning, and operating such transportation and related facilities as may be necessary for developing and improving commerce in Boston and the surrounding metropolitan area. Massport owns and operates Boston's Logan International Airport, Conley Terminal, Cruiseport Boston, Hanscom Field, Worcester Regional Airport, and various maritime/waterfront properties, including parks in East Boston, South Boston, and Charlestown.

The *Metropolitan Area Planning Council (MAPC)* is the regional planning agency for the 101 cities and towns in the MAPC/MPO district. It is composed of the chief executive officer (or their designee) of each city and town in the district, 21 gubernatorial appointees, and 12 ex officio members. It has

statutory responsibility for comprehensive regional planning in the district under Chapter 40B of the MGLs. It is the Boston Metropolitan Clearinghouse under Section 204 of the Demonstration Cities and Metropolitan Development Act of 1966 and Title VI of the Intergovernmental Cooperation Act of 1968. Its district also has been designated as an economic development district under Title IV of the Public Works and Economic Development Act of 1965, as amended. MAPC's responsibilities for comprehensive planning include technical assistance to communities, transportation planning, and the development of zoning, land use, and demographic and environmental studies.

The *City of Boston, six elected cities (currently Beverly, Braintree, Everett, Newton, Somerville, and Woburn), and six elected towns (currently Arlington, Bedford, Framingham, Lexington, Medway, and Norwood)* represent the region's 101 municipalities in the Boston Region MPO. The City of Boston is a permanent MPO member (with two seats). There is one elected municipal seat for each of the eight MAPC subregions, and there are four at-large elected municipalities (two cities and two towns). The elected at-large municipalities serve staggered three-year terms, as do the eight municipalities representing the MAPC subregions.

The *Regional Transportation Advisory Council*, the MPO's public advisory group, provides the opportunity for transportation-related organizations, agencies, and municipal representatives to become actively involved in the MPO's decision-making processes for planning and programming transportation projects in the region. The Advisory Council reviews, comments on,

and makes recommendations for certification documents. It also provides information about transportation topics in the region, identifies issues, advocates for ways to address the region's transportation needs, and generates interest in the work of the MPO among members of the general public.

Two members participate in the Boston Region MPO in an advisory (nonvoting) capacity, reviewing the LRTP, the TIP, and the UPWP to ensure compliance with federal planning and programming requirements:

The *FHWA* and *FTA* oversee the highway and transit programs of the US Department of Transportation under the pertinent legislation and the provisions of FAST Act.

Two other entities assist MPO members in carrying out the responsibilities of the MPO's 3C planning process through policy implementation, technical support, and public participation:

- *CTPS* was created by the MPO to fulfill general and 3C transportation-planning activities on behalf of the MPO and to provide MPO member agencies with the analyses required for their decision-making.
- The *MAPC subregional groups* bring together representatives (usually appointed or elected officials or their staff) of the communities within a subregion of the MAPC district to address shared concerns about transportation and land-use issues. MAPC has promoted and supported the formation of subregional groups in order to foster

better communication and cooperation among communities. It has played an important role in the MPO's participatory process, including helping to develop the TIP and UPWP project priorities.

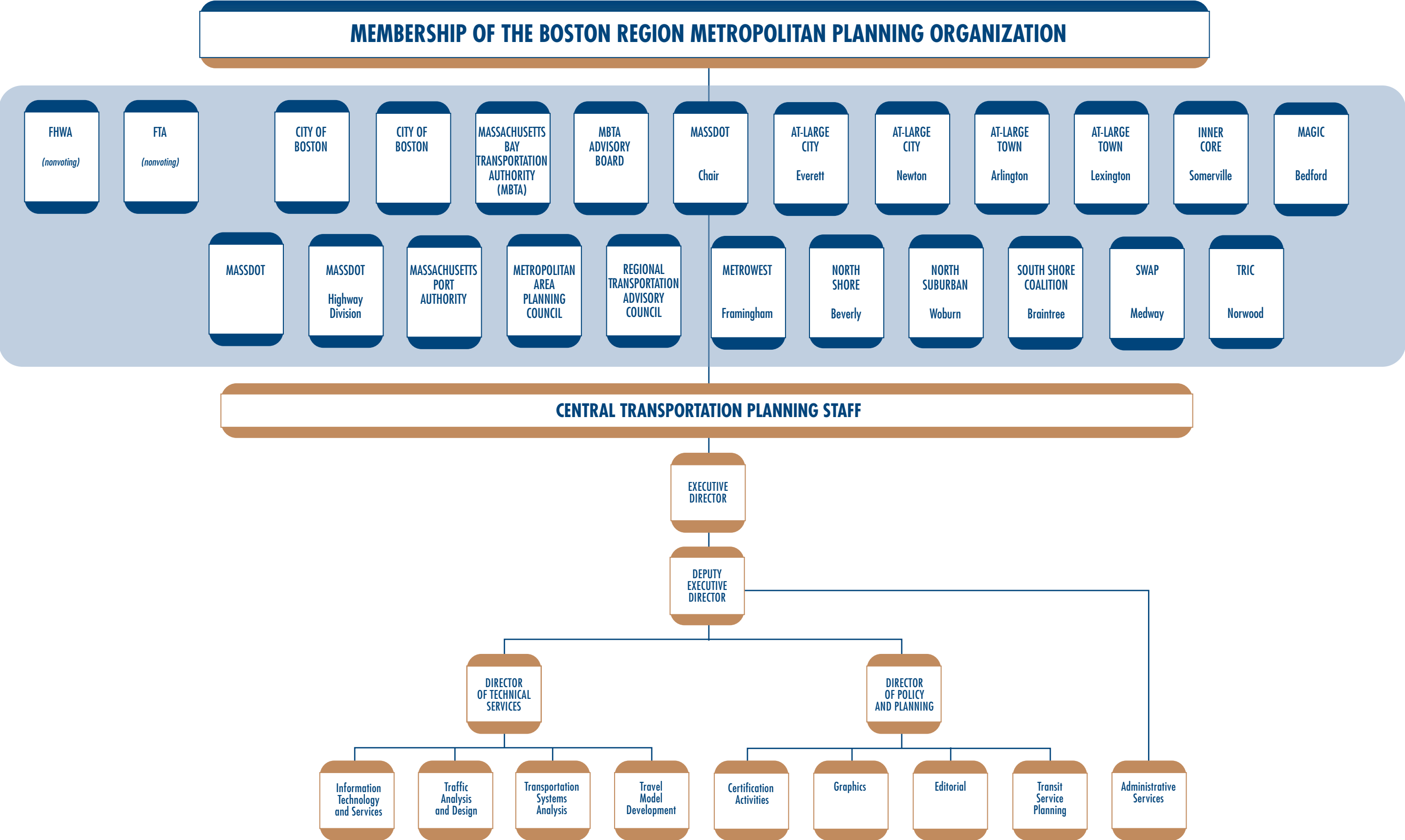
## CERTIFICATION DOCUMENTS

The following section briefly describes the three documents produced by the MPO as part of its federally required 3C process:

- The *Long-Range Transportation Plan and Air Quality Conformity Determination (LRTP)* guides investment in the transportation system of the Boston metropolitan region for the next 25 years. It defines an overarching vision of the future of transportation in the region, establishes goals and objectives that will lead to achievement of that vision, and allocates projected revenue to transportation projects and programs consistent with established goals and objectives. The Boston Region MPO produces an LRTP every four years. *Charting Progress to 2040*, the current LRTP, which was endorsed by the MPO in 2015, guided the development of the document you are now reading.

The *Transportation Improvement Program and Air Quality Conformity Determination (TIP)* is a multiyear, intermodal program of transportation improvements that is consistent with the LRTP. It describes and prioritizes transportation projects that are expected to be implemented during a five-year period. The types of projects funded include major highway reconstruction and maintenance, arterial and

Figure 1-2:  
Boston Region MPO Organizational Chart



intersection improvements, public transit expansion and maintenance, bicycle paths and related facilities, and improvements for pedestrians. The TIP contains a financial plan that shows the revenue source or sources, current or proposed, for each project. The TIP serves as the implementation arm of the MPO's LRTP; the Boston Region MPO updates the TIP annually. An MPO-endorsed TIP is incorporated into the State Transportation Improvement Program for submission to FHWA, FTA, and the Environmental Protection Agency for approval.

- The *Unified Planning Work Program (UPWP)* contains information about surface transportation planning projects that will be conducted in the Boston metropolitan region. The UPWP has a one-year scope, and is produced annually. The UPWP is an essential planning tool for the region and often a first step in determining whether or not a project will be implemented. It is integrally related to other planning initiatives conducted by the Boston Region MPO, as well as to initiatives by MassDOT, the MBTA, and Massport.

## CONSISTENCY WITH FEDERAL PLANNING REGULATIONS

### FAST Act Legislation

FAST Act legislation requires all MPOs to fulfill the 3C process. To meet this requirement, MPOs must perform the following activities:

- Produce the LRTP, the TIP, and the UPWP.
- Establish and oversee the public-participation process in the development of those documents.
- Maintain transportation models and data resources to support both air-quality conformity determinations and long- and short-range planning work.

FAST Act legislation also maintains national goals for federal highway programs, including:

1. *Safety*: Achieve significant reduction in traffic fatalities and serious injuries on all public roads.
2. *Infrastructure condition*: Maintain the highway infrastructure asset system in a state of good repair.
3. *Congestion reduction*: Achieve significant reduction in congestion on the National Highway System.
4. *System reliability*: Improve efficiency of the surface transportation system.
5. *Freight movement and economic vitality*: Improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
6. *Environmental sustainability*: Enhance performance of the transportation system while



protecting and enriching the natural environment.

7. *Reduced project delivery delays:* Reduce project costs; promote jobs and the economy; and expedite movement of people and goods by accelerating project completion, eliminating delays in the development and delivery process, lessening regulatory burdens, and improving the work practices of the agencies involved.

In addition, the FAST Act maintains the federal planning factors established in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and adds two new planning factors. In accordance with the legislation, the MPO shall comply with the following factors:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
2. Increase the safety of the transportation system for all motorized and nonmotorized users.
3. Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and nonmotorized users.
4. Increase accessibility and mobility of people and freight.
5. Protect and enhance the environment, promote energy conservation, improve quality of life,

and promote consistency between transportation improvements and state and local planned growth and economic development patterns.

6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system.
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
10. Enhance travel and tourism.

FAST Act continues to emphasize performance-based planning as an integral part of the metropolitan planning process: states are to develop performance goals, guided by the national goals, and then MPOs will work with state departments of transportation (DOTs) to develop MPO performance targets. The TIP will integrate the MPOs' performance measures and link transportation investment decisions to progress toward achieving performance goals.

## CONSISTENCY WITH OTHER FEDERAL LEGISLATIVE REQUIREMENTS

### The Clean Air Act of 1990

Air-quality conformity determinations must be performed for capital improvement projects that receive federal funding and for those that are

considered regionally significant, regardless of the funding source. These determinations must show that the MPO's LRTP and TIP will not cause or contribute to any new air-quality violations, will not increase the frequency or severity of any existing air-quality violations in any area, and will not delay the timely attainment of air-quality standards in any area.

Transportation control measures identified in the Commonwealth's State Implementation Plan for the attainment of air-quality standards are federally enforceable and must be given first priority when using federal funds. Such projects include parking-freeze programs in Boston and Cambridge, statewide rideshare programs, rapid-transit and commuter-rail extension programs, park-and-ride facilities, residential parking-sticker programs, and operation of high-occupancy-vehicle lanes.

### **Nondiscrimination Mandates**

The Boston Region MPO complies with Title VI of the Civil Rights Act of 1964, the ADA, and other federal and state nondiscrimination statutes and regulations in all of its programs and activities. The MPO does not discriminate based on race, color, national origin, English proficiency, income, religious creed, ancestry, disability, age, gender, sexual orientation, gender identity or expression, or military service. The major federal requirements are discussed below.

#### **Title VI of the Civil Rights Act of 1964**

This statute requires that no person be excluded from participation in, be denied the benefits of, or be subjected to discrimination on the basis of race, color, or national origin under any program or activity

provided by an agency receiving federal financial assistance.

Executive Order 13166, dated August 11, 2000, extends Title VI protections to persons who, as a result of national origin, have limited English-language proficiency (LEP). Specifically, it calls for improved access to federally conducted and -assisted programs and activities and requires MPOs to develop and implement a system by which LEP persons can meaningfully participate in the transportation-planning process.

#### **Environmental Justice Executive Orders**

Executive Order 12898, dated February 11, 1994, further expands upon Title VI, requiring each federal agency to achieve environmental justice by identifying and addressing any disproportionately high adverse human health or environmental effects, including interrelated social and economic effects, of its programs, policies, and activities on minority or low-income populations.

On April 15, 1997, the US Department of Transportation issued its Final Order to Address Environmental Justice in Minority Populations and Low-Income Populations. Among other provisions, this order requires programming and planning activities to:

- Explicitly consider the effects of transportation decisions on minority and low-income populations.
- Provide meaningful opportunities for public involvement by members of minority and low-income populations.

- Gather (where relevant, appropriate, and practical) demographic information such as the race, color, national origin, and income level of the populations affected by transportation decisions.
- Minimize or mitigate any adverse impact on minority or low-income populations.

### The Americans with Disabilities Act

Title III of the Americans with Disabilities Act (ADA) requires all transportation projects, plans, and programs to be accessible to people with disabilities. At the MPO level, this means that public meetings must be held in accessible buildings and MPO materials must be made available in accessible formats.

### Executive Order 13330

This executive order, dated February 26, 2004, calls for the establishment of the Interagency Transportation Coordinating Council on Access and Mobility, under the aegis of the Secretary of Transportation. This executive order reinforces both environmental justice and ADA requirements by charging the Council with developing policies and methods for improving access for people with disabilities, low-income persons, and older adults.

## CONSISTENCY WITH STATE REQUIREMENTS

### Global Warming Solutions Act

The Global Warming Solutions Act (GWSA) makes Massachusetts a leader in setting aggressive and enforceable greenhouse gas (GHG) reduction targets and implementing policies and initiatives to achieve

these targets. In keeping with this law, the Massachusetts Executive Office of Energy and Environmental Affairs, in consultation with other state agencies and the public, developed the Massachusetts Clean Energy and Climate Plan for 2020. This implementation plan, released on December 29, 2010, establishes the following targets for overall statewide GHG emissions:

- By 2020: 25 percent reduction below statewide 1990 GHG emission levels
- By 2050: 80 percent reduction below statewide 1990 GHG emission levels

## GREENDOT POLICY

The transportation sector is the single largest contributor of GHGs—accounting for more than one-third—and therefore is a major focus of the Clean Energy and Climate Plan for 2020. MassDOT’s approach to fulfilling its part of the plan is presented in its GreenDOT Policy Directive, a comprehensive sustainability initiative that sets three principal objectives:

- **Reduce GHG emissions.** MassDOT will achieve this by taking GHG emissions into account in all of its responsibilities, from strategic planning to project design and construction and system operations.
- **Promote the healthy transportation modes of walking, bicycling, and taking public transit.** MassDOT will achieve this by pursuing multimodal Complete Streets design standards, providing choices in transportation services, and working

with MPOs and other partners to prioritize and program a balance among projects that serve drivers, pedestrians, bicyclists, and public transit riders.

- **Support smart-growth development.** MassDOT will achieve this by working with MPOs and other partners to invest in transportation projects that make denser smart-growth development patterns—which support reduced GHG emissions—possible.

The Commonwealth's 13 MPOs are integrally involved in helping MassDOT achieve its GreenDOT objectives and supporting the GHG reductions mandated under the GWSA. The MPOs seek to realize these objectives by prioritizing projects that will help accomplish them in the LRTP and TIP. The Boston Region MPO's TIP project evaluation criteria are used to score projects based on GHG emissions impacts, multimodal Complete Streets accommodations, and their ability to support smart-growth development. Tracking and evaluating GHG emissions by project will enable the MPOs to anticipate GHG impacts of the planned and programmed projects and also to use GHG impacts as a criterion for prioritizing transportation investments.

## COORDINATION WITH OTHER PLANNING ACTIVITIES

### Long-Range Transportation Plan

The MPO considers the degree to which a proposed TIP project would advance the goals and objectives of

its LRTP. The MPO also reviews TIP projects within the context of the recommended projects already included in the LRTP.

### Unified Planning Work Program

The MPO aims to implement the findings and recommendations of the UPWP's past studies and reports in developing the TIP.

### Congestion Management Process

The purpose of the Congestion Management Process (CMP) is to monitor and analyze the performance of transportation facilities and services; develop strategies to alleviate congestion; and move these strategies into the implementation stage by providing decision makers in the region with information and recommendations. The CMP monitors roadways and park-and-ride facilities in the MPO region for safety, congestion, and mobility, and identifies "problem" locations. Projects that help address problems identified in the most recent CMP monitoring endeavor were considered for inclusion in this TIP.

### The MBTA's Program for Mass Transportation

In 2009, the MBTA adopted its current PMT. The PMT was developed with extensive public involvement and was approved by the MBTA Advisory Board.

The next PMT, Focus40, is under development. Focus40 is the 25-year strategic vision for MBTA investments. This process will engage customers—as well as elected officials, major employers and business leaders, academic institutions, the advocacy community, and other stakeholders—in developing a

financially responsible, long-term investment strategy that positions the MBTA to better serve the region's present concerns, as well as those of Greater Boston as projected for 2040. Focus40 will be an open and frank conversation about a number of critical issues, including:

- Necessary repair investments, in order to keep our system operating well and working safely.
- The Commonwealth's financial capacity to expand the system's footprint.
- The potential for transformative change on local streets through strong partnerships between the MBTA and municipalities.
- The Boston Region in 2040: Shifting demographics, new technology, and climate change all may affect how the MBTA must operate in the future.

The first phase of Focus40 will culminate in the release of the State of the System series of reports, which is intended to provide a clear picture of where the MBTA stands today in terms of asset inventory, condition, and service performance. The second phase of the Focus40 effort is centered on developing a better understanding of the world in which the MBTA will be operating in 2040. Finally, Focus40 will work with the public and stakeholders to develop and evaluate various investment strategies that address both current and future needs.

## MetroFuture

MetroFuture, which was developed by MAPC and adopted in 2008, is the long-range plan for land use,

housing, economic development, and environmental preservation in the Boston region. It includes a vision for the region's future and a set of strategies for achieving that future, and it was adopted as the future land-use scenario for the MPO's LRTP, *Charting Progress to 2040*. MetroFuture's goals, objectives, and strategies were considered in the development of this TIP.

## youMove Massachusetts and weMove Massachusetts

A statewide initiative designed as a bottom-up approach to transportation planning, youMove Massachusetts (YMM) derived 10 core themes from a broad-based public participation process that articulated the expressed concerns, needs, and aspirations of Massachusetts residents related to their transportation network. Those themes have been considered in the development of this TIP.

MassDOT's statewide strategic multimodal plan, weMove Massachusetts (WMM), is a product of the transportation reform legislation of 2009 and the YMM civic engagement process. In May 2014, MassDOT released *WMM: Planning for Performance*, the Commonwealth of Massachusetts' 2040 LRTP. WMM identifies high-level policy priorities that were considered in the development of this TIP. WMM also incorporates performance management into investment decision-making to calculate the differences in performance outcomes resulting from different funding levels available to MassDOT. In the future, MassDOT will use this scenario-based tool to update and refine investment priorities. The TIP builds on this data-driven method to prioritize transportation investments.

## Healthy Transportation Compact

The Healthy Transportation Compact (HTC) is a major requirement of the Massachusetts landmark transportation reform legislation that took effect on November 1, 2009. It is an interagency initiative that will help ensure that the transportation decisions made by the Commonwealth balance the needs of all transportation users, expand mobility, improve public health, support a cleaner environment, and create stronger communities.

The agencies work together to achieve positive health outcomes by coordinating land use, transportation, and public health policy. HTC membership is made up of the secretary of transportation (co-chair), secretary of health and human services (co-chair), secretary of energy and environmental affairs, administrator of transportation for highways, administrator of transportation for mass transit, and the commissioner of public health (each of whom may select a representative to serve in their stead).

The HTC also promotes improved coordination among the public sector, private sector and advocacy groups, as well as among transportation, land-use, and public health stakeholders. As part of the framework for the HTC, MassDOT established a Healthy Transportation Advisory Group comprised of advocates and leaders in the fields of land use, transportation, and public health policy.

## Accelerated Bridge Program

The \$3 billion Accelerated Bridge Program (ABP) represents a monumental investment in Massachusetts' bridges. This program has greatly

reduced the number of structurally deficient bridges in the state system while creating thousands of construction jobs.

In this program, MassDOT and the DCR have relied on innovative and accelerated project development and construction techniques. As a result, projects have been completed on time, on budget, and with minimal disruption to people and commerce.

When finished, the eight-year program, which began in 2008, will have resulted in the replacement or repair of more than 270 bridges in the Commonwealth.

## MassDOT Mode Shift Goal

In the fall of 2012, MassDOT announced a statewide mode shift goal: to triple the share of travel modes in Massachusetts that uses bicycling, transit, and walking. The mode shift goal aims to foster improved quality of life by protecting our environment and preserving the capacity of our highway network. In addition, positive public health outcomes will be achieved by providing more healthy transportation options.

On September 9, 2013, MassDOT passed the Healthy Transportation Policy Directive to formalize its commitment to implementing and maintaining transportation networks that serve all mode choices. This directive will ensure that all MassDOT projects are designed and implemented in ways that provide all customers with access to safe and comfortable walking, bicycling, and transit options.

In November 2015, MassDOT released the Separated Bike Lane Planning & Design Guide. This guide

represents the next—but not the last—step in MassDOT’s continuing commitment to Complete Streets, sustainable transportation, and to creating more safe and convenient transportation options for Massachusetts’s residents.

This guide may be used by project planners and designers as a resource for considering, evaluating and designing separated bike lanes as part of a Complete Streets approach.

## CONSISTENCY WITH MPO GOALS AND OBJECTIVES

In the development of the LRTP, *Charting Progress to 2040* (endorsed in July 2015), the Boston Region MPO updated its vision, goals, and objectives. These updated goals and objectives, listed on the following page, guided this year’s update of the TIP evaluation criteria to better align with future investment decisions.

Investments in the FFYs 2017-2021 TIP will:

- Provide safe transportation for all modes.
- Maintain the transportation system.
- Use existing facility capacity more efficiently.
- Increase healthy transportation options.
- Create an environmentally friendly transportation system.
- Afford comparable access and service quality among communities, regardless of income level or minority population.

- Ensure that our transportation network serves as a strong foundation for economic vitality.

Chapter 4 demonstrates in detail how transportation investments over the next five years would advance the MPO’s goals and objectives.

## Figure 1-3 Central Vision Statement

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.

### GOALS

### OBJECTIVES

#### ● SAFETY

Transportation by all modes will be safe

- 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

- 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

#### ● CLEAN AIR/CLEAN COMMUNITIES

Create an environmentally friendly transportation system

- 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

- 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