

**Unified Planning  
Work Program  
Federal Fiscal Year 2013**

**Boston Region Metropolitan Planning  
Organization**

**Pre-Circulation Draft**

**April 5, 2012**

**Boston Region  
Metropolitan Planning Organization Staff**

Directed by the Boston Region Metropolitan Planning  
Organization, which is composed of the:

Massachusetts Department of Transportation  
Metropolitan Area Planning Council  
Massachusetts Bay Transportation Authority Advisory Board  
Massachusetts Bay Transportation Authority  
Massachusetts Port Authority  
Regional Transportation Advisory Council  
City of Boston  
City of Beverly  
City of Everett  
City of Newton  
City of Somerville  
City of Woburn  
Town of Arlington  
Town of Bedford  
Town of Braintree  
Town of Framingham  
Town of Lexington  
Town of Medway  
Town of Norwood  
Federal Highway Administration (nonvoting)  
Federal Transit Administration (nonvoting)  
(nonvoting)



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## EXECUTIVE SUMMARY

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This Unified Planning Work Program (UPWP) contains information about surface-transportation planning projects that will be conducted in the Boston metropolitan region during the period of October 1, 2012, through September 30, 2013 (federal fiscal year 2013). The UPWP is an essential transportation-planning tool for the region and often a first step in determining whether or not a project will be constructed. It is integrally related to other planning initiatives conducted by the Boston Region Metropolitan Planning Organization (MPO), as well as by the Massachusetts Department of Transportation and the Massachusetts Port Authority.

The projects in this UPWP will be funded from federal, state, and local sources. It has been prepared in accordance with final regulations governing the implementation of the federal Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users (SAFETEA-LU) and with Federal Highway Administration and Federal Transit Administration grant application requirements and planning emphasis areas. This UPWP contains xx projects, of which xx will be carried out by the Central Transportation Planning Staff (CTPS) and the Metropolitan Area Planning Council (MAPC) on behalf of the MPO, the Massachusetts Department of Transportation (MassDOT), and the Massachusetts Port Authority (Massport). The remaining xx projects will be carried out by individual transportation agencies, municipalities, and academic institutions.

The majority of the FFY 2013 UPWP projects have been ongoing since FFY 2012. However, there are several new projects. Those to be undertaken on behalf of the MPO are:

**List of projects to be inserted after MPO Vote**

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CTPS will also continue to support projects that are being conducted by MassDOT and the MBTA. Examples of these are:

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The UPWP is intended to serve two purposes. The first is to provide information to government officials, local communities, and the general public about all surface-transportation planning projects expected to be undertaken in the Boston region. The second is to provide complete

budget information to federal and state officials about the expenditure of federal funds for those projects being carried out by the Boston Region MPO.

The document is structured as follows. Chapter 1 provides general information about the Boston Region MPO, the transportation-planning process, and the sources of funding for UPWP projects. In addition, it explains the MPO's role in programming these funds and the criteria the MPO used to evaluate the projects it was responsible for programming in this UPWP. Chapter 1 also contains a graphic that shows the UPWP's relationship to other MPO planning documents and current feasibility studies, and other visioning processes.

Chapter 2 provides a status report on the FFY 2012 UPWP projects that were conducted by CTPS and MAPC. It also includes a list of products for those projects and information on how to obtain copies of reports and certification documents.

Chapter 3 is an index of the FFY 2013 projects. They are organized by the name of the agency responsible for conducting them.

Chapters 4 through 7 contain project descriptions and detailed budget information for all work being conducted by CTPS and MAPC on behalf of the MPO, and for transportation projects being conducted by CTPS on behalf of the individual transportation-planning entities mentioned on page ES-1.

Chapter 8 gives budget summaries of the projects included in Chapters 4 through 7 and other information about the status of federal funding in this UPWP. It is intended to provide federal and state officials with information necessary for funding approval and contract administration.

Appendix A presents brief summaries of project information for other, non-MPO transportation-planning projects that will be conducted in the Boston region. These projects have separate review and approval processes and are outside the purview of the MPO. They are included in the UPWP to provide a more comprehensive picture of what is being planned for the region and to ensure that MPO planning efforts within the region are coordinated with other ongoing work.

Appendix B will be completed following the close of the 30-day public review period and before the final document is presented to the MPO for adoption. It will describe the public participation process used for the development of the draft UPWP and the public workshops that were held during its public review period. It will also present a summary of the written comments on the document that were received during its review period and the MPO's responses to them.

Appendix C contains the worksheets developed by staff to evaluate potential UPWP projects and used by the UPWP Committee as a guide in selecting new projects.



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# 1 THE TRANSPORTATION-PLANNING AND PROGRAMMING PROCESS IN THE BOSTON REGION MPO AREA

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This chapter is intended to give the reader an understanding of how the transportation-planning process is conducted in the Boston Region Metropolitan Planning Organization (MPO) area, including the federal requirements that govern the process, the funding sources used to carry it out, and the implementation of the process from concept to completion.

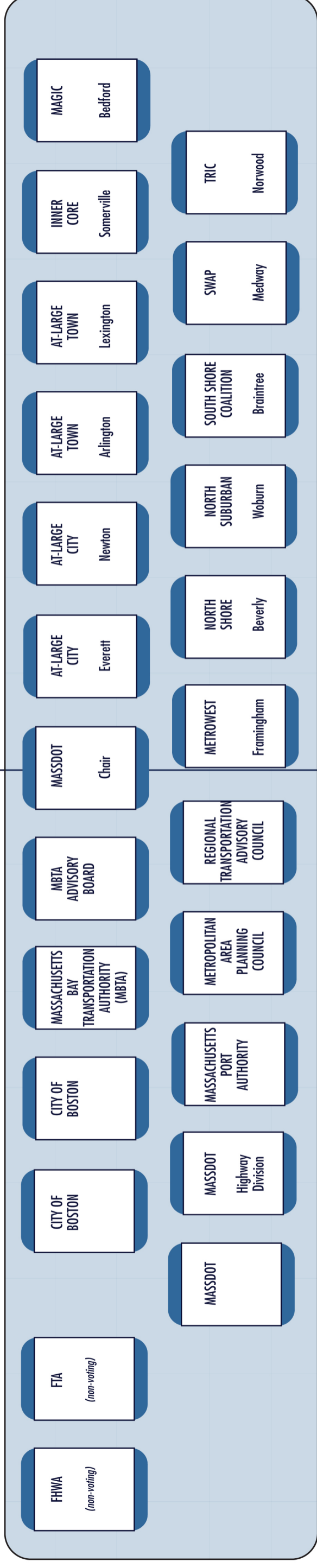
Section 134 of the Federal-Aid Highway Act and Section 5303 of the Federal Transit Act, as amended, require that urbanized areas, to be eligible for federal funds, conduct a continuing, cooperative, and comprehensive transportation-planning process (3C process) resulting in plans and programs consistent with the planning objectives of the metropolitan area.

## THE BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

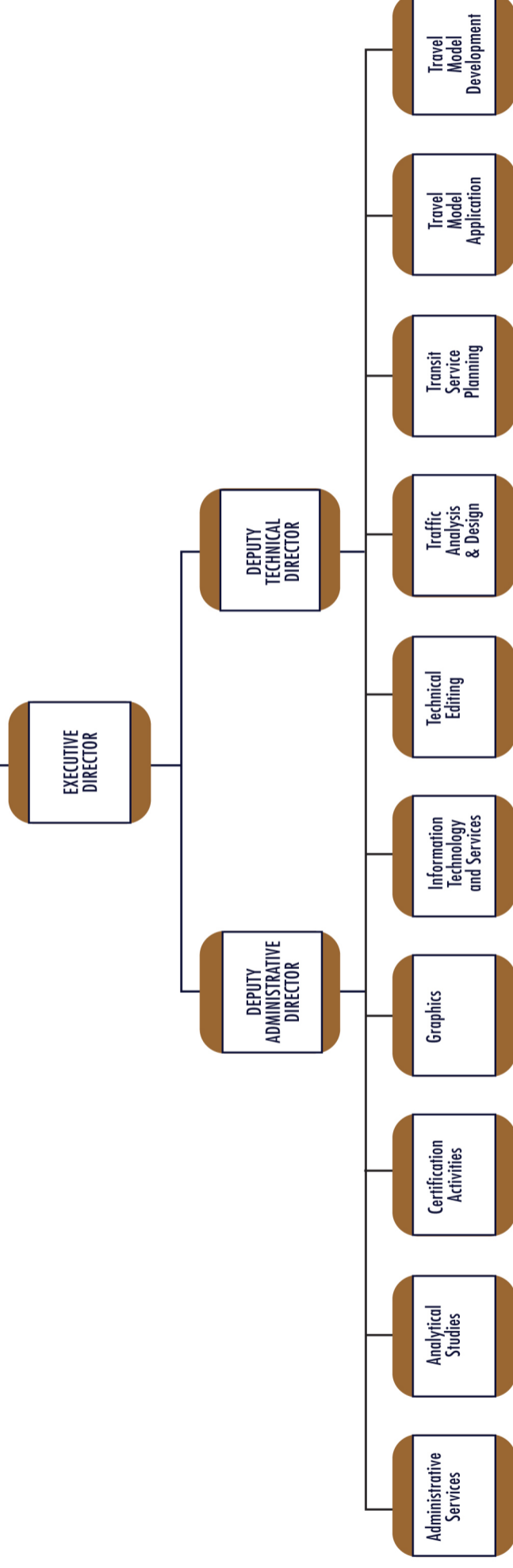
The Boston Region MPO area consists of the 101 cities and towns shown on the map that follows the title page of this document. The MPO voting members are the commonwealth's Massachusetts Department of Transportation (MassDOT); Massachusetts Bay Transportation Authority (MBTA); MBTA Advisory Board; Massachusetts Port Authority (Massport); Metropolitan Area Planning Council (MAPC); Regional Transportation Advisory Council; Cities of Beverly, Boston, Everett, Newton, Somerville, and Woburn; the towns of Arlington, Bedford, Braintree, Framingham, Lexington, Medway, and Norwood. In addition, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) participate in the MPO as advisory (nonvoting) members. The chart on the following page also shows MPO membership along with the organization of the MPO's staff, the Central Transportation Planning Staff.

- The *Massachusetts Department of Transportation (MassDOT)* was established on November 1, 2009, under Chapter 25 (“An Act Modernizing the Transportation Systems of the Commonwealth of Massachusetts”) of the Acts of 2009, which was signed by Governor Deval Patrick in June 2009. Accordingly, MassDOT is a merger of the former Executive Office of Transportation and Public Works (EOT) and its divisions with the former Massachusetts Turnpike Authority, the Massachusetts Highway Department, the Registry of Motor Vehicles, and the Massachusetts Aeronautics Commission. The legislation also established MassDOT oversight of the Massachusetts Bay Transportation Authority (MBTA), and of the Commonwealth's regional transit authorities (RTAs). In addition, it authorized the transfer of ownership of the Tobin Bridge from the Massachusetts Port Authority to MassDOT and the assumption of responsibility by MassDOT for many of the bridges and parkways formerly operated by the Department of Conservation and Recreation (DCR).
- The *MassDOT Highway Division* oversees the roadways, bridges, and tunnels of the former Massachusetts Highway Department and Massachusetts Turnpike Authority and the Tobin Bridge. The Division also includes the former DCR bridges and parkways mentioned above.

# MEMBERSHIP OF THE BOSTON REGION METROPOLITAN PLANNING ORGANIZATION



# CENTRAL TRANSPORTATION PLANNING STAFF



The Highway Division is responsible for the design, construction and maintenance of the commonwealth's state highways and bridges. The Division is responsible for overseeing traffic safety and engineering activities, including the Highway Operations Control Center, to ensure safe road and travel conditions.

- The *Massachusetts Bay Transportation Authority (MBTA)* has the statutory responsibility within its district, under the provisions of Chapter 161A of the Massachusetts General Laws (MGL), 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 101 cities and towns of the Boston Region MPO area. The MBTA board of directors consists of a chairman and five other directors, appointed by the governor. The MBTA will provide general transit planning in support of the projects in this UPWP.
- The *Massachusetts Bay Transportation Authority Advisory Board* was created by the Legislature in 1964 through the same legislation that created the MBTA; this legislation was updated as part of Chapter 127 of the Acts of 1999. The Advisory Board consists of representatives of the 175 cities and towns that compose the MBTA district. Cities are represented by either the city manager or mayor, and towns by the chairperson of the board of selectmen. Specific responsibilities of the Advisory Board include review of and comment on the Program for Mass Transportation (PMT), proposed fare increases, and the annual MBTA Capital Investment Program; review of the MBTA's documentation of net operating investment per passenger; and review of the MBTA's operating budget.
- The *Massachusetts Port Authority (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 the development and improvement of commerce in Boston and the surrounding metropolitan area. Massport owns and operates the seaport, Logan International Airport, and Hanscom Field.
- 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 (or her/his designee) of each of the 101 cities and towns in the MAPC 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 MGL. 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. Also, its district has been designated 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 responsibilities in the areas of technical assistance to communities, transportation planning, and the development of zoning, land use, demographic, and environmental studies.
- The *City of Boston, five elected cities (currently Beverly, Everett, Newton, Somerville, and Woburn), and seven elected towns (currently Arlington, Bedford, Braintree, 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; there is one elected municipal seat for each of the eight MAPC subregions; and 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 so that each year there is an election of one at-large city, one at-large town and four (4) municipal seats. This procedure was established in the MPO's Memorandum of Understanding, endorsed on July 7, 2011 and effective November 1, 2011.

- The *Regional Transportation Advisory Council*, the MPO's citizen advisory group, provides the opportunity for transportation –related organizations, agencies, and municipal representatives to become actively involved in the decision-making processes of the MPO in the planning and programming of transportation services in the region. The Advisory Council reviews, comments on, and makes recommendations regarding certification documents. It also serves as a forum for providing information on transportation topics in the region, identifying issues, advocating for ways to address the region's transportation needs, and generating interest among the general public in the work of the MPO.

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

- The *Federal Highway Administration* and *Federal Transit Administration* oversee the highway and transit programs of the U.S. Department of Transportation under pertinent legislation and the provisions of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

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:

- The *Central Transportation Planning Staff (CTPS)* was created by the MPO to carry out general and 3C transportation-planning activities on behalf of the MPO and to provide agencies with analyses required for the work described in this document and other agency initiatives.
- The *MAPC subregional groups (SRGs)* 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 regarding transportation and land use. MAPC has promoted and supported the formation of SRGs in order to foster better communication and cooperation among communities. They have played an important role in the MPO's participatory process, including the development of TIP and UPWP project priorities.

## **THE TRANSPORTATION-PLANNING PROCESS**

The Boston Region MPO is responsible for carrying out the 3C planning process in the Boston region and has established the following objectives for the process:

- To identify transportation problems and develop possible solutions to them
- To strike a balance between short-range and long-range considerations, so that beneficial incremental actions undertaken now reflect an adequate understanding of probable future consequences and possible future options
- To take into account both regional and local considerations, and both transportation and non-transportation objectives and impacts, in the analysis of project issues
- To assist implementing agencies in putting policy and project decisions into effect in a timely fashion, with adequate consideration of environmental, social, fiscal, and economic impacts and with adequate opportunity for participation by other agencies, local governments, and the public
- To assist implementing agencies in assigning priorities to transportation activities in a manner consistent with the region's needs and resources
- To maintain MPO compliance with the requirements of SAFETEA-LU, the Americans with Disabilities Act (ADA), the Clean Air Act (CAA), the Civil Rights Act of 1964, Executive Order 12898 (regarding environmental justice), Executive Order 13166 (regarding outreach to populations with limited English proficiency), and Executive Order 13330 (regarding the coordination of human-services transportation)

## **THE UPWP PROJECT SELECTION PROCESS**

Each year the MPO considers projects for inclusion in the annual update of the UPWP through its UPWP Committee, which was established by the MPO. For the development of the FFY 2013 UPWP, the MPO drew from the following sources to generate a universe of study ideas for evaluation:

1. Existing planning documents: the Congestion Management Process (CMP) reports, the Program for Mass Transportation (PMT), Paths to a Sustainable Region, the MPO's Long-Range Transportation Plan (LRTP), the youMove Massachusetts Interim Report, MetroFuture, and recent studies
2. Guidance received from the Federal Highway Administration and the Federal Transit Administration on addressing planning emphasis areas such as establishing a comprehensive livability program, addressing safety and security issues, and the developing performance measures for transportation projects.
3. FFY 2012 UPWP comment letters
4. Consultations with MassDOT's Office of Transportation Planning and its Highway and Transit divisions, MAPC, and the MBTA
5. MPO-staff-identified needs

## Evaluation Process

The MPO strengthened the link between UPWP studies and the LRTP by drawing on the Visions and Policies articulated in the LRTP and presented below to categorize potential studies and evaluate their consistency with the objectives of the MPO's new LRTP:

### LRTP Visions and Policies:

#### 1 System Preservation, Modernization, and Efficiency

Preserving the existing transportation network and replacing systems once their life span is realized are tasks critical to the promotion and effective management of regional mobility. The vision of the Boston Region MPO is to maintain and manage existing transportation facilities so that they function at their highest possible level of safety and efficiency. In this manner, people using elements of the system will experience the highest possible service level. Application of transportation systems management and intelligent transportation systems (ITS) technologies will be the main tools used to provide information, reduce congestion, and expedite transit service, thereby providing for system reliability, safety, and efficiency. Upgrading to keep in step with evolving standards will help meet the region's changing needs.

#### 2 Mobility

A coordinated mix of transportation modes and services will give users of the region's transportation system increased opportunities for convenient, reliable, speedy, affordable, and accessible travel. Existing roadway, transit, bicycle, pedestrian, and freight links will be maintained and their serviceability improved. New routes, lines, and connections will serve additional needs. The spectrum of options will serve travelers from different areas of the region with varying needs.

#### 3 Environment

Transportation- planning activities and projects will strive to reduce air quality degradation and other environmental degradations caused by transportation. Vehicle emissions (carbon monoxide [CO], nitrogen oxides [NOx], volatile organic compounds [VOCs], particulates, and carbon dioxide [CO<sub>2</sub>]) will be reduced by modernizing transit, truck, and automobile fleets, and through increasing transit mode share.

In the process of considering transportation projects, the MPO will take into account the management and minimization of soil and water contamination, such as highway and rail right-of-way runoff, and wetland impacts. Construction of transportation facilities will be planned and carried out in a manner that avoids or minimizes negative impacts to natural resources. Transportation planning will also promote project design that preserves cultural resources such as community character and cohesiveness, quality of life, and historic and scenic resources; protects greenfields, open space, wildlife, and ecosystems; and advances sustainability and health-promoting transportation options. Transportation agencies will work with environmental and cultural resource agencies to achieve these ends.

#### 4 Safety and Security

Safety and security initiatives will be implemented to protect the region from natural and human threats. Transportation infrastructure and its operation will be upgraded on an

ongoing basis for the safety and security of all users. Technologies will be employed to manage incidents, conduct emergency response, and support safe evacuations using various transportation modes. Highway and transit infrastructure will be kept in a state of good repair. There will be fewer crashes, due to improved intersection designs and upgrades.

#### 5 Transportation Equity

Regional equity and the needs of low-income and minority residents will be assessed through regular activities and technical analyses. Low-income and minority residents will share equally with others in access to the transportation network and its mobility benefits. Environmental burdens from transportation facilities and services will be identified and minimized for all populations.

#### 6 Livability

Multimodal transportation will serve business, residential, and mixed-use centers. Transit, bicycle, and pedestrian facilities will be linked in a network to a growing inventory of denser residential development, employment and commercial centers, and major destinations. Transportation investments will focus on centers of economic activity and areas with adequate water, sewer, and other public infrastructure. Transportation rights-of-way will be used to maximize public benefits.

Transportation planning will be integrated with land-use and economic-development planning to the greatest extent possible in order to achieve more mobility, foster sustainable communities and transportation, and expand economic opportunities and prosperity. Transportation improvements will be made to facilitate the movement of freight throughout the region.

#### 7 Climate Change

Strategies for achieving reductions in Greenhouse gas emissions to the levels identified in the Global Warming Solutions Act will limit environmental damage resulting from transportation. Through the adoption of greenhouse gas reduction goals will promote energy conservation and protect and enhance the environment. Planned growth and traffic demand management techniques contribute to reduced energy consumption in the region.

Next, the MPO further evaluated each study idea in a series of in-house staff discussions and UPWP Committee meetings that explored a variety of issues, such as whether there is current or planned transportation construction in the study area, and whether the recommendations of related previous studies (if applicable) have been implemented, and if they have addressed the need identified in the previous studies. Following this evaluation, staff defined the general scope and cost of a potential new study and whether a proposed study is consistent with the goals used in the LRTP for 2035, Paths to a Sustainable Region or to other critical criteria:

1. Link Land Use and Transportation
2. Work with Limited Financial Resources
3. Use a Management and Operations Approach
4. Protect Air Quality and the Environment
5. Preserve and Maintain the Transportation System
6. Increase Transit and Active Transportation Mode Share

7. Encourage Sustainable Communities
8. Consider Regional Equity
9. Address Documented Needs
10. Enhance Technical Capacity

Following completion of this process, MPO staff presented the results in an evaluation matrix to the UPWP Committee along with staff recommendations (see Appendix C).

The UPWP Subcommittee met three times to consider the development process, project evaluations, and staff recommendations regarding the draft FFY 2013 UPWP, and selected a program of projects that was based on the availability of funding and several other factors, described below, including planning priorities, state and federal guidelines, and other considerations. The MPO approved the recommendations of the UPWP Committee on April 19, 2012.

### **Consistency with Federal Planning Regulations**

*The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)*

This legislation requires all MPOs to carry out the 3C process (see page 1-1). Activities the MPOs must perform to meet this requirement are:

- Production of the LRTP, the TIP, and the UPWP
- Establishment and oversight of the public participation process
- Maintenance of transportation models and data resources to support air quality conformity determinations as well as long-range and short-range planning efforts

### **Consistency with Other Federal Legislative Requirements**

*Title VI of the 1964 Civil Rights Act, Executive Order 12898, Executive Order 13166, and Executive Order 13330*

Title VI of the 1964 Civil Rights Act forbids discrimination on the basis of race, color, national origin, age, sex, disability, or religion in agencies receiving federal financial assistance. This act and subsequent legislation and implementing regulations provide that persons may not be excluded, denied benefits, or discriminated against on these bases. This applies to all U.S. Department of Transportation programs, policies, and activities. It is the foundation of current environmental-justice policies and regulations.

Executive Order 12898, dated February 11, 1994, 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 U.S. 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

Executive Order 13166, dated August 11, 2000, is intended to ensure compliance with Title VI of the Civil Rights Act of 1964 by specifically calling for improved access to federally conducted and federally assisted programs and activities for persons who, as a result of national origin, have limited English proficiency (LEP). To comply with the order, MPOs are required to develop and implement a system by which LEP persons can meaningfully participate in the transportation-planning process.

Executive Order 13330, 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 order charges the Council with developing policies and methods for improving access for persons with disabilities, low-income persons, and older adults.

#### *The 1990 Clean Air Act*

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 the air quality standards in any area.

Transportation control measures (TCMs) identified in the State Implementation Plan (SIP) 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 regulations, rapid transit and commuter rail extension programs, park-and-ride facilities, residential parking-sticker programs, and the operation of high-occupancy-vehicle lanes.

#### *The Americans with Disabilities Act*

Title III of the Americans with Disabilities Act 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 be conducted in a manner that provides for accessibility. MPO materials must also be made available in accessible formats.

## Consistency with Federal Planning Factors and Other Federal Guidance

All the federal planning factors are reflected in the LRTP visions and policies described on page 1-6 and incorporated in the consideration of projects for this UPWP. In addition, this year the FHWA and FTA asked MPOs to pay particular attention to the following areas in their UPWPs:

- The continuation of a comprehensive livability program that provides multimodal mobility and accessibility options, includes linking land use and transportation planning, and supports actions that make better use of the existing system, such as carpools, vanpools, transportation demand management, walking, biking and access management
- Continued attention to safety and security and all-hazards and freight planning
- Continued attention to Title VI, transportation equity, and serving populations with limited English proficiency.

The MPO programmed initiatives in the FFY 2013 UPWP in response to this federal guidance; they are included in Chapter 5 and Chapter 7. MPO Title VI reporting and its Transportation Equity Program are presented on pages 5-9 and 5-18, respectively. Continued emphasis on climate change issues is reflected on page 5-4 under Safety and Security Planning. An MPO project for an ongoing freight program is described on page 7-xx; and the MPO's continuing Livable Communities Workshop Program is presented on 7-xx.

In addition to FHWA and FTA guidance to MPOs that they should continue to enhance their technical capacity and to develop and implement strategies to address environmental-justice and LEP issues, the following SAFETEA-LU planning factors were identified:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency environmental
- Increase the safety of the transportation system for motorized and non-motorized users
- Increase the security of the transportation system for motorized and non-motorized users
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Promote efficient system operation and management for both the transit and highway networks
- Emphasize the preservation of the existing transportation system
- Address safety and security issues in the transportation-planning process
- Enhance the technical capacity of the planning process

Projects specifically relating to these planning factors are identified in Chapters 4 through 7. A summary of the amount of money being spent for these projects can be found in Chapter 8.

## **Coordination with Other Planning Activities**

### *Long-Range Transportation Plan (LRTP)*

The MPO considered the degree to which a proposed UPWP project would forward the policies that guided the development of its LRTP. The MPO also reviewed UPWP projects within the context of the recommended projects included in the LRTP.

### *Congestion Management Process (CMP)*

The purpose of the CMP is to monitor transit, roadway, and park-and-ride facilities in the MPO region for safety, congestion, and mobility and identify “problem” locations. Projects that help address problems identified in the most recent CMP monitoring were considered for inclusion in this UPWP.

### *The MBTA Program for Mass Transportation (PMT)*

In 2009, the MBTA adopted its current PMT, which is the MBTA’s long-range capital plan. The PMT was developed with extensive public involvement and approved by the MBTA Advisory Board. The PMT includes projects currently under study in this UPWP, and it also identifies potential studies for inclusion in a future UPWP.

### *youMove Massachusetts*

*youMove Massachusetts*, a statewide initiative designed as a bottom-up approach to transportation planning, developed 10 core themes derived from a broad-based public participation process that articulated the expressed concerns, needs, and aspirations of Massachusetts residents related to their transportation network. These themes form the basis for the *youMove Massachusetts Interim Report*, and were considered in the development of this UPWP. MassDOT has begun a new multimodal strategic plan that will build on the work for *youMove Massachusetts*.

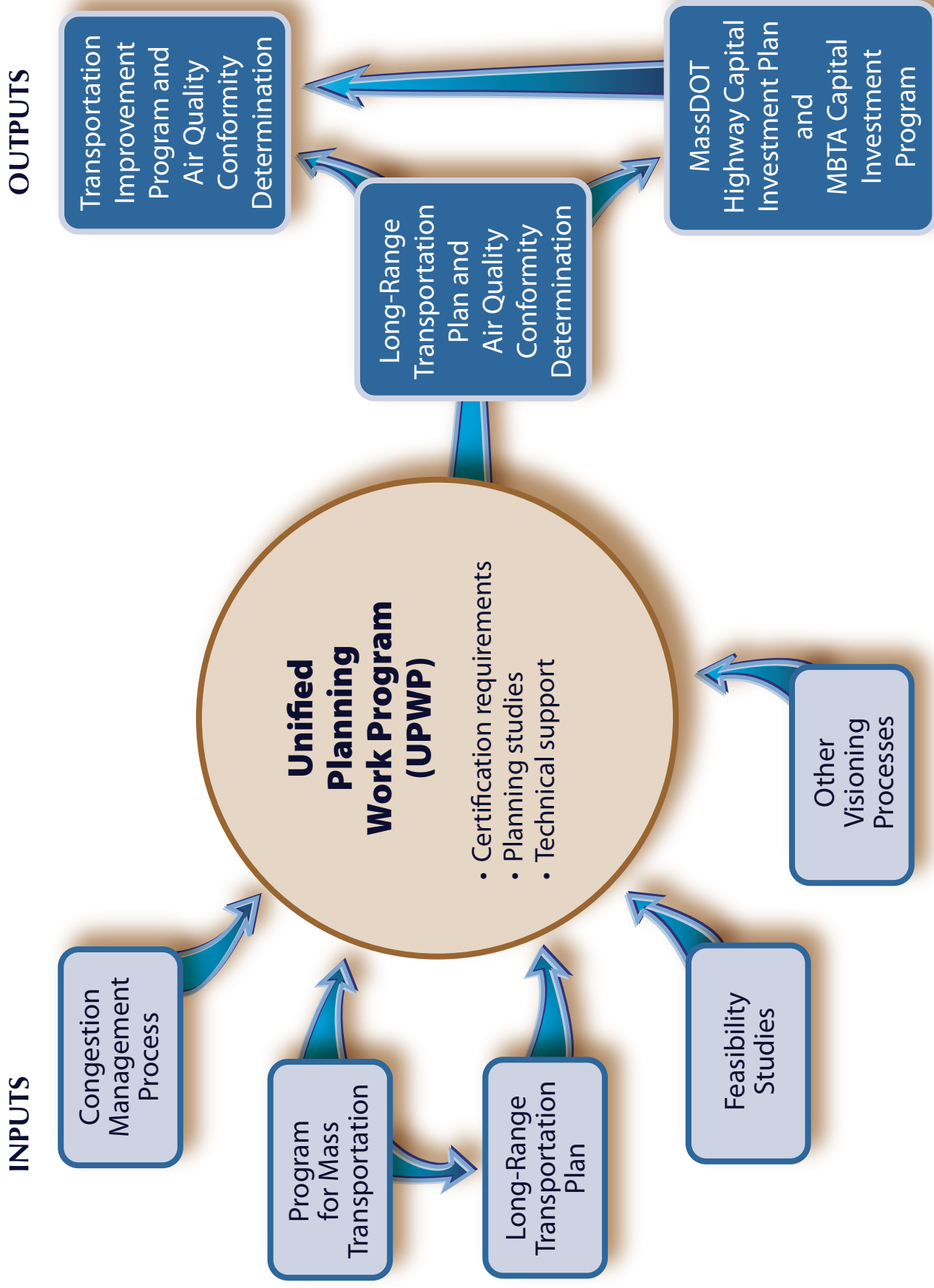
The diagram on the following page depicts how the UPWP relates to the above planning activities. In addition, this coordination is identified in the project listings shown in Chapters 4 through 8.

### *Healthy Transportation Compact*

The Healthy Transportation Compact (HTC) is a key requirement of the Massachusetts landmark transportation reform legislation which took effect on November 1, 2009. It is an interagency initiative that will help ensure that the transportation decisions the Commonwealth makes 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 through the coordination of land use, transportation, and public health policy. HTC membership is made up of the Secretary of

# Relationship of UPWP to Other Transportation Planning Documents



Transportation or designee (co-chair), the Secretary of Health and Human Services or designee (co-chair), the Secretary of Energy and Environmental Affairs or designee, the Administrator of Transportation for Highways or designee, the Administrator of Transportation for Mass Transit or designee, and the Commissioner of Public Health or designee.

The HTC will also promote 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 has established a Healthy Transportation Advisory Group composed of advocates and leaders in the field of land use, transportation and public health policy.

### **Other Considerations**

Lastly, selection of projects for the UPWP also takes into consideration the availability of CTPS time, the impact of new projects on the MPO's existing work program, and the availability of funds for a project's design and construction.

### **FUNDING THE PROJECTS**

The funding for the projects included in this UPWP (presented in Chapters 4 through 7) comes from a variety of federal and state sources, as described below. The source of funds has important implications with regard to which agency or organization is responsible for programming them, as well as the MPO's vote to approve both the UPWP and the subsequent work scopes for the projects included in it. The purview of the MPO is included in each of the funding descriptions.

*FHWA 3C Planning (PL)/MassDOT Local Match* - These are FHWA planning funds distributed to MassDOT's Office of Transportation Planning (OTP), according to an allocation formula established by federal legislation, to carry out the 3C planning process. OTP distributes these funds to Massachusetts MPOs according to a formula based on population. The FFY 2013 3C PL funding allocation for the Boston Region MPO is \$x,xxx,xxx, which includes \$xxx,xxx in state matching funds. The MPO votes on both the use of funds and the use of MPO staff for projects in this funding category.

*FHWA Statewide Planning and Research (SPR)/MassDOT Local Match* - As in the case of 3C PL funds, FHWA provides SPR funds to OTP according to a distribution formula. OTP uses these funds to carry out planning and research projects throughout the state. This UPWP contains only SPR projects that will be conducted in the Boston Region MPO area. However, OTP provides a complete listing of how these funds are distributed statewide in a document called the SPR Transportation Planning Work Program. SPR funds in the amount of \$xxx,xxx (including \$xxx,xxx in state matching funds) are programmed in this UPWP for projects to be conducted by MPO staff. The MPO's role is to approve the use of MPO staff for projects in this category and to make recommendations on work scopes for implementing them. The MPO's role in these projects is crucial to the 3C process because it provides an opportunity to coordinate projects with other, related transportation work efforts that may be planned for the same area.

*FTA/MassDOT and MAPC Local Match* - FTA provides 3C planning funds for transit projects to MPOs under Section 5303 of the Federal Transit Act. These funds require a local match, are distributed according to an allocation formula, and are administered by MassDOT. The allocation in this UPWP, including the total local match for FFY 2013, is \$x,xxx,xxx for projects to be conducted by MPO staff, MassDOT, and MAPC on behalf of the MPO. As is the case for FHWA 3C PL funds, the MPO votes on both the use of these funds and the use of MPO staff on projects in this category

*MBTA* - The MBTA provides \$xxx,xxx in funding for this UPWP for transit projects to be conducted by MPO staff. As is the case of the SPR funds described above, the MPO's role is to approve the use of MPO staff time for these projects and to make recommendations on the work scopes for implementing them.

*MassDOT* - Funds in the amount of \$xxx,xxx for MassDOT projects are included this UPWP. The Immediate Needs Bill and other bond bills will continue to provide the funding for the work to be conducted during FFY 2013.

*Other* - This UPWP also includes \$xx,xxx in funding provided by Massport and ?? for work being conducted by MPO staff on its behalf. The MPO's role is to vote on the use of MPO staff time for these projects and to make recommendations on the work scopes for implementing them.

## **MONITORING THE PROJECTS**

The following procedures for monitoring the projects in this UPWP were approved by the MPO:

- *A project work scope* must be approved by the MPO prior to the start of any CTPS project activity.
- *Monthly progress reports* on all active projects must be submitted to the respective funding agency by CTPS and/or MAPC. The reports must include the following information for each project:
  - The objectives that had been set for each reporting period
  - The accomplishments of the period
  - Any previous objectives that were not met, including the reasons why and the impact on the project and related projects
  - Any change to the scope, the amount of additional funding necessitated by the change, and the funding source
  - The percentage of the project's work scope completed and the percentage of the project's budget expended
- *A UPWP Status Report* is presented quarterly by CTPS to the MPO. It compares the UPWP project budgets with the actual project spending.
- *MPO approval* for release of a project's work products is based on whether the objectives stated in the work scope were met, whether the stated deliverables were produced.

## **AMENDMENTS AND ADMINISTRATIVE MODIFICATIONS TO THE UPWP**

Amendments or administrative modifications may be made to the UPWP, when necessary, throughout the year. If an amendment is under consideration, Advisory Council member entities and other interested parties, including any affected communities, are notified. Legal notice is placed in the region's major daily newspaper and posted on the MPO's website at least 30 days in advance of MPO action. Members of the public may attend and present comments at the UPWP Committee and at MPO meetings at which amendments are discussed. Administrative modifications may be made by the MPO, and, although no public review period is required, one may be provided at the MPO's discretion.





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## 2 STATUS OF THE FEDERAL FISCAL YEAR 2012 UPWP PROJECTS CONDUCTED BY BOSTON REGION MPO STAFF

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During federal fiscal year (FFY) 2012, numerous projects were conducted by the Central Transportation Planning Staff (CTPS) of the Boston Region Metropolitan Planning Organization (MPO) and by the Metropolitan Area Planning Council (MAPC) on behalf of the MPO. For the purpose of reporting here on the status of these projects, they have been divided into four categories:

- *Completed* – These projects are either already completed or expected to be completed by October 1, 2012, when this document goes into effect.
- *Discrete* – This is one of two categories of projects that continue from FFY 2012 into FFY 2013. It is distinctly different from the other such category, “ongoing” (described below), in that it covers planning studies that have specific start and end dates rather than ongoing programs. The percentage completed as of October 1, 2012, for each of these projects is included in the project descriptions presented in Chapters 6 and 7.
- *Ongoing* – These projects support and continue the transportation planning process from year to year and thus have no start or end date.
- *Inactive* – Contrary to expectations when the FFY 2012 UPWP was being developed, work on these projects did not begin during FFY 2012.

The tables on the following pages list FFY 2012 projects by category and give their budgets for that year. Following the tables is a complete listing of MPO work products resulting from FFY 2012 UPWP projects. Information is provided on how to obtain copies of reports approved by the MPO.

**COMPLETED FFY 2012 UPWP PROJECTS WITH FFY 2012 UPWP BUDGETS**

UPWP Project	FFY 12 MPO		FFY 12		FFY 12	FFY 12	Total FFY 2012 UPWP	
	FFY 12 PL	5303	FFY 12 SPR	MassDOT	MassDOT 5303	MBTA Other		
2011–12 I-93 North and Southeast Xway HOV Lane Monitoring			\$65,000				\$65,000	
Analysis of JARC and New Freedom Projects		\$20,000					\$20,000	
Emergency Evacuation & Hazard Mapping, Phase II*	\$10,200	\$4,800					\$15,000	
Freight Survey *	\$21,000						\$21,000	
I-495 Land Use Study						\$21,000	\$21,000	
Impacts of Walking Radius/Transit Frequency & Reliability		\$20,000					\$20,000	
Intercity Bus Study				\$65,000			\$65,000	
MBTA 2011 National Transit Database: Directly Operated						\$800	\$800	
MBTA 2011 National Transit Database: Purchased Bus						\$800	\$800	
MBTA Bus Route 1 Transit Signal-Priority Study		\$1,000					\$1,000	
MBTA Bus Service Data Collection VII						\$114,000	\$114,000	
MBTA Neighborhood Maps						\$21,000	\$21,000	
MBTA Operations Support						\$100,000	\$100,000	
MBTA Systemwide Passenger Survey: Comparison of Results		\$30,000					\$30,000	
MBTA Title VI Program Monitoring				\$50,000			\$50,000	
MPO Freight Study, Phase II (Now included in the Boston Region MPO Ongoing Freight Program listed on page 7-x)	\$30,000						\$30,000	
Pavement Management System Development	\$62,500						\$62,500	
Priority Corridors for LRTP Needs Assessment	\$120,600						\$120,600	
Regional HOV-Lane System Planning Study	\$20,400	\$9,600					\$30,000	
Roundabout Installation Screening Tool	\$700						\$700	
Safe Access to Transit for Pedestrians and Bicyclists	\$8,300	\$28,200					\$36,500	
TIP Project Impacts Before-After Evaluation	\$28,500	\$1,500					\$30,000	
Wellesley Transit Study						\$700	\$700	
<b>UPWP Subtotal</b>	<b>\$302,200</b>	<b>\$115,100</b>	<b>\$65,000</b>	<b>\$115,000</b>	<b>\$0</b>	<b>\$236,600</b>	<b>\$21,700</b>	<b>\$855,600</b>

\*An administrative modification by the MPO's UPWP Committee on 2/2/12 reduced the Emergency Evacuation & Hazard Mapping, Phase II budget by \$6,650 and the Freight Survey by \$21,000.

**DISCRETE FFY 2012 UPWP PROJECTS WITH FFY 2012 UPWP BUDGETS**

UPWP Project	FFY 12 MPO		FFY 12 SPR	FFY 12 MassDOT		FFY 12 MBTA	FFY 12 Other	Total FFY 2012 UPWP
	FFY 12 PL	5303		5303	5303			
Bicycle Network Evaluation	\$31,100	\$19,900						\$51,000
Green Line Extension FEIR				\$55,000				\$55,000
Green Line SIP Mitigation Strategies				\$20,000				\$20,000
MassDOT Title VI Program				\$85,000				\$85,000
Massport Technical Assistance State FY 2011–12							\$37,500	\$37,500
MBTA 2012 National Transit Database: Directly Operated						\$69,000		\$69,000
MBTA 2012 National Transit Database: Purchased Bus						\$15,000		\$15,000
MBTA 2013 National Transit Database: Directly Operated						\$13,800		\$13,800
MBTA 2013 National Transit Database: Purchased Bus						\$5,000		\$5,000
MBTA Bus Service Data Collection VIII						\$114,000		\$114,000
South Coast Commuter Rail Extension				\$55,000				\$55,000
South Station Expansion: Support				\$55,000				\$55,000
<b>UPWP Subtotal</b>	<b>\$31,100</b>	<b>\$19,900</b>		<b>\$270,000</b>		<b>\$216,800</b>	<b>\$37,500</b>	<b>\$575,300</b>

**ONGOING FFY 2012 UPWP PPROJECTS WITH FFY 2012 UPWP BUDGETS**

UPWP Project	FFY 12 MPO		FFY 12	FFY 12	FFY 12	FFY 12	Total FFY 2012 UPWP
	FFY 12 PL	5303	FFY 12 SPR	MassDOT	MassDOT	MBTA	
3C Planning and MPO Support*	\$460,200	\$215,800					\$676,000
Air Quality Conformity Determinations*	\$15,700	\$7,300					\$23,000
Air Quality Support Activity	\$24,500	\$11,500					\$36,000
Alternative-Mode Planning and Coordination	\$113,800	\$65,800					\$179,600
Bicycle/Pedestrian Support Activities	\$34,100	\$15,900					\$50,000
Boston Region MPO Title VI Reporting	\$6,800	\$3,200					\$10,000
Community Transportation Technical Assistance Program	\$42,200	\$27,800					\$70,000
Computer Resource Management	\$221,300	\$103,700					\$325,000
Congestion Management Process	\$146,400	\$68,600					\$215,000
Corridor/Subarea Planning Studies: Land Use Reviews	\$76,000	\$39,000					\$115,000
Data Resources Management	\$289,400	\$135,600					\$425,000
Direct Support	\$37,000	\$23,000	\$14,000		\$6,000	\$2,200	\$82,200
Disability Access Support	\$59,200	\$27,800					\$87,000
Integrating Land Use in Regional Transportation Models (Now listed as Land Use, Demographics and Climate Change in Regional Transportation Modeling)	\$53,800	\$25,500					\$79,300
Land Use Development Project Reviews	\$52,800	\$27,200					\$80,000
Livable Communities Workshop Program*	\$49,300	\$26,300					\$75,600
Long-Range Transportation Plan	\$146,400	\$68,600					\$215,000
MassDOT Statewide Planning & Research Program Support			\$421,000				\$421,000
MassDOT Transit Planning Assistance					\$301,300		\$301,300
MBTA Rider Oversight Committee Support						\$4,900	\$4,900

*\*An administrative modification by the MPO's UPWP Committee on 2/2/12 increased the 3C Planning and MPO Support budget by \$16,650 and reduced the budgets for the Air Quality Conformity Determinations by \$9,000 and the Livable Communities Workshop Program by \$30,000.*

**ONGOING FFY 2012 UPWP PPROJECTS WITH FFY 2012 UPWP BUDGETS (Cont.)**

UPWP Project	FFY 12 MPO			FFY 12		FFY 12		Total FFY 2012 UPWP
	FFY 12 PL	5303	FFY 12 SPR	MassDOT	MassDOT 5303	MBTA	Other	
MPO/MAPC Liaison and Support Activities	\$112,000	\$48,000						\$160,000
Regional Transit Service Planning Technical Support*		\$20,000						\$20,000
Regional Vision Implementation: MetroFuture	\$84,000	\$41,000						\$125,000
Safety and Operations Analyses at Selected Intersections	\$47,700	\$22,300						\$70,000
Subregional Support Activities	\$112,000	\$48,000						\$160,000
Transportation Equity/Environmental Justice Support	\$72,900	\$34,100						\$107,000
Transportation Improvement Program (CTPS)	\$102,800	\$48,200						\$151,000
Travel Data Forecasts	\$6,800	\$3,200						\$10,000
Travel Operations Analysis	\$6,800	\$3,200						\$10,000
Unified Planning Work Program (CTPS)	\$47,700	\$22,300						\$70,000
Unified Planning Work Program (MAPC)	\$7,000	\$3,000						\$10,000
<b>UPWP Subtotal</b>	<b>\$2,428,600</b>	<b>\$1,185,900</b>	<b>\$435,000</b>		<b>\$307,300</b>	<b>\$7,100</b>		<b>\$4,363,900</b>
<b>FFY 2012 UPWP Total</b>	<b>\$2,761,900</b>	<b>\$1,320,900</b>	<b>\$500,000</b>	<b>\$385,000</b>	<b>\$307,300</b>	<b>\$460,500</b>	<b>\$59,200</b>	<b>\$5,794,800</b>
MassDOT Match to 5303 Funds								\$260,400
								\$6,055,200

*\*An administrative modification by the MPO's UPWP Committee on 2/2/12 reduced the Regional Transit Service Planning Technical Support budget by \$10,000.*

## **WORK PRODUCTS OF THE FFY 2012 UPWP**

Listed below are the reports, memoranda, and other MPO work products that were associated with the projects in the FFY 2012 UPWP. Memoranda and other work products are produced for the client agency or municipality. Reports and certification documents, however, are available at the State Transportation Library. Work products may be requested by contacting CTPS at (617) 973-7100 (voice), (617) 973-7089 (TTY), or [bostonmpo@ctps.org](mailto:bostonmpo@ctps.org) (e-mail). Many of these work products are available for downloading from the MPO's website, [www.bostonmpo.org](http://www.bostonmpo.org).

### **CTPS WORK PRODUCTS**

#### **Certification Documents**

Air Quality Conformity Determination of the Federal Fiscal Years 2013–16  
Transportation Improvement Program (pending approval)

Federal Fiscal Years 2012–15 Transportation Improvement Program Amendments and  
Administrative Modifications

Federal Fiscal Year 2013 Unified Planning Work Program (pending approval)

Federal Fiscal Years 2013–16 Transportation Improvement Program and Determination  
of Air Quality Conformity (pending approval)

Memorandum of Understanding by and between the commonwealth of Massachusetts,  
the Boston Region Metropolitan Planning Organization and the Cape Ann Transportation  
Authority and the MetroWest Regional Transit Authority

Memorandum of Understanding Relating to the Comprehensive, Continuing and  
Cooperative Transportation Planning Process in the Boston Metropolitan Area,

*Paths to a Sustainable Region* Transportation Plan of the Boston Region Metropolitan  
Planning Organization Amendment (Volume I)

*Paths to a Sustainable Region* Needs Assessment (Volume II)

Public Participation Plan Update

#### **CTPS Reports**

Impacts of Walking Radius on Transit Frequency and Reliability

Inner-Suburban Mobility Study

MassDOT FHWA Title VI/Nondiscrimination Program

MassDOT FTA Title VI Language Access Plan for limited English proficient persons

MBTA Core Services Evaluation Report

MBTA 2012 Title VI Program Monitoring Report: Level-of-Service Performance for Selected Services and Amenities

MBTA Intercity Bus Study

Potential MBTA Fare Increase and Service Reductions in 2012: Impact Analysis Report

Potential MBTA Fare Increase and Service Changes in 2012: Scenario 3 Impact Analysis Report

Results of the Boston Region MPO's 2010 Freight Study – A Profile of Truck Impacts

### **CTPS Technical Memoranda**

Analysis of Responses to the MBTA Systemwide Onboard Passenger Survey by Respondents in Environmental-Justice Areas

Analysis of Job Access and Reverse Commute (JARC) and New Freedom projects in the MPO.

Arterial Traffic-Signal Improvements and Coordination (pending approval)

Community Transportation Technical Assistance Memoranda

Envisioning a Preferential Lane System for the Boston Region

FFY 2011 Safety and Operations Analysis at Selected Intersections

FFY 2012 Safety and Operations Analysis at Selected Intersections

Low-Cost Improvements to Bottleneck Locations II

Maintenance Costs for Municipally Controlled Federal-Aid Roads

MBTA Fiscal Year 2011 National Transit Database: Directly Operated – Ridership and Passenger-Mile Estimates for Fiscal Year 2011

MBTA Fiscal Year 2011 National Transit Database: Purchased Bus – Ridership and Passenger-Mile Estimates for Fiscal Year 2011

MBTA “Youth Pass”: Analysis of Potential Scenarios, Including Ridership and Revenue Implications – analyzed impacts of instituting significantly reduced fares via a “Youth Pass” for riders aged 12 through 21

MBTA Wonderland Station TIGER Grant Data Collection – documented conditions at Wonderland Station before investments through a TIGER grant were completed

MBTA Charlie Card Trip Paths Pilot Study – assessed the feasibility of creating reasonably accurate station-to-station trip tables for the MBTA's rail rapid transit and light rail lines from data generated by the automated fare collection (AFC) system

MBTA Early-Morning Transit Service – examined demand for and made recommendations regarding additional early-morning MBTA service

MBTA Commuter Rail Passenger Counts – documented results of comprehensive passenger counts on all MBTA commuter rail lines

MBTA Rapid Transit Replacement Service Study – examined ways in which rapid transit replacement bus-shuttle services can be made more effective  
Roundabout Installation Screening Tool

MBTA Systemwide Passenger Survey: Comparison of Results – compared results of the 2008-2009 surveys with the corresponding the results from previous surveys on all MBTA modes

MBTA 2011 Title VI Program Monitoring – documented data collection and analysis of performance for specific service indicators based on existing MBTA service standards and policies and compared service performance in communities that are minority and/or low-income with performance in communities that are neither minority nor low-income  
Screening Regional Express Highways for Possible Preferential Lane Implementation

TIP Projects Before and After Evaluations

### **Other CTPS Work Products and Activities**

- 20011–2012 I-93 North and Southeast Expressway high-occupancy-vehicle-lane utilization documentation.
- AACT Support – Materials, coordination, and administrative support for the Access Advisory Committee to the MBTA. Support includes meeting agendas, notices, minutes, correspondence, mailing lists, data bases, meeting scheduling and planning and services for the AACT Executive Board. Accessibility checklist for MPO meetings and distribution to other entities to facilitate compliance with ADA requirements. Updated AACT Brochure (pending)
- Accessible formatting of the *Paths to a Sustainable Region* Transportation Plan, the Transportation Improvement Program and amendments, the Unified Planning Work Program, and meeting minutes and handouts of the MPO, the Regional Transportation Advisory Council, the Access Advisory Committee to the MBTA (AACT) and other materials on request.
- All-Hazards Planning – Participation at regional meetings at which planning for emergency preparedness and response was conducted.
- Bicycle planning and support services – Ongoing counting and program development including update of the online bicycle/pedestrian count database and pending development of new web tool to allow upload of counts by others. Development of an application for bicyclists’ route selection and mapping of results (pending). Analysis of crash data from three sources: standard, emergency medical, and self-reporting (pending). Technical memorandum on projections of parking needs of multi-use trails.
- Clean Air and Mobility Program –Applications review, evaluations, and project tracking and reporting for TIP programming.



- Community Transportation Technical Assistance Program – Site visits to municipalities, consultations, recommendations for improvements and reporting.
- Computer Resources Management – Maintenance and enhancements of CTPS’s desktop and server computer systems, computer network, and peripheral devices such as printers, plotters, and mass-storage devices.
- Congestion Management Process – Travel-time runs, data collection, intersection analyses, and documentation of park-and-ride lots and other reporting.
- Congestion Mitigation and Air Quality Program analyses.
- Data Resources Management – Maintenance and enhancement of CTPS’s database of standard reference GIS layers and GIS layers required to carry out particular projects. Database updates with new versions of standard reference GIS layers as released by MassGIS, the MassDOT Office of Transportation Planning, and other agencies.
- Emergency Evacuation and Hazard Mitigation Mapping –Maps depicting the Boston region transportation network with projects programmed in, or proposed for, the FFY 2012 element of the TIP and programmed in the Long-Range Transportation Plan, maps showing the proximity of transportation projects (and in secure layers, emergency traffic control points) to natural hazard zones, and a matrix providing information indicating if proposed TIP projects are in such zones or if they provide emergency management benefits. Updated mapping of these areas and related transportation and other critical infrastructure, such as potential dam inundation areas, MBTA bridges and signals (pending). A web tool to make the mapping available on-line, with some information secure to those with special security clearance and some open to the public. Data collection and mapping of condition of critical infrastructure on evacuation routes.
- GIS maps, computer map files, databases, and data analyses.
- Ground transportation analysis in support of Massport.
- Job Access and Reverse Commute Program and New Freedom Program solicitation, evaluations and recommendations. Support for MassDOT Division of Rail and Transit program solicitation and application process.
- Livability Program – Updated web-based data and maps for the MPO’s livability index. Livable Community Workshops and Walkable Community Workshops in MPO municipalities including research, site visits, and preparation of materials and memoranda to support and document workshop discussions.
- MassDOT Accelerated Bridge Program Project Support – data analysis, and preparation of spreadsheets, and memos.
- MassDOT SIP Process Support – Identification of emissions targets for proposed projects in their opening year, quantifying emissions from offset projects, and identifying benefits for proposed offsets.
- MBTA bus trip point checks and passenger counts at surface Green Line stations.
- MBTA database using automated-fare-collection data to perform a comprehensive analysis of transfer activity on the MBTA bus and rapid transit networks

- MBTA Fiscal Year 2012 National Transit Database: Directly Operated – Sampling of passenger boardings and alightings on randomly selected bus trips; survey of a sampling of rail rapid transit passengers’ trips.
- MBTA Fiscal Year 2012 National Transit Database: Purchased Bus – Sampling of passenger boardings and alightings on randomly selected bus trips.
- MBTA Rider Oversight Committee – Technical assistance to the MBTA Rider Oversight Committee and attendance at committee and subcommittee meetings.
- MBTA transit delay model for ongoing analysis to identify the delays and reliability issues, in terms of their location, route, and time of day, that have the greatest overall impact on the transit system’s riders in terms of number of passenger trips affected and total passenger-delay times; to quantify the magnitudes of those delays; to analyze different types of delay and trace their impacts on passenger trips throughout the MBTA system; and to analyze the potential for expressing transit vehicles in order to mitigate the impacts of delays.
- Draft MassDOT FHWA Title VI/Nondiscrimination Program Public Participation Plan
- MPO Bicycle and Pedestrian Interactive Database.
- MPO Committees Support (including the Congestion Management Process Committee, the UPWP Committee, and ad hoc committees). Clean and and Mobility Program coordination, preparation of the FFY 2012 MPO Certification Activities Schedule; meeting planning; communications and coordination with members and interested parties; preparation of meeting agendas, minutes, minutes, materials, and various memoranda; and presentations; staff support; and database maintenance. Also includes informational materials and discussions supporting the MPO expanded membership.
- MPO MOU Development Support – Materials, process, and coordination with parties for the development of the February 2, 2012 MPO/Regional Transit Authority Memorandum of Understanding.
- MPO Public Participation Program – Outreach materials supporting the development of certification documents and other MPO programs; Development of transportation snapshots to summarize certain information and communicate interesting and pertinent information from MPO studies and reports. Activities supporting document development. Development of a social-media presence on Twitter and YouTube (pending). Publication and posting of MPO notices and other materials. Soliciting and responding to public comments on documents under review, and responding to other comments, questions, and requests for information from members of the public. Preparation of press releases and a media kit (pending).
- MPO Website Development and Enhancements – Revamped and updated website. TIP database . Updating of online surveys for the Transportation Equity Program and for submitting public comments on draft certification documents on the website.
- MPO Website Development and Enhancements
- Planning Topics – Memoranda documenting research and pertinent information for MPO consideration on topics such as health impacts and economic analyses (pending).

- Regional Transportation Advisory Council Support (including the Freight Committee and ad hoc committees). – Support includes meeting planning; scheduling of speakers, coordination with the MPO; preparation of meeting agenda, minutes, materials, and various memoranda; staff support; and database maintenance.
- Responses to requests for transit data.
- South Coast Commuter Rail Extension – This project is ongoing; however, the DEIR was completed. The deliverables consisted of ridership forecasts, a memo on land use assumptions, air quality impacts, user benefits, and station activity; an alternatives analysis; and a transit capacity analysis. A description of the modeling methodology was also produced.
- TIP project information forms, evaluation criteria and matrices, instructional handbook, briefing books for Municipal Input Days, TIP interactive database, and other Web-based data.
- Transportation Equity Program – Transportation needs assessment survey and outreach (meetings, forums, surveys) to organizations and agencies familiar with the needs of Environmental Justice areas and memoranda to document results. Updated environmental justice definitions and identification and mapping of new low-income and minority traffic-analysis zones using demographics updated with the 2010 Census and the 2006–2010 American Community Survey income data (pending). Other mapping and database updates.
- Travel-demand forecasting.
- *TRANSREPORT*, the MPO’s bi-monthly newsletter.
- UPWP – Outreach materials, evaluation criteria and process, staff recommendation, and FFY 2012 UPWP quarterly reports.
- Work scopes for MPO evaluation and approval.

## **MAPC WORK PRODUCTS AND ACTIVITIES**

### **MAPC Reports**

- Rte 9 Corridor Study and Smart Growth Plan (<http://mapc.org/transportation/route-9>)
- Main Street Corridor Study: Melrose, Wakefield, Reading (<http://mapc.org/main-street>)
- MAGIC Subregion Mobility Transit Study (<http://mapc.org/sites/default/files/MAGIC-Mobility-Transit-study.pdf>)
- Mystic River Corridor Walking Routes (<http://www.mapc.org/smart-growth/environment/mystic-river>)
- Boston Region Pedestrian Plan (<http://mapc.org/resources/ped-plan> )

### **MAPC Technical Memoranda**

- Regional Bike Share Memorandum Of Agreement: Boston, Cambridge, Brookline, Somerville
- Technical Assistance Memo for South Acton Commuter Rail Station
- Snow Removal Policy Toolkit (<http://mapc.org/resources/snow-removal-policy>)
- Toolkit for Sustainable Mobility, focusing on local parking issues (<http://mapc.org/resources/parking-toolkit>)

### **Other MAPC Work Products and Activities**

- Creation of a GIS coverage and related database of MAPC-reviewed projects and their mitigation commitments.  
<http://www.mapc.org/data-services/available-data/devtdatabase>
- Database development of community, subregion, and corridor population and employment, and visual displays and analysis of this information.  
<http://mapc.org/data-services/available-data/projections>
- GIS technical assistance and support for transportation planning in the region.
- Implementation of the regional and statewide bicycle and pedestrian plans, and work on bicycle/pedestrian-related issues, including coordination with relevant national, state, and regional organizations – focusing on 13 municipalities in three clusters to identify priority bicycle and pedestrian infrastructure improvements (Dedham, Westwood, Quincy, Chelsea, Revere, Malden, Everett, Saugus, Lynn, Maynard, Stow, Hudson, Marlborough).
- Interagency coordination, work scopes, participation in advisory and corridor committees, public participation, 2011 MPO elections, and attendance at relevant meetings.
- MetroFuture implementation strategies—updated implementation strategies including focus on equity indicators. (<http://www.regionalindicators.org/equity/> )
- MPO Regional Bike Parking Program – The program will end in September 2012. MAPC has alerted municipalities of the program’s end and is working to help them plan for the final installation of bike parking in the spring and summer of 2012. To date, the program has installed approximately 8,500 bicycle parking spaces since the beginning of the program in 2008, and there are currently over 4,300 spaces ordered and in the process of being installed.
- Participation in a variety of specific project reviews that have gone through the Massachusetts Environmental Policy Act process—work products include comments to the Secretary of Energy and Environmental Affairs regarding mitigation measures, transportation improvements, and other recommendations consistent with MetroFuture.
- Project evaluations and development of new project evaluation tools—work products include data to analyze the potential for Transit Oriented Development in Greater Boston.

- Provision of information to the MAPC Executive Committee, MAPC officers, and MAPC subregional groups on MPO transportation activities and issues.
- Preparation of monthly meeting agendas, coordination with transportation agencies, traffic study reviews, reports to the MPO, support for subregion and corridor advisory committee meetings.
- Subregional forums sponsored by the subregions that focus on transportation finance policies and economic development.
- Support and technical assistance in developing and implementing the MPO's Clean Air and Mobility Program.
- Support for the regional Congestion Mitigation/Air Quality Committee.
- Support for TIP criteria refinement and TIP evaluations.
- Support for the UPWP Subcommittee.
- Technical assistance for air quality, transportation enhancement, and mobility assistance programs.
- Community Transportation Technical Assistance Program – Site visits to municipalities, consultations, and recommendations for improvements.
- Livable Communities Workshops—engagement with municipalities, recommendations for transportation and land use improvements to better meet Livability Principles.
- Regional Trail Network Map and Greenway Planning—this project is ongoing, however MAPC has created an inventory of off-road and on-road trails in the region, and an interactive on-line map that will help identify priority “gaps” and provide information to evaluate specific segments. (<http://trailmap.mapc.org/>)
- Warren Street Smart Growth Plan—this project is ongoing, MAPC is working with Community Development Corporations to identify improvements to Warren Street in Boston that will help re-development of underutilized parcels in this corridor.
- 128 Business Council Smart Bus technology procurement of services—this project is ongoing, MAPC is overseeing Clean Air and Mobility Program funding to the 128 Business Council to develop a technology driven demand responsive variable bus route system.
- Framingham Technology Park Sustainable Transportation Plan—this project is ongoing, however the existing conditions analysis is complete. <http://mapc.org/techpark>
- Route 9 Phase 2 Study Implementation—this project is ongoing, following up on the completed corridor study and smart growth plan. Work is being done to identify specific sites in Wellesley, Natick, Framingham and Southborough to conduct “sprawl repair” process that will lead to zoning changes, site design requirements, and pedestrian infrastructure improvements.



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### **3 INDEX OF PROJECTS BY AGENCY**

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Following MPO approval to circulate the draft FFY 2013 UPWP, an index of the projects by the agency responsible for leading the work effort will be prepared and included in this section.

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## 4 ADMINISTRATION AND RESOURCE MANAGEMENT PROJECTS

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Chapters 4 through 7 present project descriptions and budget information for transportation-planning work that will be carried out between October 1, 2012, and September 30, 2013. The activities described in these chapters will be conducted by the Central Transportation Planning Staff (CTPS) of the Boston Region Metropolitan Planning Organization (MPO), by other agencies acting on behalf of the MPO, or by the Metropolitan Area Planning Council (MAPC).

As described in Chapter 1, the projects in the UPWP are funded by a variety of federal and state sources. Each project description identifies the project's funding source or sources. With respect to funding, there are two types of projects:

- Projects funded with federal 3C planning funds, to be carried out by CTPS or other agencies acting on behalf of the MPO. The MPO programs these funds and approves the use of staff time.
- Projects funded from other sources (federal, state, and local), to be carried out by CTPS for an individual transportation agency. The MPO approves the use of staff time for these projects and provides guidance to the implementing entities on their coordination with other planning efforts.

In reviewing the project listings, it is important to remember that the 3C transportation-planning process is a coordinated effort that is often carried out simultaneously by several agencies. For example, when the MBTA hires a consultant to prepare an environmental impact report for a transit project, CTPS may provide the travel-demand and air-quality modeling for the consultant and MAPC may perform land-use analysis. Thus, if the same project is mentioned in more than one place in this UPWP, it is because of this kind of interagency coordination. To help clarify the distinctions between the various work efforts, cross-referencing is provided, where appropriate, to show the interrelationship among projects.

The administration and resource management projects, presented in this chapter, are:

<b>Project ID #</b>	<b>Project Name</b>	<b>Page</b>
60415–60492	Computer Resource Management	4-2
60110–60600	Data Resources Management	4-4
90000	Direct Support	4-6

**STAFF:** Central Transportation Planning Staff**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** 60415–60492**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

In order to carry out its functions, CTPS maintains state-of-the-practice computer resources through the following tasks:

**60405 System Administration and Computer Room Management:** Manage and maintain hardware and software for all CTPS computer systems to ensure that staff has maximum access to the computing resources required for their work. Increased emphasis will be given to the security and integrity of all hardware, software, and data resources. Plan, monitor, and maintain CTPS’s computer room space and facilities.

**60430 Software Development:** Develop computer software to support CTPS’s analytical, administrative, and documentation requirements. Maintain and enhance software developed by CTPS and/or others when program maintenance is no longer available from the original vendor.

**60465 Staff Assistance and Training:** Assist staff in using computer resources; organize and distribute vendor-supplied documentation, and, where appropriate, provide written and online user guides for particular resources.

**60470 Liaison with Other Agencies:** Work with other public agencies, including MAPC and MassGIS, to encourage sharing of computer and data resources and techniques.

**60475 Computing Resource Purchasing and Maintenance:** Purchase and maintain CTPS’s computing resources. These include in-house resources such as servers, desktop and laptop computers, tablet and handheld computers, mass storage devices, networking and communications hardware, printers and plotters, system and application software, and consumable supplies. It also includes out-of-house resources, such as software purchased as a service, cloud-based storage, and other cloud-based computing resources.

**60492 Computer Resource Planning:** Updating the CTPS Five-Year Plan for Computer Resource Development, in conjunction with the development of the next CTPS budget.

**FFY 2013 Activities and Expected Work Products:** Work on these tasks will continue as described above.

**COMPUTER RESOURCE MANAGEMENT (CONT.)**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 60415-60492

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

**FHWA/FTA Grant Application Task and Element:** 44.22.03

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**STAFF:** Central Transportation Planning Staff**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** 60110–60600**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

CTPS provides travel data and analyses at the regional, corridor, and site-specific levels. The variety of tasks encompassed by this work may be grouped within the following categories:

**60110 Resources Management:** CTPS will maintain and improve a database that includes census data; updated travel, infrastructure, and service data; and the products of CTPS analysis. CTPS will continue to refine the database for its geographic information system (GIS) and will obtain land use, statewide digital orthophotography, and other data as they become available. Available historical, transportation, land use, and socioeconomic data will also be compiled.

**60120 Travel Data:** Data on travel patterns within the region will be processed and analyzed. Data handled as part of this project include, but are not limited to, ridership survey data, traffic counts, ridership counts, and crash data.

**60130 Socioeconomic Data:** CTPS will continue to process census data and to analyze patterns indicated by historical changes. Web-enabled software and other technical tools to enhance data extraction, analysis, and presentation will also be developed.

**60140 Miscellaneous Data:** Data coming from CTPS surveys and other sources on subjects such as land use, local zoning regulations and other geographic factors, vehicle registration, and transit service will be processed and analyzed.

**60201 Response to Data Requests:** Data will be processed or analyzed upon request to meet the needs of local, state, and federal government agencies and private institutions and firms.

**60600 Geographic Information System/Database Management System (GIS/DBMS):** CTPS will continue to develop databases for use with its GIS/DBMS. CTPS will also coordinate database development and data distribution with state transportation agencies in order to prevent duplication of effort, ensure data quality, and reduce costs. The GIS/DBMS software capabilities will be made available to additional staff through training programs and the development of Web-enabled software applications. Assistance will also be given in identifying aspects of MPO work that can benefit from specific GIS/DBMS capabilities.

**FFY 2013 Activities and Expected Work Products:** GIS maps, computer map files, consolidated databases, data analyses, Web services, and responses to data requests.

**DATA RESOURCES MANAGEMENT (CONT.)**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 60110-60600

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

**FHWA/FTA Grant Application Task and Element:** 44.22.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**DIRECT SUPPORT**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region MPO/MassDOT/MBTA

**ID #:** 90000

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

CTPS provides integral direct support to all CTPS projects and functions in the following areas:

**Computer Equipment:** CTPS computer needs are programmed in the CTPS Five-Year Plan for Computer Resource Development, as amended.

**Consultants:** Consultants are periodically hired to perform specialized, time-specific tasks as project work demands.

**Printing:** Project-specific printing costs, such as those for surveys, maps, reports, presentation boards, and other informational materials, are included in this budget.

**Travel:** Periodically, the U.S. Department of Transportation and other organizations sponsor courses and seminars that enhance the ability of staff to do project work; the costs of registration, travel, and living accommodations associated with attending such programs are direct support expenditures. Mileage, tolls, and parking expenses associated with project work are also charged as direct-support expenditures. Additional project work, such as HOV monitoring, is funded through this budget to cover rental vehicles and fuel costs.

**Other:** There are various expenditures that can arise over the term of this UPWP, such as postage and data processing services. These expenditures can become necessary when producing a project report or conducting a project-specific survey. The costs associated with postage for return mail, and services for preparing and processing data for specific projects, are direct-support expenditures. Additionally, this line item includes the Boston Region MPO’s membership in the Association of Metropolitan Planning Organizations (AMPO).

**FFY 2013 Activities and Expected Work Products:** Computer and general office equipment, professional consulting services, in-state project-related travel, out-of-state travel associated with staff attendance at professional and training conferences, and membership dues to AMPO.

**FHWA/FTA Grant Application Task and Element:** 44.27.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

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## 5 CERTIFICATION REQUIREMENTS

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The projects in this chapter are categorized as certification requirements because they include work that the Boston Region Metropolitan Planning Organization (MPO) must do to maintain its certification by the Federal Highway Administration and the Federal Transit Administration. The projects also include activities that are necessary for compliance with federal and state laws, such as the federal Clean Air Act and Americans with Disabilities Act. The projects in this category are:

<b>Project ID #</b>	<b>Project Name</b>	<b>Page</b>
90011-90090	3C Planning and MPO Support	5-2
10112	Air Quality Conformity Determinations	5-6
90061	Air Quality Support Activity	5-7
11355	Boston Region MPO Title VI Reporting	5-9
90024&28	Disability Access Support	5-10
10101	Long-Range Transportation Plan	5-12
MAPC1	MPO/MAPC Liaison and Support Activities	5-13
11244	Regional Model Enhancement	5-15
MAPC2	Subregional Support Activities	5-17
11132	Transportation Equity/Environmental Justice Support	5-19
10103	Transportation Improvement Program (CTPS)	5-21
10104	Unified Planning Work Program (CTPS)	5-24
MAPC3	Unified Planning Work Program (MAPC)	5-25

**STAFF:** Central Transportation Planning Staff**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** 90011-90090**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

The following projects are called 3C activities because they support the federally mandated continuing, coordinated, and cooperative transportation-planning process.

**SUPPORT TO THE MPO**

**90011 Support to the MPO and Its Subcommittees:** (\$xxx,xxx) Support includes conducting metropolitan planning and implementing planning activities for the MPO. This involves researching, analyzing, and reporting information on 3C planning topics, including those identified in federal reauthorization legislation, and issues related to federal policies, regulations, and guidance, such as responding to possible federal recommendations or requirements for certification documents or MPO recertification. It also includes implementing MPO policies on planning and programming; preparing information for MPO decision making; and supporting the work of the MPO and its committees. This includes providing process support, such as developing agendas for meetings, preparing informational materials, compiling meeting packages, recording minutes of meetings, conducting public outreach, managing the MPO website, preparing and distributing the MPO's monthly newsletter and timely Twitter and YouTube postings, and maintaining the mailing lists and e-mail lists. Technical and process support is provided to the MPO's Clean Air and Mobility Program.

In addition, this work includes consultation with other entities and agencies involved with or interested in 3C planning activities; liaison activities between Massachusetts MPOs (with ongoing coordination with those in the Boston Region Urbanized Area); and communication with MAPC subregional groups.

Other activities include the day-to-day oversight of and reporting on progress of projects listed in the UPWP, and the establishment of work priorities in light of MPO needs.

**90014 Planning Topics:** (\$xx,xxx) CTPS provides support related to planning topics such as the 3C planning factors and other topics highlighted in federal planning guidance, including operations and management, sustainability, health, freight, economic effects, and environmental issues. CTPS staff maintain expertise in these topics so that the MPO will have the capability of keeping current on these topics and the flexibility to respond to unforeseen needs in these areas.



**STAFF:** Central Transportation Planning Staff**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** 90011-90090**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

Information on these topics is gathered, analyzed, and presented to the MPO in memoranda and white papers for consideration in the development of the Transportation Improvement Program (TIP) and Long-Range Transportation Plan (LRTP). This project includes work needed to respond to possible new federal guidance and requirements following certification review.

**PUBLIC OUTREACH ACTIVITIES**

**90019 Subregional Outreach:** (\$xx,xxx) CTPS staff attend meetings of the MAPC subregional groups to keep them abreast of MPO activities and to coordinate subregional issues and concerns in the development of MPO documents.

**90021 Regional Transportation Advisory Council Support:** (\$xx,xxx) The Regional Transportation Advisory Council is the MPO's citizen advisory committee. CTPS provides support to this body and its committees. This includes planning programs and preparing agendas, minutes, and meeting summaries; attending meetings; organizing field trips; coordinating activities; scheduling speakers; maintaining mailing lists; and producing and distributing meeting notices and packets. CTPS provides information, updates, and briefings on MPO activities; requests and coordinates comments on MPO documents; and works with the Council and its committees as they conduct their programs, planning, and reviews.

**90025 TRANSREPORT:** (\$xx,xxx) The newsletter of the MPO, *TRANSREPORT*, is an important part of the MPO's public involvement program. CTPS is responsible for soliciting, researching, and writing articles and for managing all aspects of production: writing and editing, layout, graphics, proofreading, and printing. CTPS coordinates the participation of MPO agencies and other interested organizations in the development of articles and is responsible for the newsletter's distribution in standard print, accessible formats, and electronic-transfer formats for e-mail subscribers. CTPS offers a Spanish version of the newsletter, when requested, and posts each issue on the MPO's website.

**90026 Public Participation Process:** (\$xx,xxx) CTPS implements the MPO Public Participation Program and coordinates and conducts MPO public outreach activities. These activities are opportunities to (1) provide information to regional and local officials, agencies, and members of the public, and (2) collect input from those parties for use by the MPO in its planning and in the development of the certification documents. Communication will be ongoing and conducted through a variety of means. The program also involves consultations as specified in federal

**STAFF:** Central Transportation Planning Staff**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** 90011-90090**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

guidance; improving informational materials; reviewing and modifying procedures, as appropriate, to increase the program's effectiveness; providing upon request American Sign Language (ASL) and other language interpretation services at meetings; preparing and distributing printed materials in Spanish and other languages; posting notices on the MPO's listserv and on Twitter; producing and uploading informational videos on YouTube; and providing public participation support to MPO member entities. It also includes maintaining and updating the contact database and listserves.

**90027 Boston Region MPO Website, [www.bostonmpo.org](http://www.bostonmpo.org):** (\$xx,xxx) CTPS develops and maintains a website that provides information regarding the MPO's activities, reports and studies produced by the MPO and CTPS, a data catalogue and several interactive mapping applications. The website serves a critical role in the MPO's public participation program by providing information and eliciting public comment. All MPO meetings and meeting materials are posted on the website. CTPS continues to improve the design of the site, the information provided and the accessibility of this means of communication to those who are visually impaired.

**90041 90041 Safety and Security Planning:** (xx,xxx) This work advances the MPO's policies in this area and addresses planning factors related to security. It also responds to guidance that the MPO has received from the Federal Highway Administration and Federal Transit Administration calling for MPOs to "increase their capacity to address climate change in transportation." The program updates the MPO's database on the hazards to which the region is susceptible and the emergency evacuation and hazards planning in preparation. It provides for extensive mapping of this information, including maps showing the hazards in relation to the region's transportation network. This information is used by the MPO in its safety and security planning and in its project selection process. It is available to others, including state agencies and municipalities, for their emergency and evacuation planning. Staff conduct research, prepare reports, white papers and technical memoranda, and represent the MPO at security and emergency preparedness planning meetings.

**OTHER 3C PLANNING SUPPORT ACTIVITIES**

**90012 Professional Development:** (\$x,xxx) The MPO staff maintains its technical expertise in part by participation in courses, programs, and workshops offered by the Federal Highway

**3C PLANNING AND MPO SUPPORT (CONT.)**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 90011-90090

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

Administration, Federal Transit Administration, Transportation Research Board, Association of Metropolitan Planning Organizations, Institute of Transportation Engineers, and other public and private organizations. Previous professional development endeavors have included topics such as traffic engineering issues and applications, regional modeling, bicycle/pedestrian issues, transit planning, public involvement, environmental justice, air quality, computer operations and maintenance, database applications, and other areas related to the provision of technical-support services.

**90090 General Graphics:** (\$xxx,xxx) Graphics support will be provided to CTPS staff and MPO agencies in the design and production of maps, charts, illustrations, report covers, brochures, slides, and photographs, the application of other visualization techniques, and the creation of other products that improve communication.

**2013 Activities and Expected Work Products:** Staff will prepare materials as needed; continue to support the MPO and its committees and the Regional Transportation Advisory Council; conduct communications with the public; conduct safety and security, and freight planning; and address economic and environmental issues as they arise.

*The above activities support all other projects in this UPWP in compliance with the 3C planning process. They foster the implementation of MPO policies, federal planning factors and guidance, and all applicable orders and requirements, including Executive Order 13166 (governing outreach to persons with limited English proficiency).*

**FHWA/FTA Grant Application Task and Element:** 44.21.02 Program

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

## AIR QUALITY CONFORMITY DETERMINATIONS



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 10112

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

Analysis and documentation to demonstrate the conformity of plans, programs, and projects with the 1990 Clean Air Act (CAA) are provided annually. The Boston region has been classified as a nonattainment area for the eight-hour ozone standard. The city of Boston, the surrounding cities and towns, and the city of Waltham are classified as maintenance areas for carbon monoxide (CO). To continue receiving federal transportation funding, the region must show that, overall, its federally funded transportation programs improve air quality in a manner consistent with the Massachusetts State Implementation Plan (SIP).

**FFY 2013 Activities and Expected Work Products:** Conformity determinations, including a detailed analysis of air quality impacts (volatile organic compounds [VOCs], nitrogen oxides [NOx], carbon monoxide [CO], and carbon dioxide [CO2]) of the projects in the 2013–16 TIP, any changes to the Long-Range Transportation Plan, and any work required for the implementation of GreenDOT will be performed and presented as follows:

- *System-Level:* If there are changes to regionally significant projects in the LRTP and the TIP, a systemwide conformity determination will be prepared. Any new conformity determination will use the new 2010 base year, as well as “build” networks for 2016, 2020, 2025, and 2035 for VOCs, NOx, and CO2; for CO it will show build networks for 2016, 2025, and 2035, in the maintenance areas only.
- *Project-Level:* A detailed analysis of the potential VOC, CO, CO2, and NOx impacts of each project to receive Congestion Mitigation/Air Quality Program funding in the TIP and those that will help in meeting the GreenDOT initiative will be conducted in accordance with U.S. Department of Transportation and U.S. Environmental Protection Agency (EPA) guidelines. The specifics of the analysis will be determined through consultation between the state’s transportation and environmental agencies.

**FHWA/FTA Grant Application Task and Element:** 44.21.03

### FFY 2013 Budget

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**STAFF:** Central Transportation Planning Staff**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** 90061**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

This project complements the Air Quality Conformity Determinations of the LRTP and the TIP described previously. It also provides for research and analysis regarding climate change and its impacts within the MPO region. It allows for additional support in implementing air-quality-related transportation programs and projects and includes consultation, research, and coordination between CTPS and federal, state, local, and private agencies.

**FFY 2013 Activities and Expected Work Products:**

***Support to MassDOT (including the Highway Division, the Office of Transportation Planning, and the MBTA) and Massport:*** Activities will include analysis of transportation control measures (TCMs), park-and-ride facilities, and proposed high-occupancy-vehicle (HOV) projects throughout the Boston Region MPO area, and evaluation of emerging and innovative highway and transit clean-air activities.

***Support for Climate Change Initiatives:*** Activities will include integrating climate-change concerns and emission-reduction opportunities into the MPO's planning process in relation to the regional model, the TIP, project-specific work products, the LRTP, the Congestion Management Process, the UPWP, and performance measures. Staff will also work with MassDOT to implement their GreenDOT policy. Staff will develop a white paper outlining current and proposed activities at the state and federal levels to reduce greenhouse-gas emissions that will affect MPO activities. The white paper will be used for educating the MPO and the public on climate-change issues. Staff will also confer with agencies and organizations that are concerned about climate-change issues and obtain knowledge and ideas for policies, programs, and improvements in the MPO region.

***Mobile-Source Element of the State Implementation Plan (SIP):*** The Massachusetts Department of Environmental Protection (DEP) is required to submit a SIP to the U.S. Environmental Protection Agency (EPA) documenting strategies and actions designed to bring Massachusetts into compliance with air quality standards, as needed. CTPS support will include:

- Support for amendments or revisions to the Memorandum of Understanding between the MPO and the DEP.
- Continued staff support to the agencies involved in monitoring, updating, and revising the mobile-source section of the SIP.

**AIR QUALITY SUPPORT ACTIVITY (CONT.)**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 90061

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

- Analysis of existing regional air quality conditions, assistance to MassDOT in data collection, and validation of DEP’s air quality inventories and emission budgets. In addition, CTPS will evaluate policies on long-term growth, transportation, and land use, and other public policies that may affect air quality.
- Continued coordination with DEP in developing statewide regulations and programs for ridesharing, and other regulations and programs that pertain to transportation and air quality.
- Support to regional, local, and private agencies.
- Continued participation in the Transportation Task Force of the SIP Steering Committee.
- Provision of data and recommendations to MPO agencies regarding funding and implementation of transportation programs and projects that have air quality benefits.

**FHWA/FTA Grant Application Task and Element:** 44.21.03

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other
100,000										

**BOSTON REGION MPO TITLE VI REPORTING**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 11355

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

Title VI of the federal Civil Rights Act requires that persons must not be excluded, denied benefits, or discriminated against on the basis of race, color, national origin, age, sex, disability, or religion. Federal regulations governing its implementation require the MPO to report on how it is followed—and how minority populations are involved—in MPO planning and decision making, including development of the UPWP, TIP, and LRTP.

**FFY 2013 Activities and Expected Work Products:**

- The MPO will comply with Title VI regulations through the preparation and submittal of reports as required.
- Annual Title VI update.

*This project is supported by public outreach activities and transportation equity/environmental-justice work presented in this chapter. See Chapter 7 for additional support provided by CTPS to MassDOT and the MBTA for their Title VI compliance.*

**FHWA/FTA Grant Application Task and Element:** 44.21.04

**FFY 2013 Budget**

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**STAFF:** Central Transportation Planning Staff**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** 90024&28**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

**90024 Access Advisory Committee Support:(\$xx,xxx)** CTPS supports the MBTA in meeting ADA requirements by providing ongoing support to the Access Advisory Committee to the MBTA (AACT), a user group representing people with disabilities. AACT advises the MBTA on all accessibility matters relating to the use of the MBTA's systemwide fixed-route services and THE RIDE paratransit service by people with disabilities and ensures that users' ideas concerning accessible transportation are heard.

**90028 Provision of Materials in Accessible Formats:(\$xx,xxx)** One requirement of the 1990 Americans with Disabilities Act (ADA) is that government agency material that is distributed to the public be made available in accessible formats, in a timely manner, upon request. CTPS fulfills this requirement with regard to materials that it produces, providing documents in whatever formats are requested—large print, Braille, audiocassette, or compact disc (CD). CTPS also reformats documents produced by MPO members on request and advises members on the subject of providing materials in accessible formats. Most materials prepared for the MPO are posted on the MPO website in PDF and HTML formats so that they can be read by contemporary screen reader technology. CTPS has developed accessibility standards and guidelines for the conduct of MPO-sponsored meetings.

**FFY 2013 Activities and Expected Work Products:**

- Staff support for regularly scheduled AACT and related meetings at which attendees advise and comment on projects being planned or implemented systemwide for commuter rail, rapid transit, surface transit, and paratransit.
- Distribution of monthly reports on systemwide accessibility, the MBTA RIDE service statistics, and other materials pertinent to AACT meeting agenda items
- Preparation and distribution of AACT meeting agendas and minutes, meeting announcements, correspondence, meeting calendars to post in THE RIDE vans, and an updated AACT brochure
- Production and distribution of an orientation packet for new AACT members.
- Continued maintenance of AACT databases for mailings, meeting attendance, and membership standing; and maintenance of AACT archives, supplies, and accessible-formatting equipment
- Production of MPO and Regional Transportation Advisory Council materials in accessible formats, as requested



**DISABILITY ACCESS SUPPORT (CONT.)**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 90024&28

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

- Documents posted on the website may be requested and will be provided in audio tape or CD versions.

*This project supports MPO public outreach and planning activities presented in this chapter.*

**FHWA/FTA Grant Application Task and Element:** 44.21.04

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

# LONG-RANGE TRANSPORTATION PLAN



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 10101

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

The MPO adopted its Long-Range Transportation Plan (LRTP), “Paths to a Sustainable Region” in September 2011. A Needs Assessment was developed as part of this LRTP and is considered a living document. Work in this fiscal year will include updating and further analyzing information in the Needs Assessment. This information can be used by the MPO and staff in studies, reports and deliberations in the future.

In addition, the MPO will continue to develop performance measures and to incorporate performance-based planning for LRTP and TIP decision making.

**FFY 2013 Activities and Expected Work Products:**

- Information in the current Needs Assessment will be further detailed and analyzed to provide the most up-to-date information for the MPO and the public. This will include incorporating the new transportation demand model base year of 2010, which was developed using new census data and updated data sets, and a 2035 No-Build Scenario.
- Produce summaries of Paths to a Sustainable Region as outreach to the public as needed.
- Address any comments or changes required from comments from the Federal Highway Administration and Federal Transit Administration or changes to the State Implementation Plan.
- Continue to develop performance measures to be used in monitoring the implementation of the LRTP and TIP.

**FHWA/FTA Grant Application Task and Element:** 44.23.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



**STAFF:** Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** MAPC1

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

This project includes working with MPO members and staff to establish work priorities and meeting agendas. It also includes reporting to the MAPC Executive Committee, the Officers Transportation Advisory Committee, MAPC Council members, MAPC subregions, and MAPC staff on MPO activities, to ensure strong coordination of land use and transportation planning.

***Statewide and Corridor Committees:*** MAPC actively participates in statewide committees and task forces to represent the interests of the region, with a particular focus on the critical links between land use and transportation. Committees include the statewide Congestion Mitigation and Air Quality Consultation Committee, the Statewide Bicycle/Pedestrian Committee, and the Massachusetts Association of Regional Planning Agencies (MARPA). MAPC will also be actively involved in regional and statewide plans and programs with regard to climate-change and greenhouse-gas issues as they relate to transportation. MAPC is also an active participant on a number of advisory committees to ongoing corridor and subregional studies, including the Green Line extension, Roxbury, Dorchester Mattapan Transit Needs Study, and various working groups. Advisory committees may change from year to year as studies are begun or completed, but participation in a variety of advisory committees is an ongoing task.

***Support of the Public Participation Process for Metropolitan Planning Documents:*** MAPC provides education and outreach on a wide variety of transportation-related topics in the region, with emphasis on outreach through the subregions to municipal officials. MAPC is also an active participant in the Regional Transportation Advisory Council (RTAC) meetings.

***MPO Elections:*** Working with the MBTA Advisory Board, MAPC coordinates and implements the annual election process for the local representatives on the MPO.

***Clean Air and Mobility Program:*** MAPC will work with CTPS to provide technical support for the Clean Air and Mobility Projects identified in federal fiscal years 2012 and 2013 in the TIP.

***Transportation Improvement Plan Evaluation Criteria:*** MAPC will coordinate with CTPS on the land use and economic development aspects of the TIP evaluations, as well as coordinating with the implementation of the comprehensive regional growth plan, MetroFuture.

**MPO/MAPC LIAISON AND SUPPORT ACTIVITIES (CONT.)**



**STAFF:** Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** MAPC1

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

**FFY 2013 Activities and Expected Work Products:** Interagency coordination, work scopes and agendas, participation in advisory and corridor committees, public participation, reports to the MAPC Officers Transportation Advisory Committee and to the Executive Committee, MPO elections, Clean Air Mobility Program implementation, TIP criteria evaluations, and attendance at relevant meetings.

**FHWA/FTA Grant Application Task and Element:** 44.21.02

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**STAFF:** Central Transportation Planning Staff**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** 11244**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

CTPS builds and maintains a state-of-the-practice regional travel-demand model set for predicting the impact of regionally significant transportation improvements and land use policies on travel demand and air quality in eastern Massachusetts. This model set is used by the Boston Region MPO and other transportation agencies to perform travel forecasting and air quality conformity determinations. It is a highly sophisticated, data-intensive planning support tool that relies on computer representations of regional transportation systems.

Objectives of the current work program are to:

- Monitor and understand changes in federal requirements as they affect MPO modeling procedures
- Research ways in which the state of the practice is changing and develop modifications in the modeling approach to meet those requirements
- Acquire and process data so that the work program can be executed
- Estimate, calibrate, and validate the current model set as an ongoing activity
- Document the model set so that it can be understood and replicated at the technical level
- Document the modeling process so that its capabilities and limitations can be understood by the lay person

***Making use of Massachusetts Statewide Household Travel Survey:*** CTPS has shared oversight responsibilities for the statewide household survey, which was completed in early 2012 with the assistance of NuStats LLC, the consultant on this project. The survey was conducted to provide an accurate representation of household-based travel and demographic characteristics to be used to update existing travel-demand estimation models, develop future models, and serve as an important source of information for transportation planning and policy decisions. In addition to providing data for rebuilding the trip based model's , the household survey will allow for the development of an activity-based model set, an emerging form of travel model that more accurately represents travelers' decision processes.

**FFY 2013 Activities and Expected Work Products:**

- Incorporate new or advanced techniques into the current regional travel-forecasting model set in TransCAD and maintain a well calibrated 2010 base-year regional model set and a future year model set. This effort supports projects in this UPWP that rely on the regional model for



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MassDOT Office of Transportation Planning

**ID #:** 11244

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

forecasting and analysis, particularly the air quality conformity determinations for the LRTP and the TIP.

- Analyze the data from the Statewide Household Travel Survey.
- Utilize the household survey data to build trip-based models.
- Utilize the household survey data to incorporate some advance techniques such as incorporating “population synthesizer” and the “activity generator” in trip generation. This would be the first step in our effort toward building activity-based models.

*This effort supports projects in this UPWP that rely on the regional model for travel forecasting and analysis, particularly the air quality conformity determinations for the LRTP and the TIP presented in this chapter. Also see Chapter 7 for MAPC activities related to the development of land use allocation model, as described above.*

**FHWA/FTA Grant Application Task and Element:** 44.22.03

**FFY 2013 Budget**

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

## SUBREGIONAL SUPPORT ACTIVITIES



**STAFF:** Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** MAPC2

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

The MAPC region consists of 101 cities and towns. The region is subdivided into eight geographic areas that are represented by subregional councils comprising municipal officials, business leaders, community-based organizations, and other local participants. MAPC staff planners are assigned as coordinators to each of the subregional groups, to assist members in developing an understanding of subregional and regional transportation and land use issues.\*

Subregions are encouraged to recommend subregional projects and priorities for the TIP, the RTP, and the UPWP. Subregional coordinators and MAPC transportation staff report back to the MPO through formal and informal communications. MAPC subregional groups will continue to participate in local corridor advisory committees whenever these committees are appropriate vehicles for working on projects in their area. MAPC staff ensures timely discussions of transportation-related issues occur by placing the topics on the monthly agendas, by leading and participating in the discussions, and by distributing appropriate documents and notices relating to region-wide and statewide transportation meetings.

Over the course of FFY 2013, the subregions will pay particular attention to planning regional forums on the topic of transportation finance policies and transportation's impact on economic development.

\* In the case of the MetroWest Regional Collaborative, the subregion is independently staffed and provides subregional services under an agreement with MAPC and the communities. MAPC pays 25% of the director's salary.

**FFY 2013 Activities and Expected Work Products:** Preparation of monthly meeting agendas for transportation topics at subregional meetings, coordination with transportation agencies, reviews of transportation studies in sub-regions, support for subregional and corridor advisory committee meetings, and assistance in setting subregional transportation priorities. This project supports community involvement in the development of transportation planning documents.

**SUBREGIONAL SUPPORT ACTIVITIES (CONT.)**



**STAFF:** Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** MAPC2

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

**FHWA/FTA Grant Application Task and Element:** 44.21.02

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other





**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 11132

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

The primary purpose of this project is to foster awareness and consideration of Transportation-equity/environmental-justice transportation needs in MPO planning and programming, specifically in relation to the LRTP, the UPWP, the TIP, the CMP, air quality conformity determinations, environmental impact studies, and project-specific work products of the MPO. This will be done primarily through continued outreach to minority and low-income populations, senior citizens, and limited English proficiency populations. Community organizations will be interviewed to identify transportation needs, solicit ideas for improvements, and expand the universe of possible entities to be contacted. The transportation equity survey on the MPO web site will also gather this information. In addition, information gathered through other recent initiatives will be analyzed and presented.

Work will also include continued assessment of the transportation needs of low-income, minority and elderly populations, updating of the region's Coordinated Human-Services Public Transportation Plan and conducting the related outreach, particularly that supporting three Federal Transit Administration programs which target low-income populations, elderly individuals, and people with disabilities in the region: Job Access and Reverse Commute (JARC), New Freedom, and Transportation for Elderly Individuals and Individuals with Disabilities. CTPS will assist the MPO in applying the adopted environmental justice definition for the LRTP and TIP. Analysis will be conducted as needed.

In addition, CTPS staff may focus on the following topics, gathering specific information and preparing appropriate documentation and reports:

***Mapping of Important Locations in Environmental-Justice Areas and Identifying Transportation Options in Those Areas:*** Staff will identify and map major locations (for example, hospitals, government agencies, schools, social service agencies, and grocery stores) within selected environmental-justice areas of the MPO region, input destinations serving minorities, people with low incomes and/or disabilities, and produce an overlay of existing public and active (walking and biking) transportation options in those areas. The study will explore the potential for coordinating existing transportation.

***Opportunities for Combining Job Access/Reverse Commute, and Low-Income and Minority Elderly Transportation Services:*** The study will explore the potential for coordinating existing transportation services in three municipalities selected to meet both the needs of low-income



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 11132

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

employment-related trips. This will include: identifying existing job access/reverse commute, elderly transportation and services, and services provided by transportation management associations; determining the distribution of low-income and minority elderly households; identifying travel-need characteristics and destinations by trip type for both groups; and assessing the appropriateness of sharing vehicles/providers. .

**FFY 2013 Activities and Expected Work Products:**

- Continue MPO outreach to minority and low-income communities
- Monitor developments at the U.S. Department of Transportation and participate in workshops, conferences, and seminars, as appropriate
- Provide summaries of interviews and other updates to the MPO
- Update the MPO’s Coordinated Human-Services Transportation Plan
- Continue the solicitation of projects for funding under the JARC and New Freedom programs
- Conduct environmental-justice analyses as needed
- Mapping and technical memoranda noted above

*This work is related to the work on the LRTP and project programming for the TIP presented in this chapter.*

**FHWA/FTA Grant Application Task and Element:** 44.21.04 44

**FFY 2013 Budget**

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**STAFF:** Central Transportation Planning Staff**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** 10103**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

The Boston Region MPO’s Transportation Improvement Program (TIP) is a document that presents a multiyear, financially constrained program of planned investments in the metropolitan area’s transportation system. Although federal regulations require the TIP to be updated every four years, Massachusetts and its MPOs have committed to producing annual updates.

**Development:** The annual TIP development cycle begins with gathering a list of existing and new projects requested by cities and towns to be considered for the upcoming TIP. Municipal TIP Contacts and MPO staff coordinate to update information on projects through the MPO’s Interactive TIP Database. This data gathering process establishes information on a project’s background, infrastructure condition and needs, development status, and effectiveness at advancing MPO policies. To help ensure that municipalities and other project proponents are informed and up to date on TIP development, CTPS conducts “TIP-Building” workshops each year near the beginning of the process. In addition, CTPS conducts targeted outreach to the MAPC subregions and ongoing outreach through our various public-involvement channels to provide opportunities for input into the draft TIP development process.

**Project Evaluation:** CTPS reviews and evaluates all projects in the universe for which there is adequate information against the TIP criteria. The project evaluation process for the TIP continues to evolve, and MPO participation in the MassDOT Highway Division’s project development process continues to develop, as called for in the Highway Division’s Project Development and Design Guide. Changes to the project evaluation criteria were implemented during the development of the FFYs 2012–15 TIP to better reflect the visions and policies adopted by the MPO on April 22, 2010. Further adjustments will occur as needed, particularly to incorporate changes criteria resulting from the MPO’s performance measurements.

Based on the evaluation results, staff prepares a first tier list of projects that evaluate well and can be made ready in the scope of the TIP. Staff also prepares a staff recommendation of transportation investments over the next four years. The MPO reviews and discusses the first tier list of projects and staff recommendation, and releases a draft TIP for public comment. After consideration of public comments, the MPO adopts the TIP.

**Information Flow:** CTPS will continue to collect and disseminate project status information, cost updates, public comments, and information on process-related issues to the MPO. CTPS



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 10103

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

provides “relevant, timely, and comprehensive” information, including project planning, design, and advertisement status updates, to the MPO. Additionally, staff continues to provide a consistent information flow to the MPO municipalities through mail, e-mail, the MPO website, and telephone communication via the municipally appointed TIP contacts.

***Development and Certification:*** CTPS performs all tasks necessary for TIP development and certification, including:

- Preparing and producing all TIP-related informational materials and analysis, and draft and final documents
- Coordinating public participation in TIP development and review of all drafts and preparing responses to comments
- Scheduling and staffing meetings of the MPO and its ad hoc TIP Criteria Committee; the Regional Transportation Advisory Council; and MPO workshops, open houses, and “TIP-Building” Workshops
- Conducting outreach to the MAPC subregions

***Amendments/Administrative Modifications:*** CTPS drafts amendments and/or administrative modifications and manages all procedural steps necessary to properly adopt and certify them.

***Public Participation Process:*** Staff are responsible for the dissemination of TIP materials for public review; the release of the circulation draft, as well as all amendments, are announced in *TRANSREPORT* and in press releases and legal notices to print media and through notification to the MPO’s listserver subscribers. The draft document is made available on the MPO website and on CD on request. Notice of the availability of the document is mailed directly to municipal officials, legislators, libraries, the Regional Transportation Advisory Council and MAPC representatives in the 101 MPO municipalities and it is also emailed through MPOinfo. Notices of public meetings and outreach concerning the TIP are sent (via e-mail and U.S. mail) to regional contacts and interested parties. Public meetings are held at locations around the region during the public review period. Articles are also prepared for *TRANSREPORT*.

***GIS Support:*** GIS support will include the creation of TIP map coverages, data collection for project evaluation, and production of maps.



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 10103

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

**FFY 2013 Activities and Expected Work Products:** The FFYs 2014–17 TIP, and amendments and administrative modifications to the FFYs 2013–16 TIP, will be prepared as described above. The interactive TIP database for tracking projects will be maintained and a funding database will be developed to provide more complete funding source information by project.

*This project is supported by 3C planning support activities, the accessible formats project, and transportation equity and public outreach activities described in this chapter.*

*MAPC work efforts related to the TIP are also presented in this chapter.*

**FHWA/FTA Grant Application Task and Element:** 44.25.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT			PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 10104

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

The Boston Region MPO produces an annual Unified Planning Work Program (UPWP). This document outlines transportation planning activity, for all surface transportation modes, anticipated to be undertaken in the region during the UPWP period. It also includes detailed budget information on the expenditure of federal planning funds.

CTPS prepares materials for and coordinates all phases of this work, including soliciting, evaluating and selecting study ideas, preparing budgets, writing project descriptions, conducting background research, coordinating document development with the MPO’s UPWP Committee, and preparing draft and final documents. CTPS staff are responsible for public participation and distribution of the draft UPWP, as well as any administrative modifications and amendments. CTPS also prepares quarterly reports on the implementation of the UPWP.

**FFY 2013 Activities and Expected Work Products:** Amendments and administrative modifications to the FFY 2012 UPWP; development of, and public outreach for, the FFY 2014 UPWP, as described above; attendance at relevant meetings; quarterly implementation reports; and other information materials as needed.

*This project is supported by 3C planning support activities, the accessible formats project, and transportation equity and public outreach activities described in this chapter.*

*MAPC work efforts related to the UPWP are also presented in this chapter.*

**FHWA/FTA Grant Application Task and Element:** 44.21.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



**STAFF:** Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** MAPC3

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

This UPWP task supports MAPC’s management and oversight of UPWP funded planning studies, projects and programs, which include preparing updates and budget information in monthly reports to MassDOT.

MAPC also provides assistance on the annual development of the UPWP and support for the development of specific work scopes. Staff will also provide assistance to communities in identifying and developing studies to be included in the UPWP, through community liaison and subregional support activities.

**FFY 2013 Activities and Expected Work Products:** MAPC staff will prepare UPWP project listings and monthly reports on UPWP activities. MAPC will provide assistance on the annual development of the UPWP and support for the development of specific work scopes. Staff will also provide assistance to communities in identifying and developing studies to be included in the UPWP, through community liaison and subregional support activities.

**FHWA/FTA Grant Application Task and Element:** 44.21.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other





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## 6 PLANNING STUDIES

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The projects in this chapter are planning studies that will be conducted during federal fiscal year 2013. They are technical in nature and may include support for larger projects that are described in Appendix A: Other Boston Region Transportation-Planning Projects. In instances where this occurs, the project description refers the reader to Appendix A.

<b>Project ID #</b>	<b>Project Name</b>	<b>Page</b>
TBD	2012–13 I-93 North and Southeast Xway HOV Lane Monitoring	6-x
23321	Assembly Square Station Service and Fare Equity Analysis	6-x
11247	Bicycle Network Evaluation	6-x
13209	Bicycle/Pedestrian Support Activities	6-x
22206	Callahan Tunnel Construction Impact Study	6-x
11138	Congestion Management Process	6-x
MAPC5	Corridor/Subarea Planning Studies & Land Use Reviews	6-x
22333	Green Line Extension FEIR	6-x
11377	Green Line SIP Mitigation Strategies	6-x
TBD	I-93/I-95 Interchange, Woburn	6-x
MAPC6	Land Use Development Project Reviews	6-x
TBD	Massport 2013 Assistance	6-x
TBD	Regional HOV Systems Planning Phase II	6-x
MAPC7	Regional Vision Implementation: MetroFuture	6-x
TBD	Route 79 Interchange	6-x
13246	Safety and Operations Analyses at Selected Intersections	6-x
12311	South Station Expansion: Support	6-x

**2012–13 I-93 NORTH AND SOUTHEAST XWAY HOV LANE MONITORING**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MassDOT Office of Transportation Planning

**ID #:** TBD

**BUDGET:**

**STATUS:** 0%

The Massachusetts Department of Environmental Protection regulation 310 CMR 7.37 calls for quarterly monitoring of the southbound high-occupancy-vehicle (HOV) lane of I-93 North and the reversible HOV lane of the Southeast Expressway. The monitoring is performed in order to assess compliance with a set travel-time-savings threshold. The work consists of collecting travel-time and vehicle-occupancy data and analyzing them to calculate anticipated time savings and occupancy changes over time.

**FFY 2013 Activities and Expected Work Products:**

- Collect travel-time data on a quarterly basis for the HOV and associated general-purpose lanes and analyze them to calculate travel-time savings
- In the spring and fall, collect vehicle-occupancy data and analyze them to report changes, if any
- Write five technical memoranda annually, one for each season to document data collection, analysis, and results, and one for an annual summary of travel time data collection and analysis

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**ASSEMBLY SQUARE STATION SERVICE AND FARE EQUITY ANALYSIS**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MBTA

**ID #:** 23321

**BUDGET:**

**STATUS:** 80%

Description: CTPS has been requested by the MBTA to perform a fare equity analysis for the new Assembly Square Station. This analysis is mandated by the FTA’s Small Starts program. It will assess the effects of the proposed service changes and the alternatives available to people affected by the changes, and will determine if the proposed construction of a new Orange Line station would have an adverse effect on low-income and minority populations.

**FFY 2013 Activities and Expected Work Products:** CTPS will complete the project and prepare a technical memo documenting the service and fare equity analysis.

**FHWA/FTA Grant Application Task and Element:** 44.23.02

**FFY 2013 Budget**

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**BICYCLE NETWORK EVALUATION**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 11247

**BUDGET:**

**STATUS:** 50%

The MPO has supported bicycling in the region through the development of on-road facilities and off-road trails. The purpose of this project is to conduct a regionwide evaluation of the existing network to identify proposals for new connections. These connections could link trails or on-road segments, or provide access to transportation services, or significant commercial, employment and residential sites. The goal of this project is to create a more useful and continuous trail network in the region by identifying barriers and gaps that can be addressed. New connections could be off-road or could use the existing street network. This project would further the mobility goals discussed in the Long-Range Transportation Plan, Paths to a Sustainable Region, encourage the shared use of infrastructure recommended in the youMove Massachusetts interim report, and build on the ongoing work of the Congestion Management Process (CMP). CTPS, in coordination with MassDOT’s statewide bicycle plan, and in collaboration with MAPC, would be responsible for carrying out the project.

**FFY 2013 Activities and Expected Work Products:**

- Maps showing the existing and proposed bicycle network, with major transportation services and significant commercial, employment, and residential sites; and the identification of gaps and potential new connections.
- An evaluation of potential connections among trails, on-road facilities, and activity centers. Evaluation criteria would be based on the MPO policies, and consider factors such as safety, access to activity centers, relative distance, conceptual cost, estimated usage, and consistency with other plans. Based on the above, and other possible criteria, a list of the relative priority of recommended connections will be produced.

**FHWA/FTA Grant Application Task and Element:** 44.22.02

**FFY 2013 Budget**

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**BICYCLE/PEDESTRIAN SUPPORT ACTIVITIES**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 13209

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

CTPS supports the MPO’s and the region’s needs for bicycle and pedestrian planning through ongoing data collection, analysis and technical assistance. In addition to the items below, during the UPWP year, other bicycle and pedestrian planning studies are often identified collaboratively among MPO members, communities, bicycle/pedestrian advisory groups and CTPS.

**FFY 2013 Activities and Expected Work Products:** Technical assistance, data collection, analysis, review of materials, and attendance at state, regional, and local forums and committee meetings. Tasks not related directly to separate studies or activities include the following:

- Coordinate with state agencies, MAPC, other MPOs, the Safe Routes to Schools Program at MassRIDES, WalkBoston, MassBike, Livable Streets, municipalities and other groups regarding bicycle and pedestrian planning for the region
- Conduct and collect bicycle and pedestrian volumes at selected on-road and off-road facilities
- Examine bicycle and pedestrian crash data at the intersection, corridor and regional level
- Provide ongoing technical support on current tools and practices to communities on bicycle/pedestrian issues
- Conduct technical analysis to quantify the impacts of proposed bicycle facilities, including air quality improvements, vehicle miles traveled reductions, and parking needs
- Examine potential routes, both on- and off-road, to increase the connectivity of the existing transportation system, including trails, on-road facilities, and public transit

**FHWA/FTA Grant Application Task and Element:** 44.22.02

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**CALLAHAN TUNNEL CONSTRUCTION IMPACT STUDY**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MassDOT Office of Transportation Planning

**ID #:** 22206

**BUDGET:**

**STATUS:** 80%

The purpose of this project is to support MassDOT in conducting a study that will analyze the transportation impacts associated with the temporary closure of the Callahan Tunnel when it is undergoing rehabilitation. The objectives of the CTPS support of the project are threefold:

- To provide general technical assistance as needed
- To analyze the existing travel patterns and estimate the traffic conditions under the Callahan Tunnel Temporary closure
- To evaluate the potential alternatives for mitigating the transportation impacts during the Callahan Tunnel temporary closure

**FFY 2013 Activities and Expected Work Products:** CTPS will continue to examine traffic impacts of Callahan Tunnel construction.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**STAFF:** Central Transportation Planning Staff**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** 11138**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

The Congestion Management Process (CMP) in the Boston Region MPO area typically follows federal guidelines and recommendations from the MPO's CMP Committee to set goals and objectives, performance measures, identify congested locations, determine the causes of congestion, develop sets of alternative strategies to mitigate congestion, evaluate the potential of the different strategies, recommend the strategies that best address the causes and impacts of congestion, coordinate with and support the development of the TIP, Plan, and the UPWP, and develop needs priorities for planning studies. Depending on CMP Committee recommendations, monitoring and analysis will continue for highways, arterial roads, transit services, park-and-ride lots, and bicycle/pedestrian facilities. A new work program outlining the tasks for the next CMP cycle will also include the purchase of electronic monitoring data for roadway travel time and speed monitoring, identification of existing conditions and a recommendation on appropriate improvements in accordance with federal guidance.

The CMP is a federally mandated requirement, seeking to monitor congestion, mobility and safety needs and recommend appropriate strategies. The CMP is developed in an integrated manner with the development of the certification documents: the LRTP, the TIP, and the UPWP, to ensure coherent strategy evaluation and implementation.

**FFY 2013 Activities and Expected Work Products:** A new work program will be written that will include monitoring, needs assessment, and strategy recommendations for multimodal facilities and services, including:

- Purchase of electronic travel time and speed data for MPO arterials and freeways;
- Evaluation
- Intersection performance
- Bicycle and pedestrian transportation, including parking at MBTA stations
- Coordination with the MPO's certification activities

*This project informs decisions related to the LRTP and the TIP, and identifies areas requiring additional study through the UPWP.*

**CONGESTION MANAGEMENT PROCESS (CONT.)**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 11138

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

**FHWA/FTA Grant Application Task and Element:** 44.22.02

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other





**STAFF:** Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** MAPC 4

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

This UPWP task includes funding to support MAPC's work on several corridor and subarea studies in the region. Some of these projects will be funded jointly through the UPWP, the District Local Technical Assistance program, and the Sustainable Communities Initiative.

***Sullivan Square/Rutherford Avenue Land Use Visioning:*** MAPC will work closely with the City of Boston to study the potential for re-development of the Sullivan Square area into a transit-oriented mixed-use center that will better connect the transit station to residential neighborhoods in Charlestown, and inter-connect existing and new open spaces. The land use planning study and rezoning also aims to support the further development of a multi-modal MBTA station at Sullivan Square that includes a commuter rail stop and future Urban Ring connections. As a corollary to the creation of new street grid and development parcels, the study aims to enhance the public realm by creating public sidewalks, new open spaces and an appropriate mix and scale of residential and commercial development with active ground-floor uses. The transportation elements of this project are programmed in the Long-Range Transportation Plan in the 2016 – 2020 time period.

***Sub-regional Priority Development and Priority Preservation Studies:*** MAPC will work with the municipalities in the North Suburban Planning Council and the South Shore Coalition to identify areas for priority development and areas for priority preservation, and the corresponding transportation connections needed to support these sites. New commercial and residential growth must occur in a manner that is respectful of open space resources, impacts on the environment, transportation networks, and water resources in the region. MAPC will work with the municipalities to identify a set of regional priorities, and opportunities to coordinate their planning. MAPC recently conducted a similar planning study that successfully included thirty-seven communities in the Metro West region and along I-495.

***Opportunities and Impediments to Creating Transit Oriented Development:*** MAPC will use demographic data to identify five to ten existing transit stations (subway, commuter rail, bus) that have the potential to support transit oriented development (TOD). MAPC will analyze these sites and identify potential impediments to development such as existing zoning, inadequate pedestrian connections, parking challenges, and other infrastructure elements, and offer recommendations on how to improve the sites' potential for TOD. MAPC will work closely with the MBTA, CTPS, MassDOT, land owners, and the municipality in which the



**STAFF:** Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** MAPC5

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

stations are located, and may conduct community visioning processes for certain sites. MAPC will coordinate site analyses with the CTPS “Access to Transit” study, planning of transportation projects in the MPO’s Long-Range Transportation Plan and TIP “Universe of Projects.”

**Needham Street/Highland Avenue Corridor in Newton and Needham:** MAPC will assist the City of Newton and Town of Needham to identify how the Bay Colony Rail Trail right-of-way can be utilized to support sustainable growth along the Highland Avenue and Needham Street corridor. This corridor is identified for improvement in the Long-Range Transportation Plan in the 2021–2025 time period. MAPC will work on an alternatives analysis to identify potential uses of the abandoned rail right-of-way and the connections that the right-of-way can have to parcels along the corridor that can encourage sustainable redevelopment.

Other subarea and corridor studies may also be identified later for FFY 2013.

**FY 2013 Activities and Expected Work Products:** MAPC will work with the municipalities, MassDOT, MBTA and other stakeholders to document problems and develop recommendations for transportation improvements and land use changes. To the extent possible, MAPC will coordinate the planning of currently programmed LRTP and TIP projects in these corridor and sub-area plans. Recommendations will be finalized in reports and presented to the MPO.

**FHWA/FTA Grant Application Task and Element:** 44.23.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**GREEN LINE EXTENSION FEIR**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MassDOT Office of Transportation Planning

**ID #:** 22333

**BUDGET:**

**STATUS:** 95%

This project is a legal commitment under the amended State Implementation Plan, and includes an extension of Green Line service from a relocated Lechmere Station through Cambridge to Somerville and Medford with a spur to Union Square in Somerville. CTPS will continue to provide needed analytical support for the state and federal environmental review documents and conduct other design-related activities that include travel-demand forecasting.

**FFY 2013 Activities and Expected Work Products:** CTPS will continue to support MassDOT with their FEIR submission and their New Starts program.

*This work is related to a recommended, regionally significant project that is identified in the LRTP, and included in the PMT. Also see Appendix A.*

**FHWA/FTA Grant Application Task and Element:** 44.23.02

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

## GREEN LINE SIP MITIGATION STRATEGIES



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MassDOT Office of Transportation Planning

**ID #:** 11377

**BUDGET:**

**STATUS:** 90%

The Green Line Extension is one of the four outstanding transportation control measure (TCM) commitments currently listed in the State Implementation Plan (SIP), and has a legal deadline of December 31, 2014. MassDOT and the MBTA are currently estimating that the Green Line Extension project will be ready for in-service start-up sometime after the aforementioned legal deadline.

A provision exists in 310 CMR 7.36 which allows for approval of project delays if interim measures are implemented that result in emission reductions in non-methane hydrocarbons (NMHC), carbon monoxide (CO), and nitrogen oxides (NOx) equal to or greater than the emission reductions that would have been achieved had the required project not been delayed. In order to act on this provision, MassDOT must petition the Massachusetts Department of Environmental Protection (DEP) to authorize delay of the project and to accept one or more interim offset projects that can be demonstrated to achieve the aforementioned desired level of emission reductions for NMHC, CO, and NOx. MassDOT is beginning the process of developing a list of projects, programs, and other measures for interim offsets. CTPS, using its regional travel-demand model, will test these measures to ascertain their impacts and determine if they meet or exceed the emissions reductions forecast for the Green Line Extension project.

**FFY 2013 Activities and Expected Work Products:** CTPS will provide air quality data on SIP projects that will be used to offset the delay in opening the Green Line Extension.

**FHWA/FTA Grant Application Task and Element:** 44.23.02

### FFY 2013 Budget

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**I-93/I-95 INTERCHANGE, WOBURN**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MassDOT Office of Transportation Planning

**ID #:** TBD

**BUDGET:**

**STATUS:** 25%

*Project description may be revised.*

MassDOT’s Office of Transportation Planning will be working with an advisory task force to develop an environmental document that will evaluate transportation improvements at the I-93/I-95 interchange in the Towns of Reading and Stoneham and the City of Woburn. This interchange is the busiest in the state, processing more than 375,000 vehicles on an average weekday. The I-93/I-95 interchange was built in the early 1970s using then-prevalent design standards and serving substantially lower volumes than the roadway experiences today. As the number of vehicles increases, merges and weaves become congested to a greater degree than would occur if dimensions were adequate, and conflicts between vehicles increase the rate of crashes. Substandard geometry also has consequences when the interchange is not busy: the I-93 southbound ramp to Route 128 southbound has been the location of truck rollovers, and the ramp has a warning sign about this hazard.

A full range of potential alternatives, including interchange improvements and non-highway options, has been analyzed and the preferred option will be advanced in the environmental process into final design. These options were screened against four basic screening criteria: (1) improves congestion, (2) improves safety, (3) does not require takings, and (4) provides local access. This process resulted in a short list of alternatives for improvement of the interchange, which will be examined in the new study.

**FFY 2013 Activities and Expected Work Products:** Tasks associated with this project will be conducted as requested by MassDOT/MBTA.

**FHWA/FTA Grant Application Task and Element:**

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



**STAFF:** Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** MAPC6

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

This UPWP task includes funding to support MAPC’s review of potential development projects in the region. In particular, projects will be reviewed for consistency with MetroFuture, impacts on the transportation network and projects identified in the TIP and Long Range Plan, consistency with the MPO’s Livability goals, and the Commonwealth’s sustainable-development principles.

MAPC tracks all projects reviewed in the region under the Massachusetts Environmental Policy Act (MEPA) and provides a regional planning analysis to the Secretary of Energy and Environmental Affairs for all developments considered having significant impact. Special attention is given to local zoning ordinances and regulations that serve to reduce auto travel by encouraging carpooling, transit, and other travel-demand management techniques. MAPC will also recommend appropriate mitigation measures.

MAPC also reviews notices of “offered railroad property” from MassDOT, consults with municipalities as necessary, and provides appropriate input. Often, these involve rail trails, but they may also involve other types of proposed development.

**FY 2013 Activities and Expected Work Products:** Analysis and write-up of MEPA reviews, mitigation recommendations, coordination with municipalities and transportation agencies, updated MAPC development database, and input into TIP and Plan evaluated projects. In addition, MAPC will continue to review and respond to notices of offered railroad property.

**FHWA/FTA Grant Application Task and Element:** 44.23.02

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Massport

**ID #:** TBD

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

CTPS will continue to provide technical assistance to Massport’s Department of Economic Planning and Development. The services are expected to support Logan Airport ground access planning and might include data collection and analysis, analysis related to the Logan Airport Consolidated Rental Car Facility (CONRAC), air quality analysis and support for additional, to-be-determined transportation-planning activities. This work may be redirected or modified in response to emerging issues.

**FFY 2013 Activities and Expected Work Products:** CTPS will continue to support Massport in their desire to examine and improve ground access options.

**FHWA/FTA Grant Application Task and Element:** NA

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT			PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA

**STAFF: Metropolitan Area Planning Council****CLIENT: Boston Region Metropolitan Planning Organization****ID #: MAPC 6****BUDGET: Not applicable to ongoing projects****STATUS: Ongoing**

MetroFuture, the comprehensive land use plan for Metro Boston, was adopted as the future land use scenario for the long-range transportation plan, PATHS TO A SUSTAINABLE REGION, in FFY 2011. This UPWP task will continue to support the implementation of MetroFuture’s local transportation and land use elements. This task will also support coordination with the Sustainable Communities Initiative. In FFY 2010, MAPC secured a \$4 million planning award on behalf of the region, from the federal partnership of DOT, HUD, and EPA, to implement MetroFuture in furtherance of federal sustainability goals.

***Building Support at the Local Level for MetroFuture:*** MAPC will continue to work with municipal officials and residents at the local level to seek changes in land use that will enable livable communities and sustainable transportation. This will include engaging the public in planning and dialogue that enhances corridor planning, identification of priority development and preservation areas, and other decision making to enhance the land use-transportation connection. This task will also include educating local officials and state policy makers about state and federal transportation funding shortcomings, potential policy solutions, and the link between transportation and economic growth. MAPC will conduct a series of forums hosted through the sub-regions that will bring together local officials, policy makers, business organizations, civic leaders, and other stakeholders.

***Measuring MetroFuture Progress Through Regional Indicators:*** MAPC launched its regional indicators program in FFY12 with the State of Equity in Metro Boston report. The trends revealed differ markedly from those that are needed if the region is to achieve MetroFuture, and is fueling public conversation about ways in which to “bend the trends.” This task would support development of the next regional indicators report, focusing on the region’s progress toward MetroFuture’s prosperity or sustainability goals.

***Increasing Equity Focus in Regional Planning:*** The State of Equity report underscored the strong relationship between social equity and virtually every element of regional planning. This task would support MAPC’s efforts broaden public engagement, help leaders understand the equity implications of their decisions, and generally integrate equity considerations into its planning and public engagement work.





**STAFF:** Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** MAPC7

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

**Updating MetroFuture Implementation Strategies:** Many local and state policies and programs have changed since MetroFuture Goals and Implementation Strategies were adopted in December 2008. While some of these changes have moved the region closer to the MetroFuture goals, all have changed the context in which MAPC and its partners pursue those goals. This changing context requires periodic updates to the recommendations that are made in the MetroFuture Implementation Strategies. This task would support updates to those recommendations most closely related to achievement of MetroFuture’s transportation-related goals. have changed since MetroFuture Goals and Implementation Strategies were adopted in December 2008. While some of these changes have moved the region closer to the MetroFuture goals, all have changed the context in which MAPC and its partners pursue those goals. This changing context requires periodic updates to the recommendations that are made in the MetroFuture Implementation Strategies. This task would support updates to those recommendations most closely related to achievement of MetroFuture’s transportation-related goals.

**Coordinate Sustainable Communities Initiative with MPO Planning:** The Metro Boston Sustainable Communities Consortium, created to guide the unprecedented support provided by the federal Sustainable Communities Regional Planning Grant, is not only bringing new partners into MAPC’s regional planning but is also supporting nearly 50 discrete projects to advance the region’s progress toward the MetroFuture goals. This task would support information sharing and coordination among MAPC staff and the MPO in an effort to make the most of this unprecedented opportunity for the region.

**Creating Smart Growth Profiles:** Whether directly related to MetroFuture implementation activities or not, there are fine examples of smart growth and good transportation-land use

**FHWA/FTA Grant Application Task and Element:** 44.23.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**ROUTE 79 INTERCHANGE**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MassDOT Office of Transportation Planning

**ID #:** TBD

**BUDGET:**

**STATUS:** 45%

[Project description and FFY 2013 Activities and Work Products under development.](#)

**FHWA/FTA Grant Application Task and Element:**

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**SAFETY AND OPERATIONS ANALYSES AT SELECTED INTERSECTIONS**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 13246

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

The purpose of this study is to examine for mobility and safety major intersections in the region’s arterial highways, where, according to the MPO’s crash data system, many crashes occur. These locations are also congested during peak traffic periods. The resulting bottlenecks can be at a large single intersection but usually spill over a few adjacent intersections along an arterial. They may also carry multiple transportation modes, including buses, bicyclists, and pedestrians.

This study builds directly on the monitoring results of the Congestion Management Process (CMP) for delays and safety along arterial highways and the resulting recommendations will be of the “management and operations” type. Municipalities in the region are very receptive of this type of study as they give them an opportunity to begin looking at needs of these locations, starting at the conceptual level before they commit funds for design. Eventually, if the project qualifies for federal funds, the study’s documentation is also useful to MassDOT.

**FFY 2013 Activities and Expected Work Products:** Additional intersection locations will be selected for transportation planning, operations, and complete streets analysis. The exact number of locations will depend on funding amount.

**FHWA/FTA Grant Application Task and Element:** 44.23.02

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**SOUTH STATION EXPANSION: SUPPORT**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MassDOT Office of Transportation Planning

**ID #:** 12311

**BUDGET:**

**STATUS:** 5%

Boston’s South Station is the premier passenger hub in New England, serving rail passengers from the Northeast Corridor and beyond, connecting them to local and intercity destinations. South Station offers commuters and travelers not only Amtrak and MBTA commuter rail service, but also intercity bus, MBTA rapid transit, and MBTA bus rapid transit services. At present, however, South Station operates above its design capacity for efficient train operations and convenient passenger queuing. In addition, South Station lacks sufficient ancillary vehicle storage capacity, constraining operations today and limiting future growth. Several recent transportation studies have highlighted the existing limitations at South Station and how they limit the expansion of local, regional, and Northeast Corridor–wide rail service. In order to realize the cumulative 50 percent increase in Amtrak high-speed and intercity passenger service outlined in the Northeast Corridor Plan, South Station and its support facilities need to be expanded and improved. In addition, the Commonwealth of Massachusetts is planning a number of major commuter rail expansion projects, and greater capacity at South Station is a prerequisite for the full realization of these plans. MassDOT’s South Station Expansion project will make possible all of these rail improvements for the benefit of not only Boston and New England but also the entire Northeast Corridor. MassDOT’s study of the expansion of South Station which will take place over a three-year period is dependent on a \$32.5 million in High Speed Rail grant being awarded from the Federal Railroad Administration (FRA). This funding, if awarded, will be matched by \$10.5 million dollars in state funds and will support MassDOT’s work once funding is received from the FRA.

**FFY 2013 Activities and Expected Work Products:** CTPS will support the project team in developing and testing options for expanding South Station.

**FHWA/FTA Grant Application Task and Element:** 41.23.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

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## 7 TECHNICAL SUPPORT/OPERATIONS ANALYSIS PROJECTS

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The projects in this chapter will be conducted during federal fiscal year 2013. They are technical in nature and may include support for larger projects, which are described in Appendix A: Other Boston Region Transportation-Planning Projects. In instances where this occurs, the project description refers the reader to Appendix A.

<b>Project ID #</b>	<b>Project Name</b>	<b>Page</b>
TBD	Accelerated Bridge Program Support	7-x
MAPC8	Alternative-Mode Planning and Coordination	7-x
TBD	Boston Region MPO Freight Program	7-x
13801	Boston Region MPO Livability Program	7-x
13150	Community Transportation Technical Assistance Program	7-x
TBD	Household Survey-based Travel Profiles and Trends	
11702	Land Use, Demographics and Climate Change in Transportation Modeling	7-x
TBD	MassDOT Roadway Inventory Supplemental Grant	7-x
11124	MassDOT Statewide Planning & Research Program Support	7-x
13151	MassDOT Title VI Program	7-x
11380	MassDOT Transit Planning Assistance	7-x
14326	MBTA 2012 National Transit Database: Directly Operated	7-x
14325	MBTA 2012 National Transit Database: Purchased Bus	7-x
TBD	MBTA 2013 National Transit Database: Directly Operated	7-x
TBD	MBTA 2013 National Transit Database: Purchased Bus	7-x
TBD	MBTA Bus Service Data Collection VIII	7-x
14328	MBTA Neighborhood Maps	7-x
14303	MBTA Rider Oversight Committee Support	7-x
TBD	MBTA Title VI Program Monitoring	7-x
14327	Regional Transit Service Planning Technical Support	7-x
90080	Travel Data Forecasts	7-x
90040	Travel Operations Analysis	7-x

**ACCELERATED BRIDGE PROGRAM SUPPORT**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MassDOT Office of Transportation Planning

**ID #:** TBD

**BUDGET:**

**STATUS:** 60%

The MassDOT project managers overseeing the Accelerated Bridge Program have asked CTPS to assist them in advancing the construction and repair of the bridges in the Program via transportation-planning and travel-forecasting support. Some of the bridge projects for which continuing CTPS support will be needed are for the Charles River Basin Study, the Casey Overpass project, the Whittier Bridge and several Revere Beach Parkway Bridges. Support for other bridge projects may be requested as needed.

**FFY 2013 Activities and Expected Work Products:** This project will continue as described above, with the understanding that additional work may be requested by MassDOT.

**FHWA/FTA Grant Application Task and Element:**

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



**STAFF:** Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** MAPC8

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

MAPC provides alternative-mode transportation planning support to the Boston Region MPO and municipalities in the region. This work benefits bicycle and pedestrian transportation, encourages transit in areas currently underserved by the region's existing regional transit authorities (RTAs), and identifies and supports transportation demand management (TDM) strategies.

***Route 128 Business Council TMA support:*** MAPC will support the implementation of the 128 Business Council Smart Bus project, which was funded through the Clean Air and Mobility Program in the FFY 11 element of the TIP. MAPC will work with the 128 Business Council to develop and manage a technologically driven, demand responsive interface for suburban transit systems that will better facilitate variable route bus services. MAPC will engage municipalities and other transit providers to consider similar technology to improve suburban transit service.

***Bike Share Program Implementation:*** MAPC will continue to work with the Cities of Boston, Cambridge, Somerville and the Town of Brookline to implement the regional Hubway Bike Share system. In summer 2011 Boston launched a 600 bicycle and 60 station bike share system, which will expand into neighboring municipalities in 2012. Funding for the program comes from the Clean Air and Mobility Program, a separate FTA Bus Livability award, and local support from the municipalities. The bike share vendor for this project, Alta Bike Share, was selected through competitive procurement by MAPC in FFY 2011. Implementation efforts need to be undertaken by MAPC to continue to guide the process. Working with officials from the four municipalities, as well as institutions in Greater Boston, MAPC will help implement a program that can be expanded to the three neighboring municipalities, and beyond.

***Technical Assistance with Local Bicycle and Pedestrian Planning Initiatives:*** MAPC will provide technical support, as requested, to communities seeking to augment portions of the regional bicycle and pedestrian network, as identified in the 2007 Regional Bicycle Plan and 2010 Regional Pedestrian Plan.

***Regional Greenway Planning and Mapping:*** MAPC will work with MassDOT, CTPS, and municipalities to better develop and implement portions of a regional bicycle and pedestrian network of off-road and on-road connections (a greenway) that form a contiguous system around Greater Boston. Trail development is occurring in greater frequency in most of the



**STAFF:** Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** MAPC 7

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

communities in the Boston region. The trails consist of shared use paths along former railroad rights of way, hiking trails through conservation land, and historic corridors connecting points of interest. The binding theme of all the proposed and completed corridors are creating attractive places to walk, bike, or otherwise move along low traffic or traffic free green areas. These greenways are often local in nature, however if we bring all of these separate projects into a regional system, can create a world class regional network.

**South West Advisory Planning Committee (SWAP) Suburban Mobility Study:** MAPC, in coordination with CTPS, will work with the municipalities in the SWAP subregion to identify potential improvements to public transit. This work will include identifying transit needs in the subregion and potential improvements such as better connections to commuter rail stations, reverse commute needs, transportation management associations, and regionalizing municipally funded human services shuttles. A working group consisting of members from each municipality, MAPC, and CTPS will be formed to coordinate this work.

**FY 2013 Activities and Expected Work Products:** MAPC will help implement the 128 Business Council Smart Bus technologies, identify priority bicycle and pedestrian infrastructure needs, implement the regional bike share program, and help the MAPC sub-regions coordinate transit options.

**FHWA/FTA Grant Application Task and Element:** 44.22.02

**FFY 2013 Budget**

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



**BOSTON REGION MPO FREIGHT PROGRAM**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** TBD

**BUDGET:** Not applicable for ongoing projects

**STATUS:** Ongoing

The MPO’s 2010 Freight Study, “A Profile of Truck Impacts,” revealed gaps in the knowledge of freight transportation in the Boston region. The MPO’s Freight Program will provide staff support to the MPO in order to collect information that will fill in these gaps. The program will include collection, analysis, and dissemination of information for all of the freight transportation modes – air, rail, truck, and sea.

**FFY 2013 Activities and Expected Work Products:** Among the work activities that may be pursued as part of this program are:

- Collection of classification count data at key locations where such data are lacking
- Development of emissions factors that correspond to the truck use categories in the MPO’s truck model
- Surveying of shippers and carriers in the Boston region to learn about their transportation needs for freight distribution

Additional work activities may be identified through the second phase of the MPO’s Freight Study, which is scheduled to be conducted in the latter half of FFY 2012.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



**STAFF:** Central Transportation Planning Staff and Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 13801  
& MAPC10

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

The MPO livability initiative furthers the goals of the state's Healthy Transportation Compact and the recent federal guidance that MPOs promote thinking about the relationship between the built environment, mobility, affordability, health, and quality of life in a community.

This means offering information, analysis, and technical assistance around a broad base of perspectives, such as active transportation, transit, parking, air quality, environment, land use, transit-oriented development, urban design, and public health.

The program seeks to support livability by way of three primary components: regional forums, workshops, and online resources, described below.

1. MAPC and CTPS will identify communities to participate in the workshops through regional forums and discussion at the sub-regions. MAPC and CTPS will work with municipalities interested in promoting livability locally. They will conduct a "Livability" assessment and then, with this information, conduct a workshop with local planning staff and residents to identify short- and long-term recommendations that will improve livability in the municipality, including specific steps for facilitating active transportation modes, access to transit (if applicable), and coordinated land use and transportation solutions. Staff will update and develop toolkits on topics such as parking policies, complete streets, funding opportunities, citizen engagement, and transit-oriented development. In addition, because the workshops will seek to involve people with a broad range of interests and expertise (elected officials, planning and health boards, conservation commissions, public safety, schools, public works, engineering departments, chambers of commerce and businesses, community groups, and interested individuals), it is hoped that the workshops will stimulate community-based discussion of other livability-related topics and locally-based actions.
2. Staff will update and expand the MPO Livability Indicators Database. The database serves as an online resource for exploring data associated with livability throughout the Boston region. The database provides access to data, by municipality, related to demographics, transportation options, existing transportation patterns, and other topics related to livability. The purpose is to facilitate a better understanding of the conditions that support livability. Staff will research, provide analysis, and update the indicators.

**BOSTON REGION MPO LIVABILITY PROGRAM (CONT.)**



**STAFF:** Central Transportation Planning Staff and Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 13801 & MAPC11

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

**FFY 2013 Activities and Expected Work Products:** Outreach through regional forums and local workshops to a diverse interests in participating municipalities, including municipal planning staff and local officials; "Livability" analysis of selected areas; recommendations and ideas to improve local livability, updated Livability Indicators database; and the development and distribution of toolkits.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**COMMUNITY TRANSPORTATION TECHNICAL ASSISTANCE PROGRAM**



**STAFF:** Central Transportation Planning Staff and Metropolitan Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 13150 & MAPC 8

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

Local community officials often identify transportation issues that are of concern and about which they would like to have technical advice. In this project, a team of CTPS and MAPC engineers and planners will meet with community officials to learn more about specific problems and provide advice on next steps or to on such things as parking, traffic calming, walking, bicycling, and bus-stop-related issues that the community might have identified. There will likely be a site visit to better understand the potential problem, review existing data and make suggestions on further data that may be needed. General types of solutions along with appropriate follow-up and contact information might be recommended. Descriptions of the various planning processes at MassDOT, the MBTA, the MPO and MAPC and of how communities can get involved might also be appropriate to share. These are not design or even planning studies that would be performed by the CTPS or the MAPC staff. Rather, the project is a mechanism for providing quick-response advice to communities for resolving the issues they have identified.

This work will advance the MPO’s goals for system preservation, modernization, and efficiency; mobility; and land use and economic development. It will also be consistent with the MPO’s Congestion Management Program and other staff-identified needs. It will also include a safety component in which staff will respond to community requests to conduct analyses at crash locations, and it will recommend possible mitigation strategies.

**FFY 2013 Activities and Expected Work Products:** Town requests for technical assistance will be solicited in early FFY 2013. The number of technical assistance cases will depend on the funding amount. MAPC and CTPS will coordinate and collaborate on a case-by-case basis. It is expected that two to five person-days will be spent on each community problem identified. Requests for services will be fielded and prioritized by the CTPS and MAPC staff. Teams of professionals will be dispatched to client municipalities, and memoranda on the consultations

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**HOUSEHOLD SURVEY-BASED TRAVEL PROFILES AND TRENDS**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** TBD

**BUDGET:**

**STATUS:** 0%

In 2011, the Massachusetts Travel Survey obtained travel information from 15,017 Massachusetts households, 10,399 of which were in the CTPS model region. Every household member prepared a diary for a specified day, and reported all trips, mode of travel, and the type of activity at each visited location from the beginning of the day to the end. A similar survey using a smaller sample (3,743 households) was undertaken in 1991 for the CTPS model region only. The 1991 survey was used for model development and later topical investigations.

The proposed study would have two primary purposes. First, it would analyze the 2011 survey in order to create a statistical household and travel profile of the CTPS model region. Second it would develop a set of comparisons between 1991 and 2011 with respect to trip making patterns and household characteristics such as household size, income, and auto ownership. Of particular interest is measuring any trends in the average length of trip by trip purpose, travel mode, and time of day travel distributions, auto occupancy, and travel speeds. Measuring these trends may have important implications for calibration and validation of the current CTPS model set."

**FFY 2013 Activities and Expected Work Products:** The specific tasks and work products associated with this project will be presented to the MPO in a work scope, for approval to proceed.

**FHWA/FTA Grant Application Task and Element:** TBD

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



**STAFF:** Metropolitan Area Planning Council Area Planning Council

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 11702  
& MAPC 9

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

In FFY 2013, MAPC will compile data, prepare projections, and conduct analysis to support transportation modeling, plan development, and project evaluation. Using current employment data developed collaboratively with CTPS and information from the Development Database, MAPC will begin the preparation of employment projections for the region, municipalities, and TAZs. MAPC will also begin the development of a regional parcel-level dataset of land use, land value, development potential, and attractiveness attributes relevant to the creation of a land use transportation model. MAPC will also continue analysis of vehicle-level VMT estimates from Registry of Motor Vehicles inspection records, and will compare these estimates to data from the household travel survey and CTPS model output to improve our understanding of the relationship between land use and travel demand. Finally, MAPC will continue to support the development and implementation of methods for assessing the GHG impacts of transportation projects and consistency with GreenDOT.

**FFY 2013 Activities and Expected Work Products:** Analysis of data, white papers, maps, data to support advanced transportation modeling; research relating VMT to household travel survey.

**FHWA/FTA Grant Application Task and Element:** 44.22.03

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**MASSDOT ROADWAY INVENTORY SUPPLEMENTAL GRANT**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MassDOT Office of Transportation Planning

**ID #:** TBD

**BUDGET:**

**STATUS:** 25%

In this project CTPS will assist MassDOT by updating street name attributes in the Roadway Inventory to assist with the Crash Records database.

**FFY 2013 Activities and Expected Work Products:** Tasks associated with this project will be conducted as requested by MassDOT.

**FHWA/FTA Grant Application Task and Element:**

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**MASSDOT STATEWIDE PLANNING & RESEARCH PROGRAM SUPPORT**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MassDOT Office of Transportation Planning

**ID #:** 11124

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

Work on this project is performed as requested by MassDOT. It includes studies, analyses, and technical assistance to be conducted by CTPS under MassDOT’s federally funded Statewide Planning and Research Program (SPR). Projects that are either already underway or currently expected to begin during FFY 2012 are listed below. Additional projects may be added during FFY 2013.

- Boston Ramp Study
- Diversity Posters
- Miscellaneous SPR Graphics
- MassDOT Road Inventory File
- Statewide Modeling Support

**FFY 2013 Activities and Expected Work Products:** Activities and work products will depend on tasks requested by MassDOT’s Office of Transportation Planning. Projects of appropriate scope will be submitted to the MPO before proceeding.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



**MASSDOT TITLE VI PROGRAM**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MassDOT

**ID #:** 13151

**BUDGET:**

**STATUS:** 48%

CTPS will provide technical support to MassDOT in the preparation of its Title VI Program for submittal to the Federal Highway Administration (FHWA). Work also includes assisting with MassDOT’s Federal Transit Administration (FTA) corrective action plan and 2011 Title VI submittal. For the FHWA Title VI Program, CTPS will assist MassDOT Civil Rights in its outreach to Division and Enterprise Services personnel and will provide support to a MassDOT working group that will help to shape development and implementation of the Title VI Program throughout the agency. CTPS will also research laws, regulations, FHWA guidance, and Title VI programs from other states; assist in the creation of a preliminary program outline; and produce the preliminary MassDOT FHWA Title VI Program.

**FFY 2013 Activities and Work Products:** MassDOT Public Participation Plan, analyses for demonstrating Title VI compliance in Planning and Right-of-Way, and ongoing technical assistance.

**FHWA/FTA Grant Application Task and Element:** 44.21.04

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MassDOT Office of Transportation Planning

**ID #:** 11380

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

Work on this project is performed as requested by MassDOT for various studies and analyses to be conducted by CTPS under MassDOT’s federally funded Section 5303 Program. It includes:

- Short-term and ongoing analysis of projects and proposals, including travel-demand modeling, impacts analyses, air quality analyses, traffic engineering analyses, and other types of quick-response analyses for the MBTA
- Preparation of supporting data, graphics, maps, and other materials for MassDOT studies and presentations
- Support of environmental document preparation for projects under development

Projects that are either already underway or currently expected to begin during FFY 2013 are listed below. Additional projects may be added during FFY 2013.

- MBTA Strategic Visioning for Bus Service
- Automated-Fare-Collection Analysis
- MBTA Fairmount Line SIP Mitigation Strategies
- MBTA Green Line SIP Mitigation Strategies

**FFY 2013 Activities and Expected Work Products:** Activities and work products will depend on tasks requested by the Office of Transportation Planning. Projects of appropriate scope will be submitted to the MPO before proceeding.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MBTA

**ID #:** 14326

**BUDGET:**

**STATUS:** 95%

The objective of this project is to develop estimates of passenger boardings and passenger-miles for directly operated bus, trackless trolley, heavy rail, and light rail services. The data that form the basis of the estimates will be collected through onboard ridechecks, station turnstile observations, and passenger surveys. The MBTA will be submitting its SFY 2012 National Transit Database estimates of passenger boardings and passenger-miles for various transit modes to FTA with the aid of CTPS. The final reports, however, will not be completed until FFY 2013.

**FFY 2013 Activities and Work Products:** Staff will prepare a technical memorandum for the MBTA summarizing estimates of passenger boardings and passenger-miles for directly operated bus, trackless trolley, heavy rail, and light rail services for SFY 2012 NTD reporting.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MBTA

**ID #:** 14325

**BUDGET:**

**STATUS:** 91%

The objective of this project is to develop estimates of passenger boardings and passenger-miles for bus routes operated as part of the MBTA’s Suburban Transportation program and other contracted MBTA local bus service. The data that form the basis of the estimates will be collected through onboard ridechecks. The MBTA will be submitting its SFY 2012 National Transit Database (NTD) estimates of passenger boardings and passenger-miles to FTA with the aid of CTPS. The final reports, however, will not be completed until FFY 2013.

**FFY 2013 Activities and Expected Products:** Staff will prepare a technical memorandum for the MBTA summarizing estimates of passenger-miles and boardings on purchased transportation services for SFY 2012 NTD reporting.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT			PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MBTA

**ID #:** TBD

**BUDGET:**

**STATUS:** 12%

The objective of this project is to develop estimates of passenger boardings and passenger-miles for directly operated bus, trackless trolley, heavy rail, and light rail services. The data that form the basis of the estimates will be collected through onboard ridechecks, station turnstile observations, and passenger surveys. The MBTA will be submitting its SFY 2013 National Transit Database estimates of passenger boardings and passenger-miles for various transit modes to FTA with the aid of CTPS. The final reports, however, will not be completed until FFY 2014.

**FFY 2013 Activities and Expected Work Products:** FFY 2013 data collection will be completed. Ridechecks will be conducted for the bus and trackless trolley portions of the SFY 2013 National Transit Database reporting. For heavy and light rail, origin-and-destination surveys will be conducted, and fare-mix data will be obtained.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MBTA

**ID #:** TBD

**BUDGET:**

**STATUS:** 2%

The objective of this project is to develop estimates of passenger boardings and passenger-miles for bus routes operated as part of the MBTA’s Suburban Transportation program and other contracted MBTA local bus service. The data that form the basis of the estimates will be collected through onboard ridechecks. The MBTA will be submitting its SFY 2013 National Transit Database (NTD) estimates of passenger boardings and passenger-miles to FTA with the aid of CTPS. The final reports, however, will not be completed until FFY 2014.

**FFY 2013 Activities and Expected Products:** FFY 2013 data collection will be completed. Ridecheck data for purchased bus services will be collected including boardings and alightings by stop, fare box readings, trip-level travel times, departure and arrival times, and intermediate-stop arrival times.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**MBTA BUS SERVICE DATA COLLECTION VIII**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MBTA

**ID #:** TBD

**BUDGET:**

**STATUS:** 0%

In order to assess bus service changes that are included in the biennial MBTA service plans, the MBTA requires ongoing data collection on its bus system. The data collected as part of this project also support future MBTA service plans, through which bus routes undergo comparative evaluations for cost-effectiveness, crowding, schedule adherence, and other indicators. Work may also include support for improving the ridecheck database so that it will be compatible with new software and data sources.

**FFY 2013 Activities and Expected Work Products:** Pointchecks on bus routes and other data collection, as requested by the MBTA for planning purposes. Improvements to the ridecheck database.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**MBTA NEIGHBORHOOD MAPS**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MBTA

**ID #:** 14328

**BUDGET:**

**STATUS:** 0%

Using the latest mapping software and data, CTPS will create a neighborhood map showing streets, street names, building footprints, points of interest, and MBTA bus routes for each MBTA station. Each map will have a “You Are Here” designation at the station location, as well as a quarter-mile-radius ring depicting the distance of a 5-to-10-minute walk from the station.

**FFY 2012 Activities and Expected Work Products:** Production of draft maps for MBTA review and the transmission of final computer files to the MBTA.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other





**STAFF:** Central Transportation Planning Staff

**CLIENT:** MBTA

**ID #:** 14303

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

The MBTA general manager established a Rider Oversight Committee (ROC) in 2004 to provide ongoing public input on a number of different issues, including strategies for increasing ridership, development of new fare structures, and prioritization of capital improvements.

**FFY 2013 Activities and Expected Work Products:** CTPS will continue to provide technical assistance to the MBTA Rider Oversight Committee and attend committee and subcommittee meetings.

**FHWA/FTA Grant Application Task and Element:** 44.21.02

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**MBTA TITLE VI PROGRAM MONITORING**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** MBTA

**ID #:** TBD

**BUDGET:**

**STATUS:** 0%

CTPS will provide the MBTA with technical assistance in collecting data on, and conducting assessments of, comparative level of service in targeted minority and low-income communities versus nonminority and non-low-income communities. Data on service indicators such as service coverage, station condition and cleanliness, the distribution of neighborhood maps, the operability of automated fare collection (AFC) fare gates and fare vending machines, the distribution of AFC retail sales terminal, the distribution of variable message signs, station elevator and escalator location and operability, vehicle age and condition, utilization of parking facilities; and the location of passenger security inspections will be gathered and used in the assessments. These activities will help to fulfill annual monitoring required as part of the MBTA’s ongoing Title VI program. The results of the analyses will be reported internally at the MBTA and may be folded into future triennial FTA reporting.

FTA released proposed revisions to the Title VI Circular in September 2011. Depending on the timing of the release of the finalized circular, work may need to be completed under this scope to respond to new requirements.

**FFY 2013 Activities and Expected Work Products:** CTPS will provide documentation of selected level-of-service evaluations for FFY 2013 MBTA revenue service and amenities, and will prepare a summary report for the MBTA.

**FHWA/FTA Grant Application Task and Element:** 44.21.04

**FFY 2013 Budget**

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**REGIONAL TRANSIT SERVICE PLANNING TECHNICAL SUPPORT**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 14327

**BUDGET:**

**STATUS:** 0%

The MPO has a policy of supporting transit services and taking steps to reduce single-occupant travel in the region. To support this policy, regional transit authorities (RTAs) in the region are provided with technical support to promote best practices and assistance in addressing issues of ridership, cost-effectiveness, route planning, and other service characteristics.

The MPO also extends support to TMAs and municipalities seeking to improve existing transit services they operate or fund.

**FFY 2013 Activities and Expected Work Products:** Staff will provide assistance to the RTAs, TMAs and municipalities in implementing as described above.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT	FFY13 Total Budget	PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**TRAVEL DATA FORECASTS**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 90080

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

In the vast majority of requests for additional transportation planning and traffic engineering analysis, the amount of effort is significant and a specific scope of work is developed for those projects. Occasionally requests, including various quick response analyses and data requests for MBTA and MassDOT, and their consultants, will come to CTPS that require only a modest effort for CTPS to complete. Accounting for those requests, which are expected to be less than two-person weeks per request, is done under this generic project description.

**FFY 2012 Activities and Expected Work Products:** Work products will depend on the tasks requested by the MPO agencies, the general public, and consultants.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other

**TRAVEL OPERATIONS ANALYSIS**



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** 90040

**BUDGET:** Not applicable to ongoing projects

**STATUS:** Ongoing

Through the performance of various planning studies for the MBTA, CTPS has accumulated a large amount of ridership, revenue, and service data. This project involves performing various short-term analyses using the available data, upon request.

**FFY 2013 Activities and Expected Work Products:** CTPS will respond to data requests from public agencies, municipalities, and members of the public.

**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2013 Budget**

FUNDING RECIPIENT(S)			FFY13 Total Budget	FUNDING SOURCE(S)						
CTPS	MAPC	MassDOT		PL	MPO \$5303	SPR	MassDOT	MassDOT \$5303	MBTA	Other



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## **8 OTHER BOSTON REGION TRANSPORTATION-PLANNING PROJECTS**

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This chapter will be completed after the MPO approves the FFY 2013 UPWP BUDGET. It will contain budget information by recipient agency and by funding sources for the projects listed in the previous chapters.





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## APPENDIX A

### OTHER BOSTON REGION TRANSPORTATION-PLANNING PROJECTS

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*Project descriptions in this appendix are being finalized and some text may change.*

This appendix consists of brief descriptions of planning studies that will be conducted in the Boston Region Metropolitan Planning Organization (MPO) area by individual agencies, such as MassDOT and the MBTA. MPO funding will not be used for these studies, although in certain instances an agency or one of its consultants may contract with MPO staff, the Central Transportation Planning Staff, (CTPS) to provide support work for the preparation of an environmental-impact report or a large-scale study. For these projects, CTPS support work is described in Chapters 4 through 7, with a cross-reference to the project listing in this appendix. Likewise, projects listed in this appendix indicate whether there is a CTPS component. An example of this is the Green Line Extension Environmental Review; CTPS support work is described in Chapter 6, and the Massachusetts Department of Transportation (MassDOT) project itself is presented in this appendix. The projects in this appendix are not subject to the MPO's public participation process. Rather, they follow their own public processes with established citizen advisory committees, as required by the Massachusetts Environmental Policy Act (MEPA). They are included here to provide a more complete picture of all the surface-transportation planning projects occurring in the region.

#### **Casey Overpass Bridge Project**

**Agency: MassDOT**

The Monsignor William J. Casey Overpass is the elevated section of Route 203 connecting the Arboretum at The Arborway, over Washington and South Streets and the Southwest Corridor, to Shea Circle at Franklin Park and the Forest Hills Cemetery in the Jamaica Plain neighborhood in the City of Boston. The overpass is located directly adjacent to the Forest Hills MBTA station. It currently carries less traffic than in recent years, with approximately 24,000 vehicles per day.

The overpass is structurally deficient and suffers from numerous superstructure and substructure problems due to deterioration over time and flaws in the original design. The structure has reached the point where it can no longer be maintained, and, as part of the Accelerated Bridge Program, funding is now available to take a fresh look at the connections and to reexamine the opportunities for an improved transportation network to provide better access in and around this area. The study will work to identify safe, accessible, multimodal landscape, streetscape, and transportation options to accommodate all modes of transportation.

#### **Charles River Basin Bridge Projects**

**Agency: MassDOT**

As part of the Accelerated Bridge Program, over \$400 million in funding has been allocated to improving the conditions of structurally deficient bridges in the Lower Basin area of the Charles River. Created 90 years ago from tidal marshes and mud flats, the Charles River Basin operates as a complex transportation and linkage system. This area serves as a host to many historic and natural resources, including parks, shared-use pathways, public boat landings, boat houses,

recreational facilities, and leading higher-educational institutions. Bridge rehabilitation projects currently under construction or in design include the Craigie Dam Bridge and Craigie Drawbridge, Longfellow Bridge, Boston University Bridge, Western Avenue Bridge, River Street Bridge, Anderson Memorial Bridge, and Magazine Street Pedestrian Bridge.

The historic Charles River Basin bridges provide critical connections in and out of Boston for a wide range of users, including businesses, universities, hospitals, bicyclists, pedestrians, and drivers. The bridges are important evacuation routes and serve countless recreational users along the Charles River.

### **City of Everett Community Visioning Process**

**Agency: MAPC**

The City of Everett’s Office of Community Development will work with local community organizations, Everett citizens, and the Metropolitan Area Planning Council (MAPC) to create an inclusive and comprehensive “Community Vision” vision for Everett’s future planning and development. With guidance from a steering committee, the visioning process will include the design and organization of community gatherings and the drafting of a community vision and goals for Everett. This project will use innovative public engagement techniques to go beyond vision to specific goals for housing, transportation, economic development, and public services in Everett, laying the groundwork for sustainable and equitable master planning in an underserved environmental justice community. It provides a good opportunity to conduct inclusive engagement and examine issues of displacement within a traditional master planning context. The City has pursued planning and zoning projects in the past, but this visioning and planning activity will feature substantially more extensive community engagement than have been previously employed.

### **Developing the Orange Line Opportunity Corridor**

**Agency: MAPC**

Significant new opportunities exist to dramatically improve the Orange Line corridor in ways that will strengthen local neighborhoods, provide significant opportunity to area residents, enhance regional equity and economic growth, and dramatically increase transit ridership in several communities. Currently, there are several active Transit Oriented Development (TOD) planning efforts along nearly a dozen stops along the line; their potential development could increase access to opportunities for several communities and hundreds of thousands of residents in the region.

The Massachusetts Association of Community Development Corporations (MACDC) and its members will work with MAPC and other partners to explore the potential for promoting the MBTA’s Orange Line as an Opportunity Corridor by advancing a long-term agenda for a diverse mix of commercial, residential, institutional and recreational opportunities along the transit line from Jamaica Plain to Malden. MAPC will support key activities to create a corridor-wide picture of current and potential development plans from Forest Hills to Oak Grove, with applications for both MACDC strategic planning, transit advocacy, and collaboration with key stakeholders around the opportunities of a comprehensive Orange Line agenda.

### **Downtown Framingham Traffic Impact Analysis**

**Agency: MassDOT**

The Towns of Framingham and Ashland are concurrently developing projects to improve access across the CSX Boston Line/MBTA Worcester Line through their respective communities. Many major roads used for north–south travel in each community cross the railroad at grade and are significantly disrupted by the frequent crossings of CSX freight, MBTA commuter rail, and Amtrak trains along the railroad corridor. These disruptions have a negative effect on each community’s quality of life, public safety, and economic development.

MassDOT’s Highway Division and Office of Transportation Planning are conducting a study of the area as part of an Environmental Notification Form (ENF). The purpose of the study is to evaluate the impacts that several proposed modifications to the rail crossing intersections would have on traffic congestion and travel patterns in the downtown Framingham area.

### **Fairmount Line Sustainable Development Partnership**

**Agency: MassDOT/MBTA**

The MBTA and MassDOT are engaged in a joint effort involving neighborhood community groups, the City of Boston, the U.S. Environmental Protection Agency, and the U.S. Department of Housing and Urban Development to coordinate planning and programming within the Fairmount Corridor.

### **Fenway-Longwood-Kenmore Transportation Action Plan**

**Agency: City of Boston**

This study involves identifying land use, transportation, and urban design goals for the East and West Fenway. The West Fenway Plan includes two major components: a transportation plan, and land use and urban design guidelines for two special study areas (Brookline Avenue/Lansdowne Street and Boylston Street). The East Fenway Plan addresses five categories: land use, institutions, housing and economics, transportation, and urban design.

### **Green Line Extension Environmental Review**

**Agency: MassDOT/MBTA**

An extension of Green Line service from a relocated Lechmere Station through Cambridge to Somerville and Medford is a legal commitment under the amended State Implementation Plan. This effort involves the development of state and federal environmental review documents. For more information about this project, go to [www.mass.gov/greenlineextension](http://www.mass.gov/greenlineextension).

*See Chapter 6 for related work being conducted by CTPS.*

### **Green Line Positive Train Control Study**

**Agency: MBTA**

The Green Line Positive Train Control Study will provide the initial groundwork needed to determine which of the various forms of Positive Train Control (PTC), including vehicle-based collision avoidance systems, would be most appropriate for the MBTA’s Green Line light rail network. The purpose of this project is to identify the proper technology(ies) that will reduce or eliminate the types of collisions that the Green Line has experienced, while working within the MBTA’s current operating parameters. It is anticipated that this analysis will provide information which will increase the safety of the MBTA Green Line. This project will be funded

with \$1 million in Federal Transit Administration Section 5307 funds and an additional \$250,000 in matching funds from the MBTA.

### **Grounding McGrath – Determining the Future of Route 28**

**Agency: MassDOT**

MassDOT is conducting a transportation study of the Route 28 corridor in the cities of Somerville and Cambridge. The purpose of the study is to evaluate the current usage of the McGrath/O’Brien Highway in a manner that goes beyond the analysis from the Central Transportation Planning Staff’s *Toward a Route 28 Corridor Transportation Plan: An Emerging Vision* and looks at traffic from a post-Central Artery Project perspective.

This effort offers MassDOT and the general public the opportunity to consider the future use and impacts of potential removal of elevated portions of the roadway within the city of Somerville and to enhance access for all modes of travel. The Grounding McGrath Study will seek to not only balance the needs of all transportation users, but to facilitate connections along the corridor and encourage development that will have a positive impact on the neighborhoods and the region as a whole.

### **I-495/Route 9 Interchange Study**

**Agency: MassDOT**

MassDOT is conducting a study to analyze existing and future safety and capacity deficiencies at the interchange of I-495 and Route 9. Because the I-495/I-90 interchange falls within the physical limits of the primary interchange, its safety and capacity deficiencies will also be analyzed as part of this study. These interchanges and the connecting segment of I-495 act as one network, with congestion at one interchange impacting the other.

### **Inland Route High-Speed Rail Corridor Feasibility Study**

**Agency: MassDOT**

This study of the Inland Route High-Speed Rail Corridor will examine more frequent and higher speed intercity passenger rail service on the 160.2-mile corridor between Boston, MA, and New Haven, CT, via Springfield, MA, along with the corresponding ridership potential and necessary infrastructure improvements necessary to develop a Tier 1 Draft Environmental Impact Statement (DEIS) and companion Service Development Plan. This study will be coordinated with the effort to upgrade the Springfield-New Haven line, which is being led by the State of Connecticut, using analysis and design previously developed for that segment of the corridor, to the extent possible. Improvements to the Inland Route will facilitate initiation of passenger train service along a second route between Boston and New York at speeds comparable to the existing Amtrak regional trains that travel along the Northeast Corridor. This study will be integrated into the companion effort led by the State of Vermont to study intercity passenger rail service between Boston and Montreal via the Inland Route.

### **Intelligent Transportation Systems: Development and Implementation**

**Agency: MassDOT**

MassDOT is engaged in planning, developing, and implementing intelligent transportation systems (ITS) to more effectively operate the transportation system in Massachusetts. MassDOT’s Office of Transportation Planning conducts ITS planning described in the State Planning and Research Program – Part I. Current planning activities include implementing a

statewide ITS planning program; developing a statewide ITS strategic plan; maintaining and updating the regional ITS architectures for metropolitan Boston and other regions within the state; increasing awareness of ITS within the transportation community and among related stakeholders; planning activities in support of the use of ITS as a tool to improve system performance and function; and providing assistance in planning for the use of ITS for all modes.

MassDOT's Highway Division established the ITS Programs Unit within the Statewide Operations Division to design, develop, implement, and maintain ITS systems on our state highway system. The ITS Programs Unit works with consultants and contractors on these rapidly evolving technologies. Current activities in the Boston region include operation of the Statewide Traffic Operations Center in South Boston, operation of the high-occupancy-vehicle (HOV) lanes on I-93 into Boston from the north and south, expansion of the transportation communications system, operation of the Massachusetts Interagency Video Information System (MIVIS) and advanced traveler-information system, and development of an Advanced Transportation Management System.

### **Massachusetts Turnpike – Boston Ramps Study**

**Agency: MassDOT**

The goal of this study is to investigate the potential for new or revised access between the Massachusetts Turnpike Extension (I-90) and the regional express highway network in the city of Boston along the segment between Commonwealth Avenue in Allston and Interstate 93 in Chinatown. These new connections would help address the traffic congestion caused by the economic growth in the Back Bay, Longwood Medical Area (LMA), Fenway, and Seaport District neighborhoods in the city of Boston.

### **Massachusetts Turnpike Corridor Plan (Boston Extension)**

**Agency: MassDOT**

MassDOT's Office of Transportation Planning is leading an effort to conduct a thorough review of the Massachusetts Turnpike Boston Extension corridor. The review will include an examination of current and proposed transportation and land use projects, the status of existing bridge infrastructure conditions (state of good repair), and a review of any planning studies covering the corridor. In addition to Turnpike infrastructure, the review will also include a summary of proposed tolling technologies, passenger and freight rail interrelationships with the Turnpike corridor, other significant transportation projects crossing the corridor, and the status of non-Turnpike key bridges directly impacting the corridor.

### **Region One University Transportation Center: Universities Research Program**

**Colleges and Universities**

Research programs involving educational institutions such as Harvard University, the Massachusetts Institute of Technology, and the University of Massachusetts are conducted at the Region One University Transportation Center. For further information on specific projects, contact Paula Magliozzi at (617) 253-0753.

### **South Coast Rail Project**

**Agency: MassDOT/MAPC/MBTA**

MassDOT and the MBTA are developing state and federally required environmental review documents and a smart-growth corridor plan for the South Coast Rail project, which would restore passenger rail service between the cities of Fall River and New Bedford and downtown Boston. The project includes the construction of passenger stations and terminal layover facilities. MAPC is assisting MassDOT and the MBTA with land use planning for this project. In addition, MassDOT is working in coordination with the Southeastern Regional Planning Development District and with the South Coast Rail Corridor in the development of this project. Visit [www.mass.gov/southcoastrail](http://www.mass.gov/southcoastrail) for more information on this study.

*See Chapter 6 for related work being conducted by CTPS.*

### **South Station Expansion Project**

**Agency: MassDOT**

The 13 tracks currently available at Boston's South Station significantly constrain current and future rail mobility not only within Massachusetts but throughout New England and the Amtrak Northeast Corridor. South Station operates above its design capacity for efficient train operations and orderly passenger queuing and lacks comfortable, modern facilities for passenger queuing, leaving riders standing in the elements as they wait to board their trains.

This project will complete all necessary alternatives analysis, environmental review and preliminary engineering (approximately 30% design) required for the expansion of South Station and the development of a new mid-day commuter rail layover facility. The project will plan and design an enhanced passenger environment at South Station through improved streetscape and pedestrian, bicycle, local transit, and vehicular facilities in and around South Station, including the re-opening of Dorchester Avenue for public use. The project will consider opportunities for joint public/private development over an expanded South Station and also include a plan for the relocation of the existing U.S. Postal Service General Mail Facility which must be moved to accommodate the station's expansion.

### **Tri-Town Interchange Environmental Analysis**

**Agencies: MassDOT and EOHD**

MassDOT and the Executive Office of Housing and Economic Development (EOEHD) are working toward the completion of a draft environmental impact statement for a project that will construct a new highway interchange on I-93 in the towns of Andover, Tewksbury, and Wilmington. The proposed location for the new interchange is between the I-93/Route 125 interchange in Wilmington and the I-93/Dascomb Road interchange in Andover in an area referred to as the Lowell Junction. The purpose of the project is to relieve traffic congestion on I-93 and adjacent local roadways and to improve access to industrial and commercial developments, as well as undeveloped land suitable for industrial and commercial development. Visit [www.massdot.state.ma.us/tritown](http://www.massdot.state.ma.us/tritown) for more information on this study.

### **Urban Streetscape and Adaptive Reuse Plan for the Inner Belt & Brickbottom Districts**

**Agency: City of Somerville**

The City of Somerville is conducting a study of the Inner Belt & Brickbottom Districts located in the southeast section of the City. The purpose of this Urban Streetscape & Adaptive Reuse Plan

is to identify a collective vision for the area through the civic engagement process, and to develop an economic development phasing plan that includes catalyst reuse projects and incorporates an analysis of market trends and economic feasibility. In addition, a financing plan will be proposed that calculates the costs of and details the financing options for the recommended improvements and catalyst reuse projects. The end product will be a plan for future development including but not limited to land use, streetscape, roadway networks, and multimodal transportation options.





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**APPENDIX B**  
**PUBLIC PARTICIPATION**

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This appendix will include a summary of written comments received on the draft FFY 2013 UPWP and the MPO's responses. It will be completed following the adoption of the final FFY 2013 UPWP.



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**APPENDIX C**  
**FFY 2013 UPWP PROJECT UNIVERSE EVALUATION**

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The following table shows the long-range transportation categories considered during the project-selection process for this UPWP and identifies which of the MPO's LRTPS topics and themes are advanced by each project in the UPWP project universe.

**CTPS - FFY 2013 UPWP Universe of Proposed New Projects**

**SYSTEM PRESERVATION, MODERNIZATION, AND EFFICIENCY**

Project Name	Total Cost	FFY 2013 UPWP Budget	Project Description	FFY 2013 UPWP Staff Evaluation	Link Land Use and Transportation.	Work w Limited Financial Resources	Use a Mngmt & Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the System	Increase Transit and Healthy Transportation Mode Share	Encourage Sustainable Communities	Consider Transportation Equity	Address Documented Need (from CMP, RTP, PMT, YOUNG, METROFUTURE)	Enhance Technical Capacity	Comments
Addressing Non-recurring Congestion in the Region: A Status Report	\$30,000	\$0	<p>Up to sixty percent of all congestion is caused by non-recurring events such as traffic incidents, special events, weather, and bad signal timing. The Boston Region MPO has a very good record in performing planning studies on identifying safety and operational recurring congestion and deficiencies at roadway segments and intersections and recommending short and long term improvements for the efficient and safe processing of all modes, including looking at the performance of signals. However, freeway incidents frequently affecting travel in the region and their management for safety and congestion fall wholly in the responsibilities of MassDOT, the police, and other first responders.</p> <p>Through this study, staff sees an opportunity to inform and educate members of the MPO about how incidents affect travel in the region, what is the location, severity, type, and frequency of occurrence, what resources are expended in the program and what resources the program may be lacking for an improved incident management. Being informed about congestion-causing events in the region has the potential of influencing the selection of projects for funding, including funding for ITS and operational strategies instead of, or in addition, to traditional pavement management capital projects.</p>	High		✓	✓	✓	✓				✓	✓	
Pavement Management System Development ✓	\$375,000	\$0	<p>Federal guidance for the development of the FFY 2010 UPWP advised that Massachusetts MPOs undertake a study to establish the cost of maintaining municipally controlled arterials and urban collectors and to give priority to their maintenance. The guidance further stated that the results of the study be used to inform decision making in the development of the 2030 LRTP.</p> <p>The MPO programmed funding for this work in the FFY 2011 and FFY 2012 UPWPs. The results of the FFY 2012 UPWP Pavement Management System project will be discussed by the MPO meeting on April 5 to determine if further work should be included in the FFY 2013 UPWP.</p>	To be determined		✓			✓				✓		
✓ Recent Addition					✓ Major Consideration		✓ Minor Consideration								

**CTPS - FFY 2013 UPWP Universe of Proposed New Projects**

**SYSTEM PRESERVATION, MODERNIZATION, AND EFFICIENCY**

Project Name	Total Cost	FFY 2013 UPWP Budget	Project Description	FFY 2013 UPWP Staff Evaluation	Link Land Use and Transportation.	Work w Limited Financial Resources	Use a Mngmt & Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the System	Increase Transit and Healthy Transportation Mode Share	Encourage Sustainable Communities	Consider Transportation Equity	Address Documented Need (from CMP, RTP, PMT, YOUMOVE, METROFUTURE)	Enhance Technical Capacity	Comments
<b>TIP Project Impacts Before-After Evaluation</b> ✓	\$30,000	\$0	<p>This program is the continuation of a pilot study begun in FFY 2012. Its purpose is to identify the effectiveness of TIP projects. Measuring project effectiveness is important in order to know whether the employed strategies work well and are therefore suitable for application in similar situations.</p> <p>To this end, staff will select TIP projects that are programmed for construction during the spring of 2013. It is likely that only traffic management and operations projects will be selected, as the construction period of projects in this category is shorter than for other projects, such as the construction of freeway interchanges. The “before” data will be collected in the early spring of 2013, before a selected project begins. The “after” data will be collected upon project completion, which may be later than 2013.</p> <p>The type of “before” and “after” data that staff will collect depends on the nature of the project. For traffic management and operations it is likely that traffic flow, speed, delay, and safety information will be collected. If budget allows, the level-of-service and air quality information will also be calculated for the “before” and “after” conditions. Staff will compare the two sets of data and draw conclusions.</p>	Medium		✓							✓		Before/after evaluations are included in SAFETEA-LU regulations and were recommended by FHWA and FTA in their comments to the MPO following last year's certification process.
<b>School Bus Transportation: Issues and Opportunities</b>	\$40,000	\$0	<p>This study of school bus transportation would inventory towns to explore school bus transportation practices, likely inefficiencies, trends in ridership and likely explanations, costs, alternative forms of transporting students, including drop-offs, drive along, car-pool, walking, biking.</p> <p>It was the observation of MAGIC Subregion members, school buses are underutilized for a number of reasons, but still required to provide service to a diminished number of students contributing to roadway congestion. At the same time, students who do not ride school buses drive to school themselves or are driven to school thus also contributing to morning hour congestion even more. The MAGIC Subregion is interested in exploring several areas of school bus transportation and how it may relate to congestion at town intersections, especially during the morning commuting hours.</p> <p>The results of the study will be shared with administrators and school officials for their consideration in planning school transportation options, and municipal planners for transportation delays and resource planning.</p>	Low	✓	✓	✓	✓	✓	✓			✓		
✓ Addition correcting error in listing this project as ongoing in the March 15 UPWP Committee draft document.					✓ Major Consideration	✓ Minor Consideration									

**CTPS - FFY 2013 UPWP Universe of Proposed New Projects**

MOBILITY															
Project Name	Total Cost	FFY 2013 UPWP Budget	Project Description	FFY 2013 UPWP Staff Evaluation	Link Land Use and Transportation.	Work w Limited Financial Resources	Use a Mngmt & Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the System	Increase Transit and Healthy Transportation Mode Share	Encourage Sustainable Communities	Consider Transportation Equity	Address Documented Need (from CMP, RTP, PMT, YOUMOVE, METROFUTURE)	Enhance Technical Capacity	Comments
Household Survey-based Travel Profiles and Trends	\$66,700	\$66,700	In 2011, the Massachusetts Travel Survey obtained travel information from 15,017 Massachusetts households, 10,399 of which were in the CTPS model region. Every household member prepared a diary for a specified day, and reported all trips, mode of travel, and the type of activity at each visited location from the beginning of the day to the end. A similar survey using a smaller sample (3,743 households) was undertaken in 1991 for the CTPS model region only. The 1991 survey was used for model development and later topical investigations.  The proposed study would have two primary purposes. First, it would analyze the 2011 survey in order to create a statistical household and travel profile of the CTPS model region. Second it would develop a set of comparisons between 1991 and 2011 with respect to trip making patterns and household characteristics such as household size, income, and auto ownership. Of particular interest is measuring any trends in the average length of trip by trip purpose, travel mode, and time of day travel distributions, auto occupancy, and travel speeds. Measuring these trends may have important implications for calibration and validation of the current CTPS model set.	High									✓	✓	
Priority Corridors for LRTP Needs Assessment ✓	\$105,000	\$105,000	Corridor analysis is a logical way to approach transportation studies in the region. Possible corridors of critical and strategic concern might best be viewed in a programmatic way. An arterial management roadway improvement effort would recommend conceptual improvements for corridors that the Congestion Management Process (CMP) and the Long-Range Transportation Plan (LRTP) identified as part of the needs assessment process. A particular corridor or several sections from multiple corridors could be selected. Candidate locations would include: <ul style="list-style-type: none"> <li>• Route 9 in Framingham, Natick, and Southborough (West Corridor)</li> <li>• Route 30 in Framingham, (West Corridor)</li> <li>• Mystic Valley Parkway in Medford (North Corridor/Central Area)</li> <li>• Route 203 in Boston (Southwest Corridor/Central Area)</li> <li>• Route 145 in Boston and Winthrop (Northeast Corridor/Central Area)</li> <li>• Route 37 in Braintree (Southeast Corridor)</li> <li>• Route 16 in Newton and Wellesley (West Corridor)</li> <li>• Route 3A in Quincy and Weymouth (Southeast Corridor)</li> <li>• Route 16 in Chelsea and Revere (Northeast Corridor/Central Area)</li> <li>• Route 140 in Wrentham ((Southwest Corridor)</li> <li>• Route 138 in Stoughton (Southwest Corridor)</li> <li>• Route 1 in Norwood (Southwest Corridor)</li> <li>• Route 3/3A in Burlington and Woburn (North Corridor)</li> <li>• Route 60 in Arlington (Northwest Corridor)</li> <li>• Route 140 in Franklin (Southwest Corridor)</li> </ul> Note: Corridors are listed roughly in priority order according to traffic flow.	High	✓	✓	✓	✓				✓			
✓ Correction replacing previous listing of Safety and Operations Analysis at Selected Intersections					✓ Major Consideration	✓ Minor Consideration									

CTPS - FFY 2013 UPWP Universe of Proposed New Projects

MOBILITY (CONT.)															
Project Name	Total Cost	FFY 2013 UPWP Budget	Project Description	FFY 2013 UPWP Staff Evaluation	Link Land Use and Transportation.	Work w Limited Financial Resources	Use a Mngmt & Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the System	Increase Transit and Healthy Transportation Mode Share	Encourage Sustainable Communities	Consider Transportation Equity	Address Documented Need (from CMP, RTP, PMT, YOUMOVE, METROFUTURE)	Enhance Technical Capacity	Comments
CharlieCard Trip Paths Study Phase II	\$55,000	\$0	The MBTA Charlie Card Trip Paths Pilot Study conducted by CTPS in 2011 created a set of computer programs to generate station-to-station trip tables for the MBTA rail rapid transit system. These used as input daily station entry reports from the MBTA's automated fare collection (AFC) system. For planning purposes, it would be very useful to be able to calculate travel volumes over individual links in the system at hourly or even finer levels. The results of the Pilot Study indicated that it would be feasible to adapt the trip-table programs to generate such line-volume tables. The trip tables generated by the 2011 programs do not separate passengers by mode of access to or egress from the rapid transit system. However, with additional programming it would be feasible to produce tables for subgroups such as station-to-station travel by passengers transferring to or from MBTA buses, commuter rail trains, or commuter boats. This second phase of the study would create the additional programming needed to generate tables of line volumes and transfers.	Medium		✓	✓	✓		✓			✓	✓	\$1350 per location
Regional HOV Systems Planning Phase II	\$60,000	\$60,000	<p>Provision of HOV facilities can be helpful in making more efficient use of our existing express highways by providing a superior level of service for multiple occupancy vehicles and encouraging the use of public transportation. Potential types of facilities may include queue bypasses, contraflow lanes on existing pavement, and separate new HOV lanes.</p> <p><b>Phase I of HOV systems planning</b>, rules of thumb are being developed to illustrate where in our express highway system HOV facilities might be considered, and where they could yield the highest benefits relative to construction feasibility. <b>Phase 2 of HOV systems planning</b> will concentrate on the I-93 corridor north of Boston, which will be identified as having a high priority for potential HOV systems implementation, as well as having major relevance to on-going projects.</p> <p>In this corridor, a number of projects are in the planning and/or implementation stage where the designs would be impacted by the expectation of potential future HOV facilities. These include planned improvements to the I-93/I-95 interchange in Woburn/Reading/Stoneham, the expected construction of a new Tri-Town interchange in Andover/Tewksbury/Wilmington, rebuilding of the Route 110/Route 113 interchange in Methuen, and the widening of I-93 from six lanes to eight from Route 125 in Wilmington to the New Hampshire state line. This study would be the second part of a phased program considering the potential for new HOV facilities in the Boston region.</p>	High		✓	✓	✓		✓			✓		
					✓ Major Consideration				✓ Minor Consideration						

**CTPS - FFY 2013 UPWP Universe of Proposed New Projects**

MOBILITY (CONT.)															
Project Name	Total Cost	FFY 2013 UPWP Budget	Project Description	FFY 2013 UPWP Staff Evaluation	Link Land Use and Transportation.	Work w Limited Financial Resources	Use a Mngmt & Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the System	Increase Transit and Healthy Transportation Mode Share	Encourage Sustainable Communities	Consider Transportation Equity	Address Documented Need (from CMP, RTP, PMT, YOUNG, METROFUTURE)	Enhance Technical Capacity	Comments
Express Highway Vehicle Occupancy and Classification Counts	\$80,000	\$0	Understanding the composition of traffic on regional roadways is important for modeling, planning, and policy purposes. Unfortunately, these are among the most difficult data to obtain. Occupancy measurement is impossible by technical methods, and requires direct observation. Vehicle type also requires direct observation for all but an extremely limited set of instances. Hazardous cargoes require direct observation, and are looming larger as a public policy and modeling issue.  The proposed study will begin the process of building a broad, regional sample of occupancies and vehicle classifications at various express highway locations in the CTPS model region. Occupancy and classification data will correspond with CTPS trip table assignment categories, and data will be obtained in both peak and off-peak directions, as well as during the midday. Preliminary work indicates significant variations in traffic composition by location, direction, and time period. These counts may also help to validate other classification methods used in Massachusetts.	High									✓	✓	
MetroWest RTA Planning Assistance	\$30,000	\$30,000	An evaluation of existing transit services will identify improvements to present routes and schedules and new services to meet untapped area demand and to relieve traffic congestion. CTPS will provide support to the MetroWest Regional Transit Authority (MWRTA) in evaluating best routes and to modify in making the system more efficient and economical. MWRTA is entering its fifth year of service and would benefit from an evaluation of route efficiencies and demands.	High	✓	✓				✓				✓	
SWAP Regional Public Transit Feasibility Study	\$40,000	\$40,000	A regional approach to transit that takes into account trips within the region, to other regional transit systems, and to Boston, is the best approach in dealing with congestion, deteriorating roads and limited accessibility/mobility for all residents. Components of the proposed study would include: an inventory of existing public transit services within SWAP and adjacent areas; a needs assessment based on existing travel patterns and projected population; and recommendations that focus on regionalizing transit services, connections among existing systems and providing new public transit initiatives that could be implemented over time.	High	✓	✓				✓				✓	
					✓ Major Consideration					✓ Minor Consideration					



CTPS - FFY 2013 UPWP Universe of Proposed New Projects

MOBILITY (CONT.)

Project Name	Total Cost	FFY 2013 UPWP Budget	Project Description	FFY 2013 UPWP Staff Evaluation	Link Land Use and Transportation.	Work w Limited Financial Resources	Use a Mngmt & Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the System	Increase Transit and Healthy Transportation Mode Share	Encourage Sustainable Communities	Consider Transportation Equity	Address Documented Need (from CMP, RTP, PMT, YOUMOVE, METROFUTURE)	Enhance Technical Capacity	Comments
<p>Travel Demand Management: Status and Activity in Boston MPO Region</p>	<p>\$20,000</p>	<p>\$0</p>	<p>The study will inventory the activities and services of Boston metropolitan area TMAs (Transportation Management Associations) and other providers that promote and provide alternative commuting options to area citizens. TMAs are nonprofit organizations with membership from local businesses, municipalities, and chambers of commerce. Depending on the size and location of the TMA, membership benefits may include carpool and vanpooling matches, promoting transit pass programs, managing and operating shuttle bus services, and operating guaranteed ride home programs. In addition to TMAs, MassDOT funds and manages MassRides, consulting staff that operate car pool and vanpool programs in the region, in addition to providing statewide many of the programs TMAs also provide. The services mentioned earlier are the most well-known initiatives taken by TMAs but recently the FHWA expanded the notion of TDM to include any type of management or roadway travel demand modification strategy, including the construction and operation of HOV lanes.</p> <p>Though the Boston region MPO does not manage and operate directly services for commuting alternatives, it has a history of supporting, studying, and funding travel demand management options. Staff will record where the region stands with travel demand management services, including researching transportation demand software that estimate benefits of travel demand management programs such as carpooling, telecommuting and transit use.</p> <p>Travel demand management strategies are recommended to be the first step of congestion reduction strategies in the Congestion Management Process (CMP). In future work programs, sections of the MPO region can be analyzed to see what strategies benefit what areas the best. Strategies would have to be analyzed on a sub-regional or regional basis.</p>	<p>Low</p>		<p>✓</p>	<p>✓</p>	<p>✓</p>		<p>✓</p>			<p>✓</p>	<p>✓</p>	
					<p>✓</p>	<p>Major Consideration</p>		<p>✓</p>	<p>Minor Consideration</p>						

**CTPS - FFY 2013 UPWP Universe of Proposed New Projects**

LIVABILITY															
Project Name	Total Cost	FFY 2013 UPWP Budget	Project Description	FFY 2013 UPWP Staff Evaluation	Link Land Use and Transportation.	Work w Limited Financial Resources	Use a Mngmt & Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the System	Increase Transit and Healthy Transportation Mode Share	Encourage Sustainable Communities	Consider Transportation Equity	Address Documented Need (from CMP, RTP, PMT, YOUNG, METROFUTURE)	Enhance Technical Capacity	Comments
Effects of Bicycle Facilities on MBTA Access	\$30,000	\$0	While some MBTA stations are well connected to a network of bicycle lanes, trails, and paths (bicycle facilities), others are relatively isolated to bicyclists. There is also significant variation in the number and quality of amenities at T stations. Other bicycle-related projects in the 2012 UPWP provide a solid foundation for this project by identifying access-starved and dangerous stations, but they stop short of determining what benefit filling these gaps might have on the usage of recommended facilities. Using existing data from the CMP's bicycle inventory, GIS, the MBTA systemwide survey, trail counts, and previous project products, this project would determine what impact improving bicycle access (and by extension, safety) and the amenities at T stations does to increase the number of people who ride their bicycles to T stations. Using a regression analysis, the impact of different types of bicycle facilities and amenities could be estimated. The theoretical number of additional people who would bicycle (or some other benchmark derived from the study) could be added into TIP project criteria.	Medium	✓	✓		✓		✓	✓		✓		
Bicyclist Safety Improvements at Selected Intersections	\$40,000	\$0	Bicyclist crash data has been collected since 1995, and contains detailed information about crash type, severity, location, weather condition, and date and time. This study would utilize these crash reports to identify key conflict points and intersections throughout the region that have a disproportionately high number of bicyclist fatalities and injuries. Common safety challenges would be identified for each community context, and be used to inform potential low-cost safety improvements. Common challenges could include inadequate bicycle facilities, high traffic speeds, and right of way constraints. Potential improvements might involve incorporating a buffer between automobile traffic and bicyclists, improving bicycle and pedestrian accommodations on the approach to the intersection, or continuing bicycle facilities through intersections.	High	✓	✓		✓		✓	✓		✓		This work can be done under the Congestion Management Program, which is already included in the draft UPWP as an ongoing project.
					✓ Major Consideration					✓ Minor Consideration					

**CTPS - FFY 2013 UPWP Universe of Proposed New Projects**

**LIVABILITY (CONT.)**

Project Name	Total Cost	FFY 2013 UPWP Budget	Project Description	FFY 2013 UPWP Staff Evaluation	Link Land Use and Transportation.	Work w Limited Financial Resources	Use a Mngmt & Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the System	Increase Transit and Healthy Transportation Mode Share	Encourage Sustainable Communities	Consider Transportation Equity	Address Documented Need (from CMP, RTP, PMT, YOUNG, METROFUTURE)	Enhance Technical Capacity	Comments
Economic Benefit Assessment of Transportation Investments	\$60,000	\$0	<p>Transportation and economic development are closely linked. The transportation system provides access to supplies, goods, and services and allows for their circulation. Transportation investments improve access to jobs and commercial centers. Investments in transportation can produce short-term construction jobs, new long-term jobs, and expand the size of the labor market. This study would explore how the MPO can quantify the economic benefits of projects under consideration for programming in the Transportation Improvement Program (TIP) and Long-Range Transportation Plan (LRTP). As a broad scale scenario planning review of the collective projects in the LRTP, the study would consider the relative differences, in economic terms, between making the transportation investments in the LRTP, opposed to a base-case scenario. It may do so by studying the relative economic benefits of projects currently programmed in the TIP and LRTP and applying the lessons learned in future project evaluations. This study will explore the use of the software program TREDIS (Transportation Economic Development Impact System) in conducting these evaluations. Among the many measures that could be used to evaluate economic benefits are total employment growth, transportation-related job growth, dollars invested in a brownfield area as a result of a transportation project, dollars invested in transit-oriented development as a result of a transportation project, and monetary value of time savings or improved accessibility resulting from a transportation project.</p>	High							✓		✓	✓	
					✓	Major Consideration		✓		Minor Consideration					

CTPS - FFY 2013 UPWP Universe of Proposed New Projects

LIVABILITY (CONT.)

Project Name	Total Cost	FFY 2013 UPWP Budget	Project Description	FFY 2013 UPWP Staff Evaluation	Link Land Use and Transportation.	Work w Limited Financial Resources	Use a Mngmt & Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the System	Increase Transit and Healthy Transportation Mode Share	Encourage Sustainable Communities	Consider Transportation Equity	Address Documented Need (from CMP, RTP, PMT, YOUNG, METROFUTURE)	Enhance Technical Capacity	Comments
<p>Comprehensive Route 3A Corridor Study</p> <p style="text-align: center;">✓</p>	\$50,000		<p>Recent intensification of land uses and large-scale, diverse development along the Route 3A Corridor in the South Shore Subregion requires a focused review of the overall influence of all of the projects in the area. The developments have been created in a rapid succession and on a case by case basis without an overall integrated strategy for dealing with the transformative effects of the combination of projects. The concern for public safety along Route 3A and the integration and access to transportation options would be the emphasis of this study. This would help to link the benefits of the new development to an overall vision for growth in the subregional corridor. The main goals of this corridor study will be to put forth an overall strategy to enhance public safety, find and develop transportation alternatives and help in the implementation of improvements along the corridor.</p> <p>The 3A Corridor Study would include the approximately 3-mile segment of Route 3A between the Cohasset Commuter Rail Station (in Cohasset) and the intersection of Route 3A with Henry Turner Bailey Road (in Scituate). The corridor study is proposed to have two main focuses which are improving traffic safety and increasing transportation choices, including bicycle, pedestrian and potential transit accommodations. The study will look at key intersections with Route 3A along the corridor, such as Sohier Street, Beechwood Street and Henry Turner Bailey Road, to determine opportunities for traffic operations and access management improvements that would improve safety and reduce congestion. The focus would be on low-cost, quick fix improvements that could be implemented quickly. Additionally, the corridor will be investigated for opportunities to increase travel options using a Complete Streets approach. These opportunities could include locations where 'last mile' sidewalk connections can be made, potential locations for on-road bicycle accommodations and shared use paths, and possible transit connections to the rail station and other destinations.</p> <p>Could be considered in the Addressing Safety, Mobilty and Access on Subregional Priority Arterial Roadways project listed on page 14.</p>	Medium	✓	✓		✓		✓	✓		✓		<p>Could be considered in the Addressing Safety, Mobilty and Access on Subregional Priority Arterial Roadways project listed on page 14.</p>
<p>✓ Revised project description and budget</p>					<p>✓ Major Consideration</p>		<p>✓ Minor Consideration</p>								

**CTPS - FFY 2013 UPWP Universe of Proposed New Projects**

LIVABILITY (CONT.)															
Project Name	Total Cost	FFY 2013 UPWP Budget	Project Description	FFY 2013 UPWP Staff Evaluation	Link Land Use and Transportation.	Work w Limited Financial Resources	Use a Mngmt & Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the System	Increase Transit and Healthy Transportation Mode Share	Encourage Sustainable Communities	Consider Transportation Equity	Address Documented Need (from CMP, RTP, PMT, YOUNG, METROFUTURE)	Enhance Technical Capacity	Comments
Transportation Access Studies of Commercial Business Districts	\$49,500	\$0	<p>Cities and towns have relatively little information on the characteristics of CBD patrons, and, as a result, the planning process for these areas is often governed by perceptions that may or may not be correct. Understanding the transportation access mode and spending and visiting characteristics of CBD patrons would help planners in their work with businesses to improve transportation access to CBDs. Other planning agencies have conducted similar surveys of business patrons about their transportation access mode (driving, public transit, bike, walk, taxi, other) and linked spending characteristics (amount spent per visit, number of visits per month, amount spent per month) with these transportation access modes. A transportation access study of a cross-section of Boston metropolitan area CBDs would evaluate how patrons access CBDs and how this access differs according to the type of CBD.</p> <p>The study would consist of several tasks. First, CTPS would conduct a literature review and summary of other transportation access studies and their conclusions. Second, CTPS would assemble a demographic and transportation profile of CBDs in the Boston metropolitan area, categorize the CBDs according to this profile, and choose a representative CBD from each category. Third, CTPS would work with the selected towns and any business associations to solicit business participation in the study. Businesses would first be asked to provide their perceptions on their customers' actual and preferred transportation access modes. Participating businesses would then be asked to encourage their customers to fill out a short, 4-question survey while they wait in line at the register. The questions would ask the transportation access mode, how much the patron is spending on this visit, how much the patron typically spends at this business per month, and how many times per month the patron typically visits this business. The pilot study would also consist of a parking-use study. This would include a license plate survey and a vehicle turnover count conducted every hour.</p> <p>Finally, CTPS would also conduct a CBD-user survey asking questions about demographics (age, income, vehicle availability, etc.) as well as users' stated preferences (i.e. what mode would users prefer for transportation access). The resulting summaries from this study could be used to inform planning processes that are debating transportation access. Subsequent studies by CTPS could use the model refined by the study to analyze transportation access in other areas.</p>	Low	✓	✓		✓		✓	✓		✓		
					✓ Major Consideration			✓ Minor Consideration							

CTPS - FFY 2013 UPWP Universe of Proposed New Projects

LIVABILITY (CONT.)

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<p>Route 1A/Boston-Providence Turnpike, Dedham: Transit Service Enhancements</p> <p style="color: red; text-align: center;">✓</p>	\$4,000	\$0	<p>The purpose of this study would be to explore transit connections from/to commercial and retail establishments near Boston-Providence Turnpike and Washington Street in the area of Dedham close to Route 128. The proponent of this study is the MAPC sub region Three Rivers Interlocal Council (TRIC). According to TRIC members, MBTA bus 34E passengers get off the bus at Washington Street and walk along Elm Street toward Boston-Providence Turnpike, a distance of less than ¼ mile, to reach Legacy Place.</p> <p>MBTA bus route 34 and its variation 34E serve locations along Washington Street. The route originates at Forest Hills Station and terminates at Dedham Mall located close to the West Roxbury/Dedham town line. Variation 34E continues on to Walpole Center. Bus 34E, which passes through the western side of the area of interest for a transit study, operates with 20 to 30 minute headways on weekdays; 30-minute headways on Saturdays; and 60-minute headways on Sundays. Depending on traffic conditions, total running time between Walpole Center and Forest Hills Station is 52 to 62 minutes, one-way.</p> <p>The best way to address the concern of TRIC members, would be to study the benefits and impacts of modifying the route alignment of bus 34E so that it deviates from Washington Street onto Elm Street toward Boston-Providence Turnpike, cross the Turnpike, and connect with the external circulation system of Legacy Place Mall and other retail and commercial establishments east of the Turnpike.</p> <p>In the past, MBTA Service Planning staff explored providing service to the Mall. Some issues had been identified, including, low interest from the Mall owners, lack of appropriate locations for bus stops, and concern over lengthening the present run time of the bus. Currently, MBTA Service Planning is exploring altering route 34E to deviate from Washington Street to a point closer to the Boston-Providence Turnpike (but not crossing it), including locating appropriate spots for bus stops and connections to sidewalks and crosswalks for safe crossing of Elm Street and the Turnpike. A decision on this matter will likely be part of next year's MBTA Bus-Service Plan.</p>	Low	✓	✓		✓		✓	✓				<p>This work could be done under the Community Transportation Technical Assistance Program, which is already included in the draft UPWP as an ongoing project.</p>
<p>✓ Recent addition</p>					<p>✓ Major Consideration</p>		<p>✓ Minor Consideration</p>								

**CTPS - FFY 2013 UPWP Universe of Proposed New Projects**

SAFETY AND SECURITY															
Project Name	Total Cost	FFY 2013 UPWP Budget	Project Description	FFY 2013 UPWP Staff Evaluation	Link Land Use and Transportation.	Work w Limited Financial Resources	Use a Mngmt & Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the System	Increase Transit and Healthy Transportation Mode Share	Encourage Sustainable Communities	Consider Transportation Equity	Address Documented Need (from CMP, RTP, PMT, YOUMOVE, METROFUTURE)	Enhance Technical Capacity	Comments
Low-Cost Safety Improvements at Interchanges with High Crash Rates	\$60,000	\$0	<p>In the recent LRTP, MPO staff reviewed safety problems on the highway network and identified the top 25 crash locations in the Boston Region, of which many are clover-leaf interchanges. This study will identify cost-effective, safety improvements for three interchange locations. The selection of the three locations will be done according interchange performance for safety and in consultation with the interchange data base of the CMP that includes traffic volumes and safety index statistics. In addition, for location selection, staff will review interchange project lists contained in the LRTP and consult with MassDOT highway division district staff. The improvements will include improved signage, realignment, restriping, and installation guardrails.</p> <p>Consistent with performance-based planning and follow-up on the needs assessment in the LRTP, this study relates to the LRTP's vision for improved safety and related policies. As the implementation of these eventual recommendations are envisioned to be within the maintenance responsibilities of MassDOT highway district staff, implementation efficacy will be largely warranted by the fact that MassDOT district staff will be consulted regarding location selection and will participate in designing the improvements. In addition, MassDOT participation would make this study relevant to the agency's safety goals and objectives. Furthermore, low-cost improvements through MassDOT maintenance will assure relatively quick implementation. And, this assures that the study has effective safety outcomes.</p>	Medium		✓	✓	✓	✓				✓		
					✓ Major Consideration				✓ Minor Consideration						

**CTPS - FFY 2013 UPWP Universe of Proposed New Projects**

SAFETY AND SECURITY (CONT.)															
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Roadway Network Inventory for Emergency Needs: A Pilot Study	\$25,000	\$25,000	<p>This work advances the MPO's policies in this area and addresses planning factors related to security. It also responds to guidance that the MPO has received from the Federal Highway Administration and Federal Transit Administration calling for MPOs to "increase their capacity to address climate change in transportation." The program builds and updates the MPO's database on the hazards to which the region is susceptible and the emergency evacuation and hazards planning underway. It provides for extensive mapping of this information, including maps showing the hazards in relation to the region's transportation network. This information is used by the MPO in its safety and security planning and in its project selection process. It is available to others, including state agencies and municipalities, for their emergency and evacuation planning.</p> <p>In FFY 2013 staff would inventory the condition of highway and transit bridges on the emergency routing network, and the presence and condition of signals on selected evacuation routes. The signal inventory would document whether signals on key routes are equipped with emergency vehicle pre-emption or connected to a traffic control center, and whether the signals can be upgraded with ITS improvements. This information gathered would be displayed as GIS data layers on the MPO's All-Hazards Planning web application. The results of the study would also inform decision-making for the TIP process by providing information that could be used for the Safety and Security evaluation of projects. The results would also highlight areas on the emergency network that would benefit from infrastructure improvements or ITS strategies. This study advances the MPO's Safety and Security policy of protecting the region from natural and human threats, and addresses the SAFETEA-LU planning factor for security. Work products would include a memorandum presenting an inventory of bridge and signal conditions and the creation of new GIS layers for the All-Hazards Planning web application.</p>	High	✓	✓	✓	✓	✓	✓	✓	✓	✓		
					✓ Major Consideration				✓ Minor Consideration						



CTPS - FFY 2013 UPWP Universe of Proposed New Projects

SAFETY AND SECURITY (CONT.)

Project Name	Total Cost	FFY 2013 UPWP Budget	Project Description	FFY 2013 UPWP Staff Evaluation	Link Land Use and Transportation.	Work w Limited Financial Resources	Use a Mngmt & Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the System	Increase Transit and Healthy Transportation Mode Share	Encourage Sustainable Communities	Consider Transportation Equity	Address Documented Need (from CMP, RTP, PMT, YOUMOVE, METROFUTURE)	Enhance Technical Capacity	Comments
Address Safety, Mobilty and Access on Subregional Priority Arterial Roadways	\$120,000	\$75,000	<p>The quality of transportation service, associated livability and quality of life, crash incidence, and air quality along an arterial and its side streets largely depends on the presence, size and duration of bottlenecks along it, and safe access for all. Along arterials lacking the design for accommodating traffic flow for passenger cars, freight movements, bus riders, mobility-challenged, and non-motorized users, then mobility, access, safety, and economic development are compromised, including air quality that can become worse for all.</p> <p>To address comments staff heard at several sub regional meetings, staff will identify priority arterial bottleneck locations (or series of locations) in the MPO region, with emphasis in the issues identified by the relevant sub region, including EJ, mobility, and safety concern, sand will develop recommendations for low-cost improvements. Special attention will be paid to the need and feasibility of bus service along these arterial segments. Staff will consider numerous strategies to improve arterials including examining and evaluating: traffic signals (equipment, retiming, redesign, and coordination); bus stops locations; processing buses through traffic lights; location and management of pedestrian crossings and signals, including ADA requirements; travel lane utilization by motorized and bicycle traffic; speed limit assessment; and access management.</p>	High	✓	✓	✓	✓	✓	✓	✓	✓	✓		
					✓ Major Consideration				✓ Minor Consideration						

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TRANSPORTATION EQUITY															
Project Name	Total Cost	FFY 2013 UPWP Budget	Project Description	FFY 2013 UPWP Staff Evaluation	Link Land Use and Transportation.	Work w Limited Financial Resources	Use a Mngmt & Operations Approach	Protect Air Quality and Environment	Preserve and Maintain the System	Increase Transit and Healthy Transportation Mode Share	Encourage Sustainable Communities	Consider Transportation Equity	Address Documented Need (from CMP, RTP, PMT, YOUNG, METROFUTURE)	Enhance Technical Capacity	Comments
EJ-Analysis Methodology Review	\$40,000	\$0	This study would analyze the way that CTPS conducts its environmental justice (EJ) analysis for transit projects such as a fare increase or service change, but the study would also have implications for EJ analyses of other transportation projects. The study would consider four elements: methodology, service area, thresholds, and metrics. With regard to methodology, the travel demand model set currently assigns an EJ designation for each TAZ. An alternative methodology could use the Systemwide Passenger Survey results to assign an EJ designation for each transit mode. The study would consider which methodology is best for analyzing the EJ impacts on transit riders. With regard to service area, the travel demand model set currently uses two potential service areas for certain analyses: one for the entire travel demand model set area and one for a smaller, urban area. The study would consider the rationale for having these two service areas. With regard to thresholds, the travel demand model set currently assumes a 40-minute travel time as the accessibility threshold for transit trips. The study would consider whether this threshold could be refined. Finally, with regard to metrics, the study would consider which metrics from the travel demand model set provide the most useful information for an EJ analysis. These metrics include average fare, access distance, in-vehicle travel time, number of transfers, etc. The study will also include consideration of FTA's proposed new circular (FTA-C-4702.1B) on Title VI compliance.	High								✓		✓	
Household Survey-based Comparisons between Income and Racial Groups	\$30,000	\$0	The 2011 Massachusetts Travel Survey obtained travel information from households on a statewide basis. Every member in selected households prepared a diary for a specific day and reported all trips, method of travel, and the type of activity at each location visited from the beginning to the end of that day. The survey method was designed to have representative results by income and race.  In keeping with the MPO's Transportation Equity vision of conducting analyses of the transportation needs of low-income and minority populations, this proposed study would analyze household survey data (including variables such as trip length, number of trips, types of trips, and modes used) for low-income and minority households and compare them with data from non-minority and higher income households to determine what the differences are. This data will be analyzed in comparison with the LRTP Needs Assessment issues to identify specific recommendations for needed improvements.	Medium								✓		✓	
					✓ Major Consideration				✓ Minor Consideration						