

**Unified Planning
Work Program
Federal Fiscal Year 2009**

**Endorsed by the Boston Region
Metropolitan Planning Organization**

August 14, 2008

**Boston Region
Metropolitan Planning Organization Staff**

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

Executive Office of Transportation and Public Works
City of Boston
City of Newton
City of Salem
City of Somerville
Federal Highway Administration (nonvoting)
Federal Transit Administration (nonvoting)
Massachusetts Bay Transportation Authority
Massachusetts Bay Transportation Authority Advisory Board
Massachusetts Highway Department
Massachusetts Port Authority
Massachusetts Turnpike Authority
Metropolitan Area Planning Council
Regional Transportation Advisory Council (nonvoting)
Town of Bedford
Town of Framingham
Town of Hopkinton



Boston Region Metropolitan Planning Organization Municipalities

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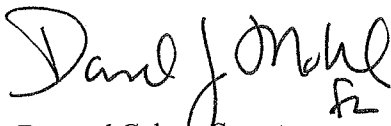
Or download it at www.ctps.org/bostonmpo/resources/reports.htm.

Certification of the Boston Region MPO Transportation Planning Process

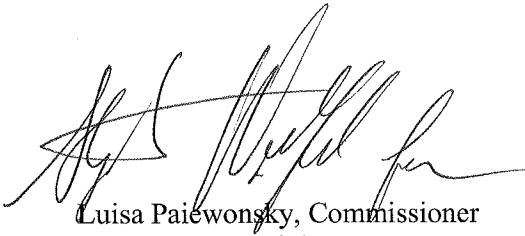
The Boston Region Metropolitan Planning Organization certifies that its conduct of the metropolitan transportation planning process complies with all applicable requirements, which are listed below, and that this process includes activities to support the development and implementation of the Regional Transportation Plan and Air Quality Conformity Determination, the Transportation Improvement Program and Air Quality Conformity Determination, and the Unified Planning Work Program.

1. 23 USC 134, 49 USC 5303, and this subpart.
2. Sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 USC 7504, 7506 (c) and (d) and 40 CFR Part 93.
3. Title VI of the Civil Rights Act of 1964, as amended (42 USC 2000d-1) and 49 CFR Part 21.
4. 49 USC 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity.
5. Section 1101(b) of the SAFETEA-LU (Pub. L. 109-59) and 49 CFR Part 26 regarding the involvement of disadvantaged business enterprises in U.S. DOT-funded projects.
6. The provisions of the Americans with Disabilities Act of 1990 (42 USC 12101 et seq.) and 49 CFR Parts 27, 37, and 38.
7. The Older Americans Act, as amended (42 USC 6101), prohibiting discrimination on the basis of age in programs or activities receiving federal financial assistance.
8. Section 324 of title 23 USC regarding the prohibition of discrimination based on gender.
9. Section 504 of the Rehabilitation Act of 1973 (29 USC 794) and 49 CFR Part 27 regarding discrimination against individuals with disabilities.
10. Anti-lobbying restrictions found in 49 USC Part 20. No appropriated funds may be expended by a recipient to influence or attempt to influence an officer or employee of any agency, or a member of Congress, in connection with the awarding of any federal contract.

September 18, 2008

A handwritten signature in black ink, appearing to read "Bernard Cohen" with a stylized flourish at the end.

Bernard Cohen, Secretary
Executive Office of Transportation and Public Works
Chair, Boston Region MPO



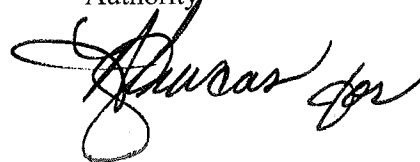
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Metropolitan Area Planning Council

for 

Thomas Kinton, Jr.
Massachusetts Port Authority



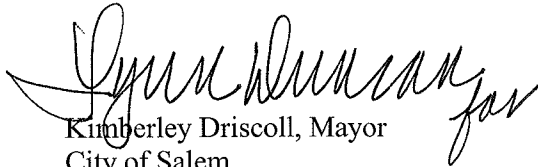
Alan LeBovidge, Executive Director
Massachusetts Turnpike Authority



Thomas M. Menino, Mayor
City of Boston




David Cohen, Mayor
City of Newton




Kimberley Driscoll, Mayor
City of Salem

Joseph A. Curtatone, Mayor
City of Somerville

Richard Reed, Town Administrator
Town of Bedford



Ginger Esty, Selectman
Town of Framingham



Mary Pratt, Selectman
Town of Hopkinton

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EXECUTIVE SUMMARY

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, 2008, through September 30, 2009 (federal fiscal year 2009). 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 transportation agencies such as the Executive Office of Transportation and Public Works (EOTPW) and the Massachusetts Bay Transportation Authority (MBTA).

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 74 projects, of which 60 will be carried out by the Central Transportation Planning Staff (CTPS) and the Metropolitan Area Planning Council (MAPC) on behalf of the MPO, EOTPW and its Office of Transportation Planning, the MBTA, the Massachusetts Highway Department (MassHighway), and the Massachusetts Port Authority (Massport). The remaining 14 projects will be carried out by individual transportation agencies, municipalities, and academic institutions.

The majority of the FFY 2009 UPWP projects have been ongoing since FFY 2008. However, there are several new projects. Those to be undertaken on behalf of the MPO are:

- Arterial Traffic-Signal Improvements and Coordination (page 6-3)
- Inner Suburban Mobility Study (page 6-8)
- Operational Improvements at Congested and High Crash Locations (page 6-15)
- Route 126 Corridor Study (page 6-18)
- Safety Evaluations of TIP Projects (6-20)
- Ongoing Planning Assistance to the MetroWest RTA (page 7-17)

CTPS will also continue developing a new Program for Mass Transportation on behalf of the MBTA (see page 6-12). Other CTPS projects to be conducted on behalf of the MBTA, MassHighway, or EOTPW are the:

- Green Line Extension Environmental Review Support (page 6-7 and Appendix A)
- Red Line–Blue Line Connector Study Support (page 6-16 and Appendix A)
- South Coast Commuter Rail Extension (page 6-22 and Appendix A)
- Route 3 South Corridor Study (page 6-19)
- MBTA Systemwide Onboard Passenger Survey (7-16)

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 as well as to the MBTA's Program for Mass Transportation (PMT), current feasibility studies, and other visioning processes.

Chapter 2 provides a status report on the FFY 2008 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 FFY 2009 projects. They are organized by 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 also presents 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 is a glossary of acronyms and transportation terms. An effort has been made to define such terms not only in the glossary but also the first time they appear in a chapter.

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

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 in the map on the back side of the cover of this document. Its members are the commonwealth's Executive Office of Transportation and Public Works; the cities of Boston, Newton, and Salem, and Somerville; the towns of Bedford, Framingham, and Hopkinton; the Massachusetts Bay Transportation Authority; the Massachusetts Bay Transportation Authority Advisory Board; the Massachusetts Highway Department; the Massachusetts Port Authority; the Massachusetts Turnpike Authority; and the Metropolitan Area Planning Council. In addition, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Regional Transportation Advisory Council participate in the MPO as advisory (nonvoting) members.

- The *Executive Office of Transportation and Public Works (EOTPW)*, under Chapter 6A of the Massachusetts General Laws (MGL), serves as the principal agency for developing, coordinating, administering, and managing transportation policies, planning, and programs related to design, construction, maintenance, and operations. The agency also is responsible for supervising and managing the Massachusetts Highway Department (including all state agencies within that department), the Massachusetts Aeronautics Commission, the Massachusetts Bay Transportation Authority, the Massachusetts Turnpike Authority, the Massachusetts Port Authority, and the commonwealth's regional transportation authorities.

Chapter 6A of the MGL also established an Office of Transportation Planning within the EOTPW to serve as the principal source of planning for state-level transportation projects and to work in coordination with the commonwealth's regional planning agencies, which serve as the principal source of planning for local and regional transportation projects.

- The *Massachusetts Bay Transportation Authority (MBTA)* has the statutory responsibility within its district, under the provisions of Chapter 161A of the 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 eight other directors, appointed by the governor. The MBTA will provide general transit planning in support of the projects in this Unified Planning Work Program (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 approval of the Program for Mass Transportation (PMT), review of proposed fare increases, annual review of the MBTA Capital Investment Program, review of the MBTA's documentation of net operating investment per passenger, and approval of the MBTA's operating budget (with the authority to reduce funding items).
- The *Massachusetts Highway Department (MassHighway)* has the statutory responsibility of designing, constructing, operating, and maintaining the commonwealth's roads and bridges and is charged with collaborating with other agencies and authorities in fields related to transportation development, public safety, and security. MassHighway is under the direction of a commissioner who is appointed by the governor.
- 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, the Tobin Bridge, Logan International Airport, and Hanscom Field.
- The *Massachusetts Turnpike Authority (MassPike)* is authorized to own, construct, maintain, improve, repair, operate, and administer the Massachusetts Turnpike and the Metropolitan Highway System (MHS). The MHS, as defined in Chapter 3 of the Acts of 1997, consists of "the integrated system of roadways, bridges, tunnels, overpasses, interchanges, parking facilities, entrance plazas, approaches, connecting highways, service stations, restaurants, tourist information centers, and administration, storage, maintenance, and other buildings that the authority [owns,] constructs, or operates and maintains pursuant to the provisions of this chapter, which consists of the Boston Extension, the Callahan Tunnel, the Central Artery, the Central Artery North Area, the Sumner Tunnel and the Ted Williams Tunnel, and any additional highway, tunnel, and bridge components as the general court may from time to time determine."
- The *Metropolitan Area Planning Council (MAPC)* The *Metropolitan Area Planning Council* 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*, three elected cities (currently *Newton*, *Salem*, and *Somerville*), and three elected towns (currently *Bedford*, *Framingham*, and *Hopkinton*) represent the region's 101 municipalities in the Boston Region MPO. The City of Boston is a permanent MPO member; the six elected municipalities serve staggered three-year terms as established in the MPO's Memorandum of Understanding, endorsed in December 2001.

Three other members participate in the Boston Region MPO in an advisory (nonvoting) capacity, reviewing the Regional Transportation Plan (RTP), 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, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).
- The *Regional Transportation Advisory Council*, the MPO's citizen advisory group, provides the opportunity for organizations and municipal representatives to become actively involved in the decision-making processes of the agencies that plan and program transportation services in the region. The Advisory Council reviews, comments on, and makes recommendations regarding certification documents. It also serves as a forum for identifying issues and alternatives, advocates solutions to the region's transportation needs, and generates interest and knowledge among the general public.

Three 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 *Transportation Planning and Programming Committee*, acting on behalf of the MPO members, meets regularly to provide ongoing coordination of planning activities taking place within the region. It consists of a representative from each MPO member, with the EOTPW representative serving as chairperson. The committee is responsible for managing the certification process, making recommendations to the MPO, and supervising MPO operations by providing direction to the Central Transportation Planning Staff (CTPS). This includes overseeing the work described in this UPWP and approval of CTPS's hirings of professional staff. The Advisory Council is a voting member of this committee.
- The *Central Transportation Planning Staff (CTPS)* was created by the MPO to carry out general and 3C transportation planning activities behalf of the MPO and to provide agencies with analyses required for the work described in this document.
- 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 nontransportation 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 service transportation)

THE UPWP PROJECT SELECTION PROCESS

Each year the MPO considers projects for inclusion in the annual update of the UPWP through its UPWP Subcommittee, which was established by the Transportation Planning and Programming Committee. Typically, after determining which projects in the previous fiscal year's UPWP will be carried forward into the next UPWP, MPO staff review the Regional Transportation Plan, the Program for Mass Transportation (PMT), recommendations of the Mobility Management System report, and letters received during the comment period on the previous UPWP to generate potential new projects to be considered for the new UPWP.

This year, the staff also reviewed all the ideas that were generated during last year's visits to MAPC's eight subregional groups that were not able to be included in the federal fiscal year (FFY) 2008 UPWP. The visits focused on a needs-based approach to identifying potential studies that would address safety and mobility problems that people experienced in their particular area. They were extremely productive and yielded more than 50 study ideas. These

and other staff-generated ideas were the topic of several roundtable discussions, held this spring, during which senior staff evaluated each project suggestion and developed a set of recommended projects to present to the UPWP Subcommittee for its consideration.

The UPWP Subcommittee met three times to consider the project evaluations and staff recommendations for inclusion in the draft FFY 2009 UPWP, and selected a program of projects that was based on the availability of funding, planning priorities, state and federal guidelines, and other considerations, described below. The Transportation Planning and Programming Committee approved the recommendations of the UPWP Subcommittee on June 26, 2008.

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. Activities the MPOs must perform to meet this requirement are:

- Production of the RTP, 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 federal agency discrimination on the basis of race, color, national origin, age, sex, disability, or religion. 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, of 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, of 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 RTP 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 MPO materials must be made available in accessible formats.

Consistency with Emphasis Areas and Federal Planning Factors

This year the FHWA and FTA identified intermodal connectors as a planning emphasis area. Intermodal connectors are short segments of road, generally less than two miles in length, that provide access between major modes of transportation (sea, air, rail, or road) from origin to destination. MPOs are encouraged to review the status of these connectors, identify existing conditions, and recommend improvements as appropriate.

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
- Increase the safety of the transportation system for motorized and nonmotorized users
- Increase the security of the transportation system for motorized and nonmotorized 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

Regional Transportation Plan

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

Mobility Management System (MMS) Program

The purpose of the MMS program (formerly known as the Congestion Management System program [CMS]) is to monitor transit, roadway, and park-and-ride facilities in the MPO region and identify “problem” locations. Projects that help address problems identified in the latest CMS report were considered for inclusion in this UPWP.

The MBTA Program for Mass Transportation (PMT)

In May 2003, 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. In addition, this UPWP includes funding for the development of the next PMT, which is currently underway.

The figure 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.

Consistency with MPO Policies

In choosing projects for inclusion in the UPWP, the UPWP Committee considers the degree to which a project forwards the following MPO policies, which were adopted in January 2006:

System Preservation, Modernization, and Efficiency

To emphasize the preservation, modernization, and efficiency of the existing transportation system, the MPO will:

- A. Put priority on projects that maintain, repair, and modernize existing infrastructure.
- B. Set funding goals for maintaining the system.
- C. Make investments that maximize the efficiency, effectiveness, reliability, and flexibility of the existing transportation system.
- D. Encourage and support, through planning and programming, projects and programs that improve the operation of the existing transportation system through the use of Intelligent Transportation Systems (ITS), new technologies, and transportation systems management (TSM).

Mobility

To improve mobility for people and freight, the MPO will:

- A. Put a priority on projects and programs that increase the availability of transportation options for people and freight by improving connections, access to and within the system, services, and infrastructure to meet needs.
- B. Support projects and programs that improve public transportation service by making it faster, more reliable, and more affordable.
- C. Consider how an improvement to a single mode can make the entire system work better.

Relationship of UPWP to Other Transportation Planning Documents

INPUTS

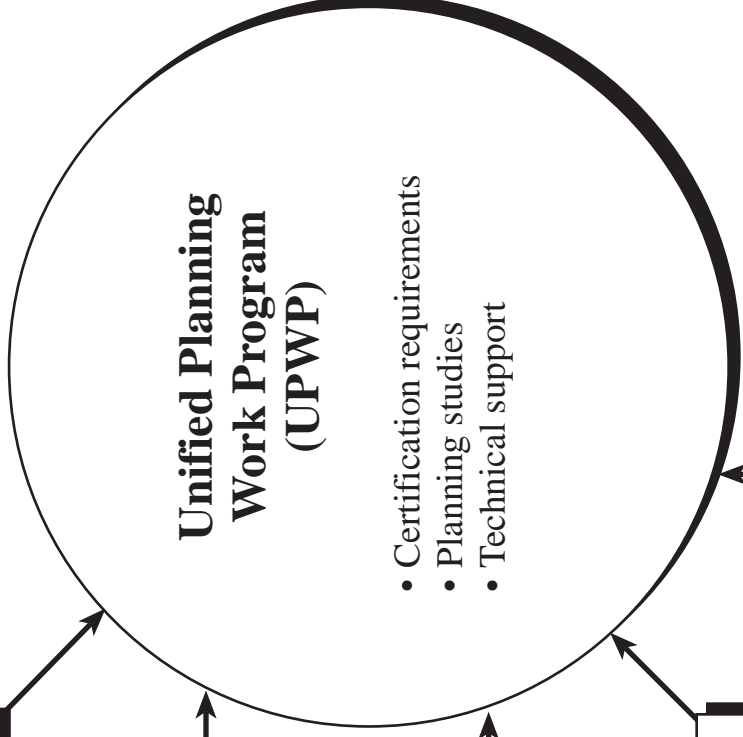
Mobility Management System

Program for Mass Transportation

Regional Transportation Plan

Feasibility Studies

Other Visioning Processes



OUTPUTS

Transportation Improvement Program and Air Quality Conformity Determination

Regional Transportation Plan and Air Quality Conformity Determination

MBTA Capital Investment Program

- D. Fund projects that expand the existing transportation system's ability to move people and goods in areas identified in the Boston Region Mobility Management System, the MBTA Program for Mass Transportation, the MPO's Regional Equity Program, MPO and EOTPW freight studies, and through public comment. This includes encouraging options that manage demand. Adding highway capacity by building general-purpose lanes should be considered only when no better solution can be found and should be accompanied by proponent commitments, developed in the environmental review process, to implement TDM measures.
- E. Assist agencies and communities in planning and implementing projects that provide bicycle and pedestrian routes, networks, and facilities.
- F. Support programs that meet public transportation needs in suburban communities, including improving access to existing public transportation and partnering with others to initiate new intrasuburban services linking important destinations.
- G. Provide better access for all to transportation throughout the region, including for our youth, elderly and people with disabilities, and members of zero-vehicle households. This includes identifying and addressing structural and operational barriers to mobility.
- H. Develop a multimodal, comprehensive plan for freight movement that includes an evaluation of freight infrastructure needs and access to intermodal facilities (air, road, rail, and water).

Environment

To minimize transportation-related pollution or degradation of the environment; promote energy conservation; support preservation of natural resources and community character; and advance sustainability, regional environmental benefits, and health-promoting transportation options, the MPO will:

- A. Give priority to projects that maintain and improve public transportation facilities and services so as to increase public transportation mode share and reduce reliance on automobiles.
- B. Give priority to projects that reduce congestion or manage transportation demand to improve air quality.
- C. Support, through planning and programming, projects that make transportation in the region more sustainable.
- D. Promote the use of low-polluting or alternative fuels, efficient engine technology, or other new, viable technology and resource protections.
- E. Consider environmental issues during project selection; in particular, air quality and reduction of pollutants (carbon monoxide [CO], nitrogen oxides [NOx], volatile organic compounds [VOCs], particulates, and carbon dioxide [CO₂]), water resources (soil and water contamination, stormwater management, and wetlands impacts), greenfields and open space, and wildlife and ecosystems; and value those that reduce negative impacts.
- F. Recognize value in transportation projects that preserve natural and cultural resources, including visual, historic, aesthetic, noise, community cohesiveness, and local quality of life values.

- G. Recognize, in evaluations, projects that respect community character in their purpose and design.
- H. Consult with environmental and cultural resource agencies and entities on environmental effects, particularly through the existing National Environmental Policy Act (NEPA) and Massachusetts Environmental Policy Act (MEPA) processes.
- I. Encourage, through planning and programming, transportation choices that promote a healthy lifestyle such as walking and bicycling.

Safety and Security

To improve safety and security for all transportation system users and prepare the transportation system for its role in emergency response preparedness, the MPO will:

- A. Support designs and fund projects and programs that address safety problems and enhance safe travel for all system users. This includes designs and projects that encourage motorists, public transportation riders, bicyclists, and pedestrians to share the transportation network safely.
- B. Support, through planning and programming, the installation, operation, upgrading, and timely maintenance of system infrastructure, including ITS, to provide for safety and security.
- C. Participate in regional planning for safety and security initiatives, such as evacuation and contingency measures, and homeland security.

Regional Equity

To promote the equitable sharing of the transportation system's benefits and burdens, and incorporate environmental justice principles into transportation planning and programming activities, the MPO will:

- A. Continue the outreach to communities with a high proportion of low-income and minority residents to identify transportation needs.
- B. Assess regional equity by analyzing mobility, accessibility, and congestion for communities with a high proportion of low-income and minority residents.
- C. Fund projects that address identified regional equity issues and needs.

Land Use and Economic Development

To promote the integration of land use, economic development, and transportation planning to achieve efficiencies; benefits for mobility and the environment, including sustainable communities and transportation; and stronger economic opportunities, the MPO will:

- A. Link transportation planning with land use and economic development plans, particularly in areas identified for economic development by state, regional, and local planning.
- B. Make transportation investments where existing or planned development will encourage public transportation use, walking, and bicycling.
- C. Give priority to projects in areas identified in local and regional plans as being suitable for concentrated development and/or redevelopment, including brownfield redevelopment; support initiatives that increase sustainability.

- D. Consider both existing development and densities in transportation decision-making and give priority to projects that support them.
- E. Consider the appropriate use and maintenance of transportation rights-of-way to maximize public benefits.
- F. Put priority on transportation investments related to existing centers of economic activity; or to areas with adequate water and sewer infrastructure; or to municipal centers or areas targeted for economic development.

Other Considerations

The commonwealth has established two core transportation policies to be integrated into the transportation planning process. The “Fix It First” and “Communities First” policies help to integrate the diverse needs for housing, jobs, and transportation, and for historic, cultural, and natural resources by promoting the coordination and cooperation of all agencies, investing funds in “smart growth” and sustainable development, and giving priority to investments that will deliver living-wage jobs, transit access, housing, open space, and community-serving enterprises.

Lastly, selection of projects for the UPWP also takes into consideration the availability of CTPS time and 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’s vote is included in each of the funding descriptions.

FHWA 3C Planning (PL)/EOTPW Local Match These are FHWA planning funds distributed to MassHighway, according to an allocation formula established by federal legislation, to carry out the 3C planning process. MassHighway distributes these funds to Massachusetts MPOs according to a formula based on population. The FY 2009 3C PL funding allocation for the Boston Region MPO is \$3,307,045, which includes \$661,410 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/MassHighway Statewide Planning and Research (SPR)/EOTPW Local Match As in the case of 3C PL funds, FHWA provides SPR funds to MassHighway according to a distribution formula. MassHighway 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, MassHighway 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 \$841,200 (including \$157,240 in state matching funds) are programmed in this UPWP for projects to be conducted by MPO staff. The MPO's role is to approve 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/EOTPW, MBTA, 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 MAPC. The allocation in this UPWP, including the total local match for FFY 2009, is \$2,033,235 for projects to be conducted by MPO staff, the MBTA, and by MAPC, on behalf of the MPO. As with the 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. This UPWP also includes \$262,900 in FFYs 2007 and 2008 MBTA Section 5303 funds that are being carried over into FFY 2009.

MBTA The MBTA provides \$959,100 in funding for this UPWP for transit projects to be conducted by MPO staff. As in 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.

EOTPW Four transit projects, two of which are related to the SIP (Green Line Extension Environmental Review Support, and Red Line–Blue Line Study Support), mentioned earlier in this chapter, are included this UPWP. The Immediate Needs Bill will provide the funding for the work to be conducted during FFY 2009.

Other This UPWP also includes \$517,600 in funding from other sources for work being conducted by MPO staff for Massport and the MetroWest Regional Transit Authority. This amount includes \$457,000 in discretionary grant funds under the FTA Alternatives Analysis Program. The MPO's role is to vote to approve 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's Transportation Planning and Programming Committee:

- *A project work scope* must be approved by the Transportation Planning and Programming Committee 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 proposed 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 Transportation Planning and Programming Committee's UPWP Subcommittee. It compares the UPWP project budgets with actual project spending. The subcommittee then recommends necessary adjustments to the UPWP project budgets to the Transportation Planning and Programming Committee.
- *Transportation Planning and Programming Committee 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, and whether the project schedule and budget were adhered to.

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. Citizens may attend and present comments at the Transportation Planning and Programming Committee and MPO meetings at which amendments are discussed. Administrative modifications may be made by the Transportation Planning and Programming Committee, and, although no public review period is required, one may be provided at the Committee's discretion. They are rare and are only likely to occur in the event of an emergency or to take advantage of an extraordinary funding opportunity.

2 STATUS OF THE FEDERAL FISCAL YEAR 2008 UPWP PROJECTS CONDUCTED BY BOSTON REGION MPO STAFF

During federal fiscal year (FFY) 2008, 58 projects were expected to be 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, 2008, when this document goes into effect.
- *Continuing* – This is one of two categories of projects that continue from FFY 2008 into FFY 2009. It is distinctly different than the similar category, “ongoing” (described below), in that it covers planning studies that have specific start and end dates. The percentage completed as of October 1, 2008, for these projects is included in the project descriptions presented in Chapters 6 and 7.
- *Inactive* – Contrary to expectations when the FFY 2008 UPWP was being developed, work on these projects did not begin during FFY 2008.
- *Ongoing* – These projects support and continue the transportation planning process from year to year and thus have no start or end date.

The tables on the following pages list FFY 2008 projects by category and their budgets for that year. Following the tables is a complete listing of MPO work products resulting from the FFY 2008 UPWP. Information is provided on how to obtain copies of reports approved by the MPO’s Transportation Planning and Programming Committee.

COMPLETED FFY 2008 UPWP PROJECTS WITH FFY 2008 BUDGETS AND FUNDING SOURCES

	EOTPW	MPO Highway (3C PL)	Mass-Highway (SPR)	MPO Transit (\$5303)	MBTA (\$5303)	MBTA	Other	Total
2007-08 I-93 North and Southeast Xway HOV Lane Monitoring			55,000					55,000
Belmont, Lexington, and Waltham Subarea Study		2,500						2,500
Bicycle/Pedestrian Mobility in Urban Centers		20,000						20,000
I-495 Corridor Transportation Study			20,000					20,000
MBTA 2007 National Transit Database: Purchased Bus						1,000		1,000
MBTA Bus Service Data Collection V						254,000		254,000
MBTA Regional Transit Parking Demand Study						40,000		40,000
MBTA Transit Signal Priority Study		11,600		11,600				23,200
Newton Corner Rotary, Phase II		35,200		17,300				52,500
Route 2/Alewife Brook Parkway, Phase II		26,450		30,250				56,700
Route 60, Malden and Medford, Mobility Improvement Study		25,000		25,000				50,000
Safety & Operational Improvements at Selected Locations		18,750		6,250				25,000
Subtotal		\$139,500	\$75,000	\$90,400		\$295,000		\$599,900

CONTINUING FFY 2008 UPWP PROJECTS WITH FFY 2008 BUDGETS AND FUNDING SOURCES

	EOTPW	MPO Highway (3C PL)	Mass- Highway (SPR)	MPO Transit (\$5303)	MBTA (\$5303)	MBTA	Other	Total
Green Line Extension Environmental Review Support	100,000							100,000
MBTA 2008 National Transit Database: Directly Operated					65,600			65,600
MBTA 2008 National Transit Database: Purchased Bus					28,300			28,300
MBTA Bus Service Data Collection VI					176,200			176,200
MBTA ITS Architecture					50,000			50,000
MBTA Post-2007 Fare Increase Analysis					95,000			95,000
MBTA Program for Mass Transportation				53,200	257,100			310,300
MBTA Systemwide Onboard Passenger Survey						350,000		350,000
North Shore Transportation Improvements			50,000					50,000
Red Line-Blue Line Connector Study Support	75,000							75,000
Regional Household Travel Survey		119,000		51,000				170,000
Regional Vision: MetroFuture		67,760		32,240				100,000
Silver Line Project Support					124,600			124,600
South Coast Commuter Rail Extension	90,000							90,000
Travel Operations Analysis				15,000				15,000
Urban Ring Phase 2 Revised DEIR/DEIS Support			110,000					110,000
Subtotal	\$265,000	\$186,760	\$160,000	\$151,440	\$796,800	\$350,000		\$1,910,000

INACTIVE FFY 2008 UPWP PROJECTS WITH FFY 2008 BUDGETS AND FUNDING SOURCES

	EOTPW	MPO Highway (3C PL)	Mass-Highway (SPR)	MPO Transit (\$5303)	MBTA (\$5303)	MBTA	Other	Total
Lowell National Park Trolley Extension Study Support							70,000	70,000
Subtotal							\$70,000	\$70,000

ONGOING FFY 2008 UPWP PROJECTS WITH FFY 2008 BUDGETS AND FUNDING SOURCES

	EOTPW	MPO Highway (3C PL)	Mass-Highway (SPR)	MPO Transit (\$5303)	MBTA (\$5303)	MBTA	Other	Total
3C Planning Process and Public Outreach Activities		516,800		215,400				732,200
Air Quality Conformity Determinations		10,500		4,500				15,000
Air Quality Support Activities		14,000		6,000				20,000
Alternative-Mode Planning and Coordination		125,365		59,650				185,015
Assistance to MBTA Development					247,300	2,000		249,300
Bicycle/Pedestrian Support Activities		78,300						78,300
Boston Region MPO Title VI Reporting				35,000				35,000
Computer Resource Management		266,600		114,300				380,900
Corridor/Subarea Planning Studies: Land Use Reviews		78,665		37,435				116,100
Data Resources Management		350,000		150,000				500,000
Direct Support		280,000	26,500	102,500	8,000	27,000		444,000
Disability Access Support		52,400		22,400				74,800
Land Use Development Project Reviews		63,465		30,200				93,665
Massport Transportation Studies							85,000	85,000
MBTA Rider Oversight Committee Support						11,500		11,500
MBTA Service Benchmarking					21,100	45,900		67,000
Mobility Assistance Program and §5310 Review				1,000				1,000
Mobility Management System Monitoring Program		250,000						250,000
MPO/MAPC Liaison and Support Activities		131,380		62,520				193,900
Regional Equity/Environmental Justice Support		62,400		26,700				89,100
Regional Model Enhancement		238,000		102,000				340,000
Regional Transportation Plan		70,000		30,000				100,000
Regionwide Suburban Transit Opportunities				45,000				45,000
Statewide Planning Assistance			524,700					524,700
Subregional Support Activities		85,850		40,850				126,700

ONGOING FFY 2008 UPWP PROJECTS WITH FFY 2008 BUDGETS AND FUNDING SOURCES

	EOTPW	MPO Highway (3C PL)	Mass- Highway (SPR)	MPO Transit (\$5303)	MBTA (\$5303)	MBTA	Other	Total
Transportation Improvement Program (CTPS)		94,500		40,500				135,000
Transportation Improvement Program (MAPC)		41,400		19,700				61,100
Unified Planning Work Program (CTPS)		37,500		16,000				53,500
Unified Planning Work Program (MAPC)		11,180		5,320				16,500
Subtotal		\$2,858,305	\$551,200	\$1,166,975	\$276,400	\$86,400	\$85,000	\$5,024,280
Total	\$265,000	\$3,184,565	\$786,200	\$1,408,815	\$276,400	\$1,178,200	\$505,000	\$7,604,180

WORK PRODUCTS OF THE FFY 2008 UPWP

Listed below are the reports, memoranda, and other MPO work products that were associated with the projects in the FFY 2008 UPWP. Memoranda and other work products are produced for the client agency. Reports and certification documents, however, are available at the State Transportation Library. They may also be requested by contacting CTPS at (617) 973-7100 (voice), (617) 973-7089 (TTY), or bostonmpo@ctps.org (e-mail). Many of these work products are available for downloading from the MPO's website, www.bostonmpo.org.

MPO Certification Documents

Air Quality Conformity Determination of the Amendment to the 2007 Regional Transportation Plan (pending approval)

Air Quality Conformity Determination of the Federal Fiscal Years 2008–11 Transportation Improvement Program (pending approval)

Federal Fiscal Years 2007–10 Transportation Improvement Program Amendments

Federal Fiscal Years 2009–12 Transportation Improvement Program (TIP) and Determination of Air Quality Conformity (pending approval)

Federal Fiscal Year 2009 Unified Planning Work Program (pending approval)

JOURNEY TO 2030 Transportation Plan of the Boston Region Metropolitan Planning Organization Amendment (pending approval)

CTPS Reports

Bicycle and Pedestrian Improvements in Urban Centers (Pending Approval)

MBTA Triennial Title VI Program Report

Federal Fiscal Year 2008 Title VI Report of the Boston Region Metropolitan Planning Organization (pending approval)

CTPS Technical Memoranda

Coordinated Human Services Transportation Plan

MBTA Potential Fare Increase Analysis

Roadway Safety Planning in the Boston Region

Ridership and Passenger-Mile Estimates for Fiscal Year 2007 National Transit Database:
Purchased Bus

Route 2 /Route 16 (Alewife Brook Parkway) Eastbound: Traffic Patterns and MBTA
Alewife Station Parking Garage Survey

Regionwide Suburban Transit Opportunities Case Studies (pending approval)

Safety and Operational Improvements at Selected Intersections Study: Analysis and
Recommendations

Other CTPS Work Products and Activities

- 2006–2007 I-93 North and Southeast Expressway High-Occupancy-Vehicle Lane Utilization Documentation
- Accessible formatting of the JOURNEY TO 2030 amendment, the Transportation Improvement Program and amendments, the Unified Planning Work Program, and meeting minutes and handouts of the Transportation Planning and Programming Committee, the Regional Transportation Advisory Council, and the Access Advisory Committee to the MBTA (AACT)
- Bicycle Count Database Maintenance
- Congestion Mitigation and Air Quality Program analyses
- GIS maps, computer map files, databases, and data analyses
- I-93/I-95 modeling of future year and selected alternative and transit modeling associated with proposed transportation-demand management improvements
- I-495 Corridor Transportation Study – Alternatives analysis support
 - Green Line Extension Environmental Review Support – New Starts submission development and support to EIR/EIS
- Massport Ground Transportation Support – 2007 passenger survey geocoding and mapping, Logan Airport ground access model validation, passenger forecasts associated with the Massport Ground Access Policy Plan, summary of Logan Airport shuttle bus ridership counts
- MBTA bus trip summaries of boardings, alightings, and on-time performance of selected bus routes. Recommendations on service reallocation to respond to demand and improve cost effectiveness

- MBTA Fiscal Year 2008 National Transit Database: Directly Operated Bus – Sampling of passenger boarding and alightings on randomly selected bus trip, survey of a sampling of passengers
- MBTA Fiscal Year 2008 National Transit Database: Purchased Bus – Sampling of passenger boarding and alightings on randomly selected bus trip
- MBTA Post 2007 Fare Increase Analysis – Systemwide pass-users survey to determine, fare-mix survey, sampling of randomly selected surface Green Line trips, and sampling of randomly selected rapid transit stations
- MBTA Program for Mass Transportation – Development of mobility problem statements summarized by corridor, identification and cost/benefit assessments of potential mobility solutions, proposed improvement strategies summarized by corridor and/or theme
- MBTA Rider Oversight Committee – Technical assistance to the MBTA Rider Oversight Committee and attendance at committee and subcommittee meetings
- MBTA Service Benchmarking – Documentation of selected level-of-service evaluations for the FFY 2008 MBTA revenue service and amenities
- MBTA Regional Parking Demand Study – Alternatives analysis support
- MBTA Systemwide Onboard Passenger Survey – Electronic and paper survey instruments for all transit modes, pilot survey to determine potential to develop survey response bias related to demographic indicators, survey results for Bus Route 39
- Mobility Management System – Travel-time runs, data collection, intersection analyses, and documentation of park-and ride lots
- MPO (including the Transportation Planning and Programming Committee and its subcommittees), Regional Transportation Advisory Council, and AACT: meeting minutes, staff support, various memoranda, and database maintenance
- MPO Public Participation Program – Outreach materials supporting development of certification documents and other MPO programs and activities
- MPO website redevelopment (www.bostonmpo.org) and CTPS intranet site maintenance
- National Transportation Week display materials
- Regional Equity Program – Notes on discussions with representatives of low-income and minority neighborhoods
- Silver Line Project Support – New starts submission development and support to EIR/EIS
- South Coast Commuter Rail Extension – Alternatives analysis support
- Suburban Mobility Program – Letters of solicitation, applications, and committee support

- TIP project information forms, evaluation criteria and matrices, instructional handbook, briefing books for Municipal Input Day and Agency Input Day, and web-based data
- Travel-demand forecasting
- *TRANSREPORT*, the MPO's monthly newsletter
- UPWP outreach materials, evaluation criteria, and FFY 2008 UPWP quarterly reports
- Urban Ring new starts submission and support to EIR/EIS
- Walkable Community Program presentation materials and memoranda
- Work scopes for Transportation Planning and Programming Committee approval

MAPC Work Products and Activities

- Creation of a GIS coverage and related database of MAPC-reviewed projects and their mitigation commitments
- Database development of community, subregion, and corridor population and employment, and visual displays and analysis of this information
- GIS technical assistance and support for transportation planning in the region
- Implementation of the statewide bicycle and pedestrian plans, and work on bicycle/pedestrian-related issues, including coordination with relevant national, state, and regional organizations
- Interagency coordination, work scopes, participation in advisory and corridor committees, public participation, 2008 MPO elections, and attendance at relevant meetings
- Participation in a variety of specific project reviews and related activities
- Project evaluations and development of new project evaluation tools
- 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 Transportation Planning and Programming Committee, support for subregion and corridor advisory committee meetings, and prioritization assistance
- Support and technical assistance in developing and implementing the MPO's Regional Suburban Mobility Improvement and Transportation Demand Management programs
- Support for the regional Transportation Demand Management Committee and Transportation Enhancement Selection Committee
- Support for TIP criteria refinement and implementation and for the Transportation Planning and Programming Committee's TIP Criteria Task Force

- Support for the UPWP Subcommittee
- Technical assistance for air quality, transportation enhancement, and mobility assistance programs

3 INDEX OF PROJECTS BY AGENCY

This chapter indexes the projects by the agency responsible for leading the work effort. It is intended both to facilitate finding specific projects in this document and to provide a summary of what parts of this UPWP each agency is conducting.

Central Transportation Planning Staff

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4 ADMINISTRATION AND RESOURCE MANAGEMENT PROJECTS

Chapters 4 through 7 present project descriptions and budget information for transportation planning work that will be carried out between October 1, 2008, and September 30, 2009. The activities described in these chapters will be conducted by the Central Transportation Planning Staff (CTPS) of the Boston Region Metropolitan Planning Organization, 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, both state and federal, to be carried 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:

Project ID #	Project Name	Page
60415–60492	Computer Resource Management	4-2
60110–60600	Data Resources Management	4-3
90000	Direct Support	4-4



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:

60415 Computer Room Management and Single-User Computer Support:

- Planning, monitoring, and maintaining computer room space and facilities.
- Performing the purchase and maintenance of CTPS computer hardware, systems and applications software, and any other equipment that supports single-user computers.
- Creating new computer procedures that support CTPS analytical, administrative, and documentation tasks. Maintaining and enhancing computer procedures where program maintenance and enhancement are no longer available from the original vendor.

60435 Computer Servers and Network Support:

- Performing the purchase and maintenance of server hardware and systems and application software, as well as any other equipment that supports the use of servers.
- Performing the purchase and maintenance of all CTPS network and communications software, as well as any other equipment that supports the use of network and communications equipment.

60455 Systems Administration and Other Computer Resources Support:

- Managing and maintaining hardware and software resources for all CTPS computer systems. Increased emphasis will be given to the security and integrity of all hardware, software, and data resources.
- Assisting staff in the use of computer resources, organizing and distributing vendor-supplied manuals, and, where appropriate, providing written and online user guides for particular resources.
- Purchasing computer-related items, supplies, and equipment, including maintenance contracts for computer resources, where appropriate.

60492 Computer Resource Planning: Updating the CTPS Five-Year Plan for Computer Resource Development in coordination with the development of the CTPS budget for the next fiscal year.

FFY 2009 Activities and Expected Work Products: Work on these tasks will continue as described above.

FHWA/FTA Grant Application Task and Element: 44.26.04

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$388,600			\$388,600	\$252,600			\$136,000			



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 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 2009 Activities and Expected Work Products: GIS maps, computer map files, consolidated databases, data analyses, and responses to data requests.

FHWA/FTA Grant Application Task and Element: 44.22.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$512,500			\$512,500	\$333,100			\$179,400			



DIRECT SUPPORT

STAFF: Central Transportation Planning Staff

CLIENT: Boston Region MPO/MassHighway/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.

Travel: Periodically, the U.S. Department of Transportation (the Federal Highway and Federal Transit Administrations) 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 expenses associated with project work are also charged as direct-support expenditures; however, these expenditures do not require prior approval.

Other: There are various expenditures that can arise over the term of this UPWP, such as printing, postage, and data processing services. These expenditures can become necessary when producing a project report or conducting a survey to obtain data that are sufficiently current and project-specific. The costs associated with printing survey forms, postage for return mail, and services for preparing and processing data for specific projects are direct-support expenditures.

FFY 2009 Activities and Expected Work Products: Computer and general office equipment, professional consulting services, in-state project-related travel, and out-of-state travel associated with staff attendance at professional and training conferences.

FHWA/FTA Grant Application Task and Element: 44.27.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$514,200			\$514,200	\$345,000	\$24,200		\$55,000		\$90,000	

5 CERTIFICATION REQUIREMENTS

The projects in this chapter are categorized as certification requirements because they include work that the 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:

Project ID #	Project Name	Page
90011-90090	3C Planning Process and Public Outreach Activities	5-2
10112	Air Quality Conformity Determinations	5-6
90061	Air Quality Support Activities	5-7
11355	Boston Region MPO Title VI Reporting	5-9
90024&28	Disability Access Support	5-10
11131&32	Regional Equity/Environmental Justice Support and Studies	5-13
11244	Regional Model Enhancement	5-15
10101	Regional Transportation Plan	5-17
10103	Transportation Improvement Program (CTPS)	5-19
10104	Unified Planning Work Program (CTPS)	5-22
MAPC 1	MPO/MAPC Liaison and Support Activities	5-11
MAPC 2	Subregional Support Activities	5-18
MAPC 3	Transportation Improvement Program (MAPC)	5-21
MAPC 4	Unified Planning Work Program (MAPC)	5-23

**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: (\$251,400) 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 highlighted or newly identified in the Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); understanding and communicating issues related to federal policies, regulations, and guidance and MPO policies on planning and programming; preparing information for decision making; and providing process support, such as developing agendas for meetings, preparing informational materials, compiling meeting packages for mailings, recording minutes of all meetings, including subcommittee meetings, conducting public outreach, utilizing the MPO website for providing information and gathering input, preparing and distributing the MPO's monthly newsletter, and maintaining the mailing lists and e-mail listserve.

This task also supports the Memorandum of Understanding between and among the MPOs in the expanded Boston Urbanized Area, as defined by the U.S. Census Bureau. This aspect of the work consists of staff awareness of transportation issues in the Southeastern Massachusetts MPO, Old Colony MPO, Merrimack Valley MPO, and Northern Middlesex MPO. CTPS serves as an information conduit for projects and activities that potentially impact the Boston Region MPO.

In addition, support to the MPO includes: consultation with other entities that are managing resources or are involved with issues highlighted in SAFETEA-LU, the day-to-day management of projects listed in the UPWP, and the establishment of work priorities. It also includes providing services to the Transportation Planning and Programming Committee's subcommittees, such as the UPWP Subcommittee and the Suburban Mobility/Transportation Demand Management Subcommittee. CTPS conducts liaison activities between the Boston Region MPO and other Massachusetts MPOs and agencies, and maintains communication with MAPC subregional groups.

0014 SAFETEA-LU and Environmental Planning Topics: (\$75,000) CTPS provides research, reporting, coordination, and technical support related to planning topics such as the 3C planning factors and other topics highlighted in SAFETEA-LU planning guidance, including safety, security, freight, and operations and management. Staff also maintain expertise in environmental issues, including climate change.

In order to incorporate freight considerations into MPO planning and programming, expertise on issues important to the movement of freight is maintained. Information on existing conditions is gathered, analyzed, and presented to the MPO in memoranda and white papers for consideration in Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP)



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 90011-90090

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

development. This information includes: data on and mapping of freight volumes, roadways used, and other infrastructure; quantifiable problems such as crashes and congestion; and identified needs such as possible operations and intelligent transportation systems (ITS) improvements. Work includes contact with freight and ITS operators and providers in the region and communication with the Regional Transportation Advisory Council Freight Subcommittee about freight and ITS issues.

Public Outreach Activities

CTPS will implement the MPO Public Participation Program and continue to coordinate and support the MPO public outreach activities. This includes the expanded consultations specified in SAFETEA-LU guidance. This will be accomplished by:

- Implementing the MPO public participation process and procedures
- Developing improvements for preparing and distributing informational materials on the 3C process, the MPO, and the draft and final certification documents
- Coordinating and supporting the activities of the MPO, the MPO's Transportation Planning and Programming Committee, the Regional Transportation Advisory Council, and the Access Advisory Committee to the MBTA; serving as a liaison between the MPO and other regional entities, such as the MBTA Rider Oversight Committee
- Maintaining direct contact with local communities to learn about transportation needs, proposed projects, and other issues that have implications for the MPO planning process
- Providing public participation support to MPO member entities
- Current public outreach activities described below (90019, 90021, and 90025 through 90027)

90019 Subregional Outreach Efforts: (\$16,200) CTPS staff attends 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: (\$39,000) The Regional Transportation Advisory Council is the MPO's citizen advisory committee. CTPS provides support to this body and its subcommittees. This includes preparing agendas, minutes, and meeting summaries, attending meetings, coordinating activities, scheduling speakers, maintaining mailing lists, and producing and distributing meeting notices and packages. CTPS provides information, updates, and briefings on MPO activities, and works with the subcommittees as they conduct their planning and reviews.

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

90025 TRANSREPORT : (\$79,100) *TRANSREPORT* is the newsletter of the MPO and 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. CTPS offers a Spanish version of the newsletter, when requested.

90026 Public Participation Process: (\$122,800) The MPO and CTPS will implement the MPO Public Participation Program and will continue to review and modify procedures as appropriate to increase the program's effectiveness. This may call for additional activities, forums, and studies, ASL and language interpretation services at meetings, and preparation and distribution of printed materials in Spanish and other languages.

90027 Boston Region MPO Website, www.bostonmpo.org: (\$80,000) For the public, for federal, state, and local officials, and for businesses, the MPO's website provides further access to the MPO and to transportation planning information. CTPS continues to post documents and data that are suitable for the site, monitors its use, keeps track of feedback, and performs necessary updating and maintenance of the site. CTPS will continue to improve the design and navigability of the site and to use it more extensively for public outreach and gathering of input.

Other 3C Planning Support Activities

90012 Professional Development: (\$10,000) The MPO staff maintains its technical expertise in part by participation in courses, programs, and workshops offered by the Federal Highway and Transit Administrations, the Transportation Research Board, the Association of Metropolitan Planning Organizations, the 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, and air quality analysis.

90090 General Graphics: (\$101,900) Graphics support will be provided to CTPS staff and MPO agencies in the design and production of maps, charts, illustrations, report covers, brochures, slides, photographs, and other visualization techniques, and products that improve communication. One of the areas of work to which graphics support will be particularly integral is the CTPS geographic information system (GIS).

FFY 2009 Activities and Expected Work Products: In order to support the MPO, its committees and subcommittees, the Regional Transportation Advisory Council, and AACT, staff will provide meeting agendas and minutes, records maintenance, and mailings; refinement of the public involvement program and maintenance of public outreach databases and listserves; reports, studies, memoranda, papers, display boards, and informational materials; implementation of the MPO Public-Participation Program; website expansion and maintenance;

3C PLANNING PROCESS AND PUBLIC OUTREACH ACTIVITIES [CONT.]



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 90011-90090

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

monthly issues of *TRANSREPORT*; maps and graphics for reports; public outreach materials; advice, research, assistance, and analysis regarding planning issues, as requested.

The above activities support all other projects in this UPWP and foster the implementation of MPO policies, SAFETEA-LU planning factors and guidance, and Executive Order 13166 (governing outreach to persons with limited English proficiency).

FHWA/FTA Grant Application Task and Element: 44.21.02

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$775,400			\$775,400	\$504,000			\$271,400			

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 2009 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 amendments to the 2007 RTP and the FFYs 2009-2012 TIP, and in the 2010-2013 TIP, will be performed and presented as follows:

- *System-Level:* A systemwide conformity determination will be prepared for regionally significant projects in the RTP and TIPs. The conformity determination will show a 2000 base year, as well as “build” networks for 2007, 2009, 2010, 2020, and 2030 for VOCs, NO_x, and CO₂; and for 2010, 2020, and 2030 for CO, in the maintenance areas only.
- *Project-Level:* A detailed analysis of the potential VOC, CO, CO₂, and NO_x impacts of each project to receive Congestion Mitigation/Air Quality Program funding in the TIP 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: 44.26.05**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$16,000			\$16,000	\$10,400			\$5,600			

AIR QUALITY SUPPORT ACTIVITIES



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 RTP 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 2009 Activities and Expected Work Products

Support to EOTPW, MassHighway, MassPike, Massport, and the MBTA: Activities will include analysis of transportation control measures (TCMs), park-and-ride facilities, and proposed high-occupancy-vehicle (HOV) projects throughout the region, 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 RTP, the Mobility Management System report, and the UPWP. Staff will also confer with agencies and organizations that are concerned about climate change issues and obtain their knowledge and ideas for improvements.

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. CTPS support efforts 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.
- Analysis of existing regional air quality conditions, assistance to MassHighway and EOTPW 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 the MPO agencies regarding funding and implementation of air-quality-related transportation programs and projects.
- Support to MPO agencies in analyzing the air quality effects of projects during environmental justice reviews.

AIR QUALITY SUPPORT ACTIVITIES [CONT.]**STAFF:** Central Transportation Planning Staff**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** 90061**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

- Support to MPO agencies in analyzing the air quality effects of projects during environmental justice reviews.

FHWA/FTA Grant Application Task and Element: 44.26.05**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$50,000			\$50,000	\$32,500			\$17,500			

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 Civil Rights Act provides 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 RTP.

FFY 2009 Activities and Expected Work Products: The MPO will comply with Title VI regulations through the preparation and submittal of reports as required.

This project is supported by public outreach activities and regional equity/environmental justice work presented in this chapter.

FHWA/FTA Grant Application Task and Element: 44.24.01**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO §5303	MBTA §5303	MBTA	Other
\$40,000			\$40,000	\$28,000			\$12,000			



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 90024&28

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

90028 Provision of Materials in Accessible Formats: 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 at their request and advises members on the subject of providing materials in accessible formats.

90024 Access Advisory Committee Support: In addition, 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 matters relating to the use of the MBTA’s fixed-route and paratransit services by people with disabilities and ensures that users’ ideas concerning accessible transportation are heard.

FFY 2009 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 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 RIDE vans, and an updated AACT brochure
- 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 materials in accessible formats, as requested

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

FHWA/FTA Grant Application Task and Element: 44.26.03

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$77,800			\$77,800	\$50,600			\$27,200			

**STAFF: Metropolitan Area Planning Council****CLIENT: Boston Region Metropolitan Planning Organization****ID #: MAPC 1****BUDGET: Not applicable to ongoing projects****STATUS: Ongoing**

This project includes: reporting to the MAPC Executive Committee, the MAPC Officers Transportation Committee, MAPC Council members and committees, subregional groups, and MAPC staff on MPO activities; reporting to the MPO and its committees and subcommittees on transportation and land use issues identified in the communities and subregions. It also includes working with MAPC and with members of the MPO and its Transportation Planning and Programming Committee to identify and review transportation planning issues, including their regional implications.

Liaison and support activities also include ongoing participation in, and support to, the MPO and its Transportation Planning and Programming Committee in establishing work priorities and agendas. Participation in and support to its subcommittees includes chairing the TIP Criteria and Suburban Mobility/Transportation Demand Management (TDM) subcommittees.

MAPC actively participates in statewide committees and task forces to represent the interests of the region, including the Statewide Enhancement Committee, the Congestion Mitigation and Air Quality (CMAQ) Consultation Committee, and the Statewide Bicycle/Pedestrian Committee. MAPC is also an active participant on a number of advisory committees that deal with ongoing corridor and subregional studies. 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.

MAPC, through its participation in Statewide Transportation Managers meetings and the Massachusetts Association of Regional Planning Agencies, works to strengthen communication and coordination with its counterpart regional planning agencies around the state. MAPC coordinates with other regional planning agencies that compose the Boston Transportation Management Area.

As the certification documents, including the TIP, are developed in the coming year, MAPC will direct particular attention toward including land use planning issues in them and ensuring that the documents are coordinated with the implementation of the comprehensive regional growth plan, MetroFuture.

Support of the Public Participation Process for Metropolitan Planning Documents: MAPC participates in the public involvement subcommittee of the Transportation Planning and Programming Committee, which is charged with developing and evaluating new public involvement programs for the region. MAPC is also an active participant in the Regional Transportation Advisory Council meetings.

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



STAFF: Metropolitan Area Planning Council

CLIENT: Boston Region Metropolitan Planning Organization

ID #: MAPC 1

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

Recertification: In FFY 2009, MAPC will continue to work with elected officials, state and federal representatives, the Regional Transportation Advisory Council, and other interested parties to review, and suggest possible revisions to, the MPO’s Memorandum of Understanding (MOU). We will contact municipal officials, the business community, community-based organizations, and the MAPC subregions for input and advice.

FFY 2009 Activities and Expected Work Products: Interagency coordination, work scopes, participation in advisory and corridor committees, public participation, reports to the MAPC officers and to the MAPC Executive Committee, FFY 2009 MPO elections, MPO recertification and a revised MOU, if necessary, and attendance at relevant meetings.

This project supports the 3C planning process activities outlined in this chapter, as well as the development of the RTP, the TIP, and the UPWP. It is also closely coordinated with the MetroFuture project described in Chapter 6.

FHWA/FTA Grant Application Task and Element: 44.26.08

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
		\$185,000	\$185,000	\$129,500			\$55,500			



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 11131&32

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

The primary purpose of this project is to foster awareness and consideration of regional equity/environmental justice transportation needs in MPO planning, specifically in relation to the RTP, the UPWP, the TIP, the MMS report, air quality conformity determinations, environmental impact studies, and project specific work products. This will be done primarily through continued outreach to minority and low income populations. Community organizations will be interviewed to identify transportation needs, solicit ideas for improvements, and expand the universe of possible entities to be contacted.

Work will also include managing the region's Coordinated Human-Services Transportation Plan and conducting the related outreach, particularly that supporting several Federal Transit Administration programs which target low income populations, elderly individuals, and people with disabilities in the region: Job Access and Reverse Commute, New Freedom, and Transportation for Elderly Individuals and Individuals with Disabilities.

In addition, CTPS staff will conduct the following studies:

Transportation Needs Assessment of Low Income and Minority Elderly Population: This project will study the transportation needs of low income and minority elderly people and identify potential solutions to mobility problems. Tasks include: analyzing distribution of low income and minority elderly households; identifying travel need characteristics and destinations by trip types; determining appropriate transportation services and comparing to existing services; identifying potential providers.

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 to meet the needs of both low income and minority elderly individuals and the needs of low income and minority individuals for employment related trips. This will include: identifying existing job access/reverse commute and elderly transportation services; determining the distribution of low income and minority elderly households; identifying travel need characteristics and destinations by trip types for both groups, identifying transportation analysis zones with high percentages of low income and minority residents; and assessing the appropriateness of sharing vehicles/providers.

FFY 2009 Activities and Expected Work Products: In addition to the tasks identified above, CTPS will assist the MPO in applying previously adopted environmental justice measures to evaluate the achievement of the MPO's regional equity goals. As part of this work, the staff will also:

- Continue MPO outreach to minority and low income communities
- Continue to use year 2000 census data, where available; analyze other pertinent data; and/or develop information and data through direct interviews with affected populations or interest groups



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 11131&32

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

- Monitor developments at the Association of Metropolitan Planning Organizations and the U.S. Department of Transportation by participating in workshops, conferences, and seminars, as appropriate
- Provide summaries of interviews and other updates to the Transportation Planning and Programming Committee of the MPO
- Conduct environmental justice analyses as required

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

FHWA/FTA Grant Application Task and Element: 44.27.02

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$95,000			\$95,000	\$61,700			\$33,300			

**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 transportation 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.

Household travel surveys are the chief source of data for building travel models. The last time a regional household travel survey was conducted in the Boston region was 1991. A new household survey is being planned by the Executive Office of Transportation and Public Works' Office of Transportation Planning (EOT Planning), which will identify regional travel patterns that have almost certainly changed in the past 17 years, due partly to new transportation facilities, such as the Central Artery/Third Harbor Tunnel and commuter rail line extensions, and partly to changes in residence and employment locations. This survey will also provide updated information on factors that affect personal travel decisions. Examples include fuel costs, transit fares, highway speeds, and household incomes. In addition to providing data for rebuilding the model's existing travel modes, the household survey will also allow for the development of an activity-based model set, an emerging form of travel model that more accurately represents travelers' decision making processes.

Objectives of the current work program are to:

- Monitor and understand changes in federal requirements as they effects MPO modeling procedures
- Research ways in which the state-of-the-practice is changing, develop modifications in 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

The Executive Office of Transportation and Public Works' Office of Transportation Planning (EOT Planning) as the client is currently inviting bids for the Massachusetts Statewide Household Travel Survey. CTPS staff will share oversight responsibilities with the client on this project. The purpose of the Massachusetts Statewide Household Travel Survey is 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.



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 11244

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

FFY 2009 Activities and Expected Work Products:

- Evaluate available options for replacing EMME/2 software and incorporate the CTPS model set in the selected new software.
- Incorporate new or advanced techniques into the regional travel-forecasting model set. 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 RTP and the TIP.
- In preparation for the regional household survey, begin pre-survey activities such as developing a work plan to conduct the survey. The pre-survey tasks will include working with the consultant to develop a sampling plan and the survey instrument, beginning a publicity campaign, and conducting and evaluating the results of a pilot survey.
- It is anticipated that the main survey itself will commence in and continue through FFY 2009.

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 RTP and the TIP.

FHWA/FTA Grant Application Task and Element: 44.26.04

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$590,000			\$590,000	\$383,500			\$206,500			



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 10101

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

JOURNEY TO 2030, The Boston Region MPO’s current regional transportation plan (RTP), sets forth a 23-year, financially constrained plan for federally funded surface transportation improvements. The MPO adopted this RTP in April 2007. At that time, the MPO determined that an RTP amendment would be required within the next fiscal year based on issues and comments that arose through the RTP development process. The issues that are being addressed in this amendment include:

- Revisions to the 2030 demographic forecasts for inclusion in the transportation demand model based on MetroFuture.
- Changes to the recommended list of projects once revisions to the SIP for Attainment of Air Quality Standards are approved by EPA and DEP. The RTP is required to include the projects that are in the SIP.
- Discussion of illustrative projects.

Work on the RTP amendment was included in the 2008 UPWP and contained a discussion of these issues with analyses, document preparation, and outreach to the public on results of revised scenarios modeled by the MPO. This work included presenting to the public the projected benefits to the region and to environmental justice communities resulting from the recommended RTP projects and programs.

FFY 2009 Activities and Expected Work Products: Continued work on revisions to the RTP, ongoing consideration of the MPO’s regional equity/environmental justice input and of MetroFuture recommendations, consultation with the Regional Transportation Advisory Council, additional analyses as requested by the Transportation Planning and Programming Committee, model runs, as required, public outreach regarding amendments to the RTP, preparation of informational materials, and draft and final documents

This project is supported by 3C planning process support activities, the air quality work, and the accessible formats project presented in this chapter. It will also be closely coordinated with the MPO’s Title VI project and the Regional Equity/Environmental Justice project also in this chapter.

FHWA/FTA Grant Application Task and Element: 44.23.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$50,000			\$50,000	\$32,500			\$17,500			



SUBREGIONAL SUPPORT ACTIVITIES

STAFF: Metropolitan Area Planning Council

CLIENT: Boston Region Metropolitan Planning Organization

ID #: MAPC 2

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

The MAPC region consists of 101 cities and towns. This region has been 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.* These include the policies, goals, and objectives of the RTP, and the coordinators also explain the TIP, the Mobility Management System (MMS), transportation demand management opportunities, and the Program for Mass Transportation. In addition, the coordinators actively engage subregional council members in MetroFuture.

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 ensure that 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 regionwide and statewide transportation meetings.

* In the case of the MetroWest Growth Management Committee, the subregion is independently staffed and provides subregional services under an agreement with MAPC. MAPC pays 25% of the director’s salary.

FFY 2009 Activities and Expected Work Products: Preparation of monthly meeting agendas for transportation topics at subregional meetings, coordination with transportation agencies, reviews of traffic studies in subregions, reports to the Transportation Planning and Programming Committee, support for subregional and corridor advisory committee meetings, and assistance in setting project priorities.

This project supports community involvement in the development of transportation planning documents.

FHWA/FTA Grant Application Task and Element: 44.26.02

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
		\$126,880	\$126,880	\$88,815			\$38,065			



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 proposed improvements to the metropolitan area's transportation system. Although federal regulations require the TIP to be updated every four years, the state and Massachusetts' MPOs have committed to annual updates.

Development: TIP development is ongoing throughout the year with the updating of the MPO's project database occurring weekly. The projects in the database are sorted by several criteria to provide a smaller subset for consideration for TIP programming. This subset includes projects programmed in the previous TIP, enhancement projects, transportation demand management projects, projects that address a specific safety need, and projects that are at 25% design or higher. CTPS reviews and evaluates all of these projects based on the TIP criteria (see Appendix B of the TIP). In addition, the MPO provides opportunities for input into the TIP development process by hosting municipal and agency TIP Days. After a preliminary evaluation by staff, the MPO reviews the assessment. The staff prepares recommendations and working material for MPO use in developing a draft TIP, which is released for a public comment period in June or July. After consideration of public comments, the TIP is typically finalized in August.

Project Evaluation: The project evaluation process for the TIP continues to evolve and MPO participation in MassHighway's project development process continues to develop, as called for in its *Project Development and Design Guide*. CTPS will continue to conduct project evaluations for the MPO's Transportation Planning and Programming Committee and to support the Committee's TIP Criteria Task Force in reviewing and assessing the efficacy of the TIP project evaluation process, including the procedures and instruments used for the FFYs 2009–2012 TIP and the development of recommendations for revisions to the selection process for the FFYs 2010–2013 TIP. In addition, the staff is currently developing a pilot program to further evaluate safety projects for solution effectiveness.

Information flow: CTPS will continue to provide for the ongoing, two-way flow of information between the MPO, the municipalities and their representatives, and state and federal agencies. This will involve collecting and reporting to the MPO relevant information on projects' status (including planning, design, permitting, right-of-way, and cost), TIP finances, and process related issues. Members of the public will be informed on pertinent TIP related matters.

Public Review: The staff is responsible for circulation of the TIP for public review. The release of the circulation draft and all amendments are announced as specified in the MPO's Public Participation Program.



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 10103

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

Certification: CTPS performs all tasks necessary for TIP certification, including:

- Preparing and producing all TIP related informational materials and analysis, and draft and final documents
- Coordinating public review of all drafts and preparing responses to comments
- Scheduling and staffing meetings of the MPO; the Transportation Planning and Programming Committee and its TIP Criteria Task Force; the Regional Transportation Advisory Council; the MAPC subregions; and MPO workshops, open houses, and “how to” seminars.

Modifications/Amendments: CTPS drafts amendments and/or modifications, and handles all procedural steps necessary to properly adopt and certify them. (See Public Review, on the previous page.)S

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

FFY 2009 Activities and Expected Work Products: Document development, project evaluation, information-flow update and management, coordination of public review and certification, and GIS support for the FFYs 2010–2013 TIP and amendments and/or adjustments to the FFYs 2009–2012 TIP, attendance at relevant meetings, and maintenance of a database for tracking projects.

See CTPS And MAPC work efforts related to the TIP presented in this chapter.

FHWA/FTA Grant Application Task and Element: 44.25.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$150,000			\$150,000	\$105,000			\$45,000			



STAFF: Metropolitan Area Planning Council

CLIENT: Boston Region Metropolitan Planning Organization

ID #: MAPC 3

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

MAPC chairs the TIP Criteria Task Force of the Transportation Planning and Programming Committee, where criteria to assist in the evaluation of TIP projects were developed for the MPO and applied most recently to the FFYs 2009–2012 TIP. These criteria will be reviewed, evaluated, and probably revised during the first half of FFY 2009. Changes adopted by the Transportation Planning and Programming Committee will be applied beginning with the FFY 2010 TIP annual element. Particular attention will be paid to ensuring that the criteria reflect the adopted policies and the regional development plan of the MPO. Additional work will be done to develop criteria for the MPO to use in determining whether to encourage proponents to pursue proposed projects through the TIP. MAPC will work to revise and apply the economic development and land use criteria for the TIP.

Land use criteria, and the techniques developed by MAPC for applying them based on zoning, will be also be reviewed, and revisions will be suggested based on how successful the criteria were in identifying projects that promote and support the Commonwealth’s sustainable development principles and the adopted regional development plan, MetroFuture.

Development of the TIP is accomplished through work with other regional planning agencies, MPOs, state and federal agencies, elected officials in the MAPC subregions, MAPC community representatives, TIP contacts, and private providers of transportation services. Representatives of the business community, local institutions, and community-based organizations are also consulted. This is an important information and education function of the 3C planning process. MAPC works with the communities and MPO members to insure that the information needed for project selection using the TIP criteria will be made available in a timely fashion.

FFY 2009 Activities and Expected Work Products: After the TIP development process is completed for the FFY 2009 TIP, MAPC expects to continue to work with the Transportation Planning and Programming Committee and the TIP Criteria Subcommittee to improve the use and application of these criteria as a tool for making MPO programming decisions.

FHWA/FTA Grant Application Task and Element: 44.25.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
		\$65,000	\$65,000	\$45,500			\$19,500			

UNIFIED PLANNING WORK PROGRAM (CTPS)**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 coordinates all phases of this work, from document development and budget preparation to public review and comment and to submittal to federal agencies for certification. CTPS also coordinates the review and endorsement of any amendments to the UPWP.

FFY 2009 Activities and Expected Work Products: Any amendments and adjustments to the FFY 2009 UPWP, the FFY 2010 UPWP, public outreach in document development and review, 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 environmental justice and public outreach activities described in this chapter.

FHWA/FTA Grant Application Task and Element: 44.21.00**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$55,600			\$55,600	\$36,100			\$19,500			

UNIFIED PLANNING WORK PROGRAM (MAPC)**STAFF: Metropolitan Area Planning Council****CLIENT: Boston Region Metropolitan Planning Organization****ID #: MAPC 4****BUDGET: Not applicable to ongoing projects****STATUS: Ongoing**

MAPC prepares UPWP project listings and budget information for activities it expects to conduct using federal highway and transit funds and provides monthly reports to the MPO's Transportation Planning and Programming Committee and MassHighway on these activities. MAPC also provides general project information on transportation related activities funded from other sources.

MAPC, through its work on the Transportation Planning and Programming Committee, is also involved in the development of the annual UPWP work program. As work scopes for specific projects are developed, MAPC assists, when appropriate, in developing these scopes, especially whenever the project involves a link between transportation and land use issues.

FFY 2009 Activities and Expected Work Products: UPWP project listings and monthly reports on UPWP activities to the Transportation Planning and Programming Committee. Provide assistance on the annual development of the UPWP and support for the development of specific work scopes. 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: 44.21.00**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
		\$20,000	\$20,000	\$14,000			\$6,000			

6 PLANNING STUDIES

The projects in this chapter are studies that will be conducted during federal fiscal year 2009. 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.

Project ID #	Project Name	Page
23223	2008–09 I-93 North and Southeast Xway HOV Lane Monitoring	6-2
13243	Arterial Traffic-Signal Improvements and Coordination	6-3
23316	Assembly Square Station Feasibility Study	6-4
13208	Bicycle/Pedestrian Support Activities	6-5
MAPC 5	Corridor/Subarea Planning Studies: Land-Use Reviews	6-6
22328	Green Line Extension Environmental Review Support	6-7
11362	Inner Suburban Mobility Study	6-8
MAPC 6	Land-Use Development Project Reviews	6-9
22205	Massachusetts Turnpike Boston Ramps Study	6-10
22119	Massport Transportation Studies	6-11
10116	MBTA Program for Mass Transportation	6-12
11123	Mobility Management System Monitoring Program	6-13
82104	North Shore Transportation Improvements	6-14
13244	Operational Improvements at Congested & High-Crash Locations	6-15
22331	Red Line–Blue Line Connector Study Support	6-16
MAPC 7	Regional Vision: MetroFuture	6-17
43108	Route 126 Corridor Study	6-18
33225	Route 3 South Corridor Study	6-19
13245	Safety Evaluation of TIP Projects	6-20
23311	Silver Line Project Support	6-21
43211	South Coast Commuter Rail Extension	6-22
11351	State Fiscal Years 2009–2011 MBTA Service Benchmarking	6-23
11354	Suburban Mobility/Transportation-Demand Management Support	6-24
22329	Urban Ring Phase 2 Revised DEIR/DEIS Support	6-25



STAFF: Central Transportation Planning Staff

CLIENT: Executive Office of Transportation and Public Works

ID #: 23223

BUDGET: \$57,000

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 it to calculate anticipated time savings and occupancy changes over time.

FFY 2009 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 four technical memoranda annually (one for each season) to document data collection, analysis, and results.

FHWA/FTA Grant Application Task and Element: 44.24.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$57,000			\$57,000		\$57,000					



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 13243

BUDGET: \$45,000

STATUS: 0%

The Mobility Management System inventories revealed that many MPO arterials would benefit from traffic-signal coordination. If traffic-signal timing is rarely reviewed, it can result in outdated timing patterns that do not reflect current traffic and pedestrian needs. Signals that lack coordination (when qualified) or are inadequately coordinated force motorists to stop at multiple adjacent signals, resulting in significant travel delays. This study would be part of a program of periodic reviews of corridor signal-timing plans for improved operations and coordination. Priority would be given to high-volume and high-crash-rate arterials.

FFY 2009 Activities and Expected Work Products: A work scope outlining study activities, locations, and expected work products will be presented to the Boston Region MPO’s Transportation Planning and Programming Committee for approval to proceed.

This project will inform decisions related to the Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP.)

FHWA/FTA Grant Application Task and Element: 44.26.05

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$45,000			\$45,000	\$45,000						



STAFF: Central Transportation Planning Staff

CLIENT: MBTA

ID #: 23316

BUDGET: \$42,000

STATUS: 0%

CTPS will assist the MBTA with the preparation of a New Starts application for the construction of a new Orange Line Station at Assembly Square in Somerville. The new station would be located between the existing Wellington Station in Medford and Sullivan Square Station in the Charlestown section of Boston.

FFY 2009 Activities and Expected Work Products: Activities and work products associated with this project will continue as described above using MBTA FFY 2008 Section 5303 funds.

This project is related to an ongoing, regionally significant project identified in the RTP and is included in the MBTA's Program for Mass Transportation (PMT).

FHWA/FTA Grant Application Task and Element:

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO §5303	MBTA §5303	MBTA	Other
\$42,000			\$42,000						\$42,000	

BICYCLE/PEDESTRIAN SUPPORT ACTIVITIES



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 13208

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

Bicycle and pedestrian planning studies are usually identified during the UPWP year as part of a collaborative process with MPO members, communities, and bicycle/pedestrian advisory groups and will be conducted under this program.

FFY 2009 Activities and Expected Work Products: Technical assistance, data collection, review of materials, and attendance at state, regional, and local forums and committee meetings. The staff also plans to undertake the following tasks:

Walkable Communities Workshops: (\$33,800) This well established MPO-supported program provides technical assistance on pedestrian and bicycle issues and makes recommendations for improvements. Six or more workshops in volunteer communities will be presented this year.

Ongoing Bicycle and Pedestrian Work Program: (\$33,200) Tasks not related directly to separate studies include the following:

- Coordination with state agencies, MAPC, other MPOs, the Safe Routes to Schools Program at MassRIDES, WalkBoston, MassBike, and other groups with regard to bicycle and pedestrian planning for the region
- Design, collection, and organization of bicycle/pedestrian volumes and crash data
- Ongoing provision of information and technical support to communities on bicycle/pedestrian issues
- Update of the Pan-Massachusetts Challenge bicycle map used for the Jimmy Fund ride
- An update to an aqueduct study conducted in 1998.

FHWA/FTA Grant Application Task and Element: 44.24.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$67,000			\$67,000	\$67,000						



STAFF: Metropolitan Area Planning Council

CLIENT: Boston Region Metropolitan Planning Organization

ID #: MAPC 5

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

This UPWP task includes funding to support MAPC's work on corridor studies in the region. One study currently underway provides information and preliminary analyses for the development of transportation design concepts and mobility strategies to address current and future development opportunities, as requested by municipalities, in the vicinity of the interchanges of I-495 and I-290; I-495 and Route 9; and I-495 and I-90 (Massachusetts Turnpike), in cooperation with the Central Massachusetts Regional Planning Commission.

In addition, this task includes the development of tools to help identify potential development sites and key development parcels in the region and their related transportation characteristics. This project will build on other work conducted by MAPC including the Transportation, Community, and System Preservation (TCSP) project, which involved evaluating congestion and other issues in the I-495 corridor; MetroFuture modeling of the I-495 corridor; pre-disaster mitigation plans; local technical assistance work; subregional forums; and Massachusetts Environmental Policy Act (MEPA) reviews. In addition to these two efforts, a limited amount of funding is included under this task for developing work programs for future corridor and subarea studies.

FFY 2009 Activities and Expected Work Products: MAPC will identify one or more corridor studies and work to create tools that will help identify key development parcels and related transportation characteristics.

FHWA/FTA Grant Application Task and Element: 44.23.02

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
		\$116,100	\$116,100	\$81,270			\$34,830			

GREEN LINE EXTENSION ENVIRONMENTAL REVIEW SUPPORT**STAFF: Central Transportation Planning Staff****CLIENT: Executive Office of Transportation and Public Works****ID #: 22328****BUDGET: \$100,000****STATUS: 80%**

This project is a legal commitment under the proposed amendment to the 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 provide needed analytical support for the development of a draft environmental impact report and federal environmental review documents, including travel demand forecasting.

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

FHWA/FTA Grant Application Task and Element: 44.23.02**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$20,000			\$20,000			\$20,000				



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 11362

BUDGET: Not applicable to ongoing projects

STATUS: 0%

Over the past few decades, inner suburban communities in the MBTA service area along the Route 128 beltway have grown considerably, in terms of both residential and commercial/office development. As a result, substantial intrasuburban travel demands have developed in a nominally circumferential sense. These changes in travel demands suggest a need to reexamine the orientation of bus services in inner suburban communities. One specific area of interest that this study will address is the potential for new transit “hubs,” or common service corridors that directly serve densely developed commercial and residential centers and promote circumferential connectivity. The experiences of other similarly sized metropolitan areas in serving inner-suburban travel markets will be reviewed with respect to vehicle types used, service frequency, span of service, and coverage. This study would also consider the institutional and capital requirements associated with any reorientation or expansion of fixed-route service, whether provided by the MBTA or another existing (or future) entity. It will also take into consideration existing and planned land use development along the Route 128 corridor.

FFY 2009 Activities and Expected Work Products: A work scope outlining study activities, locations, and expected work products will be presented to the Transportation Planning and Programming Committee for approval to proceed.

FHWA/FTA Grant Application Task and Element: 44.24.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$75,000			\$75,000				\$75,000			

LAND USE DEVELOPMENT PROJECT REVIEWS



STAFF: Metropolitan Area Planning Council

CLIENT: Boston Region Metropolitan Planning Organization

ID #: MAPC 6

BUDGET: Not applicable for ongoing projects

STATUS: Ongoing

Regionally significant land use development projects will be reviewed with respect to state and regional land use goals and development policies and their impacts on the transportation system. In particular, projects will be reviewed for consistency with MetroFuture, which is MAPC’s comprehensive regional plan for the Boston region, and for consistency with the Commonwealth’s sustainable development principles and MAPC’s smart-growth principles. The project reviews will also be used to determine whether the a proposed development will have a positive or negative impact on balanced regional development. MAPC tracks all projects reviewed in its region under the MEPA and provides a regional planning analysis to the Secretary of Energy and Environmental Affairs for all developments considered to have 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 will continue to participate in a variety of specific project review activities in FFY 2009, including detailed analyses of large-scale projects with significant regional and subregional impacts. In limited cases, MAPC will participate in local review processes for regionally significant projects as a way of becoming involved earlier in project review and planning in order to have a greater impact.

MAPC also reviews notices of “offered railroad property” from the Executive Office of Transportation and Public Works (EOTPW), consults with municipalities as necessary about that property, and provides appropriate input to the municipalities involved. Often, these cases involve rail trails, but they may also involve other types of proposed development. In addition, MAPC staffs the Metropolitan Highway System Advisory Board, conducting reviews of projects occurring on or above Massachusetts Turnpike property. MAPC will work to coordinate these efforts with work funded by the UPWP.

FFY 2009 Activities and Expected Work Products: MAPC will continue to participate in a variety of specific project reviews and related activities, work with MEPA staff to increase the value of reviews, and coordinate MEPA comments with transportation agencies, where possible. In addition, MAPC will continue to review and respond to notices of offered railroad property.

FHWA/FTA Grant Application Task and Element: 44.23.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
		\$125,350	\$125,350	\$62,760			\$62,590			



STAFF: Central Transportation Planning Staff

CLIENT: Executive Office of Transportation and Public Works

ID #: 22205

BUDGET: \$75,000

STATUS: 0%

The Office of Transportation Planning (EOT Planning) is conducting a study that will evaluate and address issues of connectivity between the Boston neighborhoods of Back Bay and the Fenway, the Longwood Medical Area, and the section encompassing the Seaport District, Logan Airport, and the Central Artery. The anticipated growth in these areas and neighborhoods, combined with traffic generated by the existing educational, medical, community, and cultural institutions, the convention center, and area residents, could lead to worsening congestion on the local roadway and regional highway system.

FFY 2009 Activities and Expected Work Products: CTPS will provide alternatives analysis support for this project.

See Appendix A for related work being conducted by EOTPW and MassHighway.

FHWA/FTA Grant Application Task and Element:

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$75,000			\$75,000		\$75,000					



STAFF: Central Transportation Planning Staff

CLIENT: Massport

ID #: 22119

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

CTPS has historically provided technical assistance to Massport’s Department of Aviation Planning and Development. The services typically involve supporting ground-access planning, data collection and analysis, modeling, air quality analysis, and additional, to-be-determined, transportation planning activities. Particular attention will be paid to opportunities to improve intermodal connectors, where appropriate.

FFY 2009 Activities and Expected Work Products: Passenger forecasts and air quality analysis results associated with the Massachusetts Port Authority Ground Access Policy Plan; a summary of Logan Airport shuttle ridership counts; on-call reviews of consultant recommendations of Logan Airport shuttle network modifications related to the new centralized rental-car facility, recommendations of new and/or improved HOV public transportation connecting Logan Airport to locations outside of Boston’s urban core; and on-call technical support to Massport’s Economic Planning & Development Department.

FHWA/FTA Grant Application Task and Element: 44.24.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$50,000			\$50,000							\$50,000

MBTA PROGRAM FOR MASS TRANSPORTATION**STAFF: Central Transportation Planning Staff****CLIENT: Boston Region MPO/MBTA****ID #: 10116****BUDGET: \$500,200****STATUS: 90%**

The Program for Mass Transportation (PMT) defines a long-range vision for the MBTA and identifies potential infrastructure investments. The PMT is a critical input into the MBTA's Capital Investment Program (CIP) and the MPO's RTP and TIP. The MBTA requested that Boston Region MPO staff develop the next PMT, which will be in FFY 2009. In FFY 2008, staff developed mobility problem statements summarized by corridor; identified potential solutions to mobility problems; conducted cost/benefit assessments of potential mobility solutions; and proposed improvement strategies summarized by corridor and/or theme, addressing system preservation, service enhancement, and system expansion needs.

FFY 2009 Activities and Expected Work Products: Staff will produce a final Program for Mass Transportation for horizon year 2030.

FHWA/FTA Grant Application Task and Element: 44.23.02

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$79,000			\$79,000				\$15,000		\$64,000	

MOBILITY MANAGEMENT SYSTEM MONITORING PROGRAM



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 11123

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

The Mobility Management System (MMS) in the Boston Region MPO area will continue monitoring highways, arterial roads, transit services, park-and-ride lots, and bicycle/pedestrian facilities. In addition, a new work program outlining the tasks for the next MMS cycle will include a review of the status of intermodal connectors, identification of existing conditions, and a recommendation on appropriate improvements in accordance with federal guidance. During work scope development, consideration will also be given, to conducting an inventory of park-and-ride lots and an analysis of transportation management association services.

FFY 2009 Activities and Expected Work Products:

- Perform transit monitoring
- Develop conclusions and recommendations, and prepare final report
- Prepare a work program for the next MMS cycle and implement its tasks as scheduled

This project informs decisions related to the RTP and the TIP, and identifies areas requiring additional study through the Unified Planning Work Program (UPWP).

FHWA/FTA Grant Application Task and Element: 44.26.05

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$220,000			\$220,000	\$220,000						



STAFF: Central Transportation Planning Staff

CLIENT: Executive Office of Transportation and Public Works

ID #: 82104

BUDGET: \$179,000

STATUS: Ongoing

EOTPW and the MBTA are working toward completion of a draft environmental impact statement to identify a locally preferred alternative (LPA) for the Revere-to-Lynn corridor. The two main alternatives involve: (1) running parallel to the length of the existing commuter rail line with a trestle through Rumney Marsh, and (2) using the narrow gauge right-of-way that travels near the Point of Pines neighborhood and then parallels the existing rail line in Lynn. Pending a decision on an LPA, project advancement may require additional support work.

FFY 2008 Activities and Expected Work Products: Staff will define alternatives, calibrate the model to existing conditions, evaluate alternatives, and document findings.

This project supports MBTA work efforts described in Appendix A. It is also related to an ongoing, regionally significant project identified in the RTP and is included in the PMT.

FHWA/FTA Grant Application Task and Element: 44.23.02

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$50,000			\$50,000			\$50,000				

OPERATIONAL IMPROVEMENTS AT CONGESTED & HIGH CRASH LOCATIONS



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 13244

BUDGET: \$45,000

STATUS: 0%

The level of service along an arterial roadway is largely dictated by the quality of flow through its intersections. This study will focus on isolated, highly congested intersections with signals and high crash rates. Mobility Management System monitoring indicates that often drivers must stop at a red light when there are no vehicles or pedestrians at the crossing street, or drivers may have to wait through more than one signal cycle to proceed through the intersection. These conditions indicate that pavement sensors are either acking or broken , or that signal-timing adjustments are needed. Up to seven intersections will be examined for operational and safety inefficiencies.

This project will be an integral part of the Massachusetts Highway Safety Improvement Program (which begins October 1, 2008), and is also a SAFETEA-LU Safety and Security focus area. It will improve difficult or inappropriate operational conditions and promote safety and air quality.

FFY 2009 Activities and Expected Work Products: A work scope outlining study activities, locations, and expected work products will be presented to the Transportation Planning and Programming Committee for approval to proceed.

This project will inform decisions related to the Regional Transportation Plan and the Transportation Improvement Program.

FHWA/FTA Grant Application Task and Element: 44.26.05

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$45,000			\$45,000	\$45,000						

RED LINE–BLUE LINE CONNECTOR STUDY SUPPORT**STAFF:** Central Transportation Planning Staff**CLIENT:** Executive Office of Transportation and Public Works**ID #:** 22331**BUDGET:** \$75,000**STATUS:** 30%

Design for this project is a legal commitment under the proposed amendment to the State Implementation Plan. It will involve the development of a draft environmental impact report as well as planning and engineering documents for a 0.4-mile extension of the Blue Line from Government Center Station to the Charles/MGH Station on the Red Line.

FFY 2009 Activities and Expected Work Products: CTPS will provide analytical support for EOTPW’s advancement of the project into the state environmental review process, including travel demand forecasting.

This work is related to a recommended, regionally significant project identified in the RTP.

Also see Appendix A for related work.

FHWA/FTA Grant Application Task and Element: 44.23.02**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$75,000			\$75,000			\$75,000				



STAFF: Metropolitan Area Planning Council

CLIENT: Boston Region Metropolitan Planning Organization

ID #: MAPC 7

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

Adoption of the MetroFuture plan and discussion of the regional implementation strategy occurred in May 2008. This UPWP task will support the implementation of MetroFuture, particularly in relation to its transportation and land-use elements for FFY 2009. One of the core strategies of MetroFuture is to expedite transportation improvements through cost savings, revenue enhancements, transparent public decision making, and coordination of land use and transportation decisions. MetroFuture will study other transportation systems and draw on internal and external expertise regarding the Massachusetts model to recommend improvements in transparency, accountability, and cost controls. MAPC will also work with local and state policy makers to align land use decisions with transportation investment.

The MetroFuture plan will prioritize corridor planning by creating systematic mechanisms to coordinate state and local actions across disciplines in corridors where key transportation improvements are anticipated. In order to do so, MetroFuture will study the current disconnect between transportation and other infrastructure investments and propose a system involving regional, local, and state representation to bridge that gap. MetroFuture data will be used to identify and promote areas in the region where development should be prioritized in order to create the density necessary to support public transit. Alternatively, this also means indicating areas where conservation of undeveloped land rather than development should be promoted. This upfront planning will help to map out where transit extensions are necessary and help create a long-term vision for transit investment in the region.

FFY 2009 Activities and Work Products: Short- and longer-term recommendations for implementing the transportation and land-use components of MetroFuture. Study of relevant examples from other states and development of priority areas for development and conservation. MAPC staff will hold subregional meetings, and leadership dialogues, and will conduct selective outreach to review barriers and solutions and to begin to build regional consensus for recommended changes. Public information campaign to educate and gain support for the preferred regional scenario and associated implementation steps.

FHWA/FTA Grant Application Task and Element: 44.23.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
		\$100,000	\$100,000	\$70,000			\$30,000			

ROUTE 126 CORRIDOR STUDY**STAFF: Central Transportation Planning Staff****CLIENT: Boston Region Metropolitan Planning Organization****ID #: 43108****BUDGET: \$116,500****STATUS: 0%**

CTPS will conduct a corridor study of Route 126 from Bellingham to Framingham, which will include analysis of multimodal transportation alternatives to ensure future mobility. The safety of pedestrians using the shopping centers near the intersection of Hartford Avenue and Route 126 will also be addressed. To limit the costs of this analysis, the study will focus on key sections /intersections that will be determined in later discussions with the SWAP and MetroWest subregions regarding the final scope of the project.

FFY 2009 Activities and Expected Work Products: A work scope outlining study activities, locations, and expected work products will be presented to the Transportation Planning and Programming Committee for approval to proceed.

This project will inform decisions related to the RTP and the TIP.

FHWA/FTA Grant Application Task and Element: 44.26.05

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$116,500			\$116,500	\$101,000			\$15,500			

ROUTE 3 SOUTH CORRIDOR STUDY**STAFF:** Central Transportation Planning Staff**CLIENT:** MassHighway**ID #:** 33225**BUDGET:** \$75,000**STATUS:** 0%

This project consists of the addition of a general-purpose travel lane generally between Exit 16/Route 18 in Weymouth and Exit 11/Route 14 in Duxbury, replacing the shoulder's peak-hour use as a third lane. The current effort is the completion of a supplemental draft environmental impact report/environmental assessment.

FFY 2009 Activities and Expected Work Products: CTPS will provide updated traffic projections to support the publication of the document for public review.

This work is related to a recommended, regionally significant project identified in the RTP.

Also see Appendix A for related work.

FHWA/FTA Grant Application Task and Element:**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$75,000			\$75,000		\$75,000					

SAFETY EVALUATION OF TIP PROJECTS**STAFF:** Central Transportation Planning Staff**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** 13245**BUDGET:** \$25,000**STATUS:** 0%

In this study, staff will perform a pilot test in which several TIP projects are subjected to an analysis of their potential for crash reduction and ability to improve safety.

FFY 2009 Activities and Expected Work Products: A work scope outlining study activities, locations, and expected work products will be presented to the Transportation Planning and Programming Committee for approval to proceed.

This project will inform decisions related to the TIP.

FHWA/FTA Grant Application Task and Element: 44.26.05

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$25,000			\$25,000	\$25,000						

SILVER LINE PROJECT SUPPORT**STAFF:** Central Transportation Planning Staff**CLIENT:** MBTA**ID #:** 23311**BUDGET:** \$367,600**STATUS:** 90%

CTPS will continue to assist the MBTA with Silver Line planning, including the annual New Starts Report for Silver Line Phase III and support in the preparation of a draft environmental impact statement/environmental impact report.

FFY 2009 Activities and Expected Work Products: Activities and work products associated with this project will continue as described above.

This project is related to an ongoing, regionally significant project identified in the RTP and is included in the PMT.

FHWA/FTA Grant Application Task and Element: 44.23.02

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$50,000			\$50,000						\$50,000	

SOUTH COAST COMMUTER RAIL EXTENSION



STAFF: Central Transportation Planning Staff

CLIENT: Executive Office of Transportation and Public Works

ID #: 43211

BUDGET: \$90,000

STATUS: 50%

EOTPW 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 will include the construction of passenger stations and terminal layover facilities.

FFY 2009 Activities and Expected Work Products: CTPS will complete the extension of the ridership model to the South Coast communities; provide travel-demand forecasting estimates for each of the proposed alternative routes and modes; and provide ranges of ridership estimates for a smart growth land use scenario.

This work is related to a recommended, regionally significant project identified in the RTP.

Also see Appendix A for related work.

FHWA/FTA Grant Application Task and Element: 44.23.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$50,000			\$50,000			\$50,000				



STAFF: Central Transportation Planning Staff

CLIENT: MBTA

ID #: 11351

BUDGET: Not applicable for ongoing projects

STATUS: Ongoing

CTPS will provide the MBTA with technical assistance on collecting data and conducting assessments of comparative service quality in targeted minority and low-income communities versus the transportation system as a whole. Information on crowding, schedule adherence, shelter placement, scheduled service frequency, service coverage, access to key destinations, vehicle age and condition, parking facilities, and other topics will be gathered and used in the assessments. In addition, the impacts of proposed transit service changes on targeted minority and low-income communities will also be reviewed. These activities help fulfill annual monitoring required as part of the MBTA Title VI Program. All transit modes will be addressed, and the assessments will be compiled triennially for Federal Transit Administration reporting.

FFY 2009 Activities and Expected Work Products: CTPS will provide documentation of selected level-of-service evaluations for FFY 2009 MBTA revenue service and amenities. This project is partially funded with \$11,000 in MBTA FFY 2008 Section 5303 funds.

FHWA/FTA Grant Application Task and Element: 44.24.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$51,000			\$51,000					\$40,000	\$11,000	



STAFF: Central Transportation Planning Staff

CLIENT: Boston Region Metropolitan Planning Organization

ID #: 11354

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

In parallel with work on the Inner Suburban Mobility Study, staff also provides ongoing support to the Suburban Mobility/Transportation Demand Management (TDM) Subcommittee of the MPO's Transportation Planning and Programming Committee.

FFY 2009 Activities and Expected Work Products: Staff will continue to provide technical assistance to the Suburban Mobility/TDM Subcommittee and to applicants for funding under the Suburban Mobility and TDM programs. Staff will also conduct public outreach to eligible entities on the solicitation of proposals for the funding programs.

This project carries out the RTP's policy on mobility and will inform decisions about future funding in the TIP.

FHWA/FTA Grant Application Task and Element: 44.26.05

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$28,000			\$28,000				\$28,000			

URBAN RING PHASE 2 REVISED DEIR/DEIS SUPPORT



STAFF: Central Transportation Planning Staff

CLIENT: Executive Office of Transportation and Public Works

ID #: 22329

BUDGET: \$275,000

STATUS: Ongoing

CTPS will continue to support EOTPW in the preparation of the revised draft environmental impact report/draft environmental impact statement (DEIR/DEIS) for Phase 2 of the Urban Ring project.

FFY 2009 Activities and Expected Work Products: CTPS will provide new travel-demand forecasting to reflect any changes to the region's demographic assumptions.

This work is related to a project included in the Regional Transportation Plan and the PMT. Also see Appendix A for EOTPW and MBTA related work for this project.

FHWA/FTA Grant Application Task and Element: 44.23.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$55,000			\$55,000		\$55,000					

7 TECHNICAL SUPPORT/OPERATIONS ANALYSIS PROJECTS

The projects in this chapter are studies that will be conducted during federal fiscal year 2009. 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.

Project ID #	Project Name	Page
MAPC 8	Alternative-Mode Planning and Coordination	7-2
11347	Assistance to MBTA Development	7-4
14312	Customer Satisfaction Review for MBTA TAP Pilot Program	7-5
14307	MBTA 2008 National Transit Database: Directly Operated	7-6
14306	MBTA 2008 National Transit Database: Purchased Bus	7-7
14311	MBTA 2009 National Transit Database: Directly Operated	7-8
14310	MBTA 2009 National Transit Database: Purchased Bus	7-9
11360	MBTA Bus Service Data Collection VI	7-10
14313	MBTA Commuter Rail Ridership Growth Strategy	7-11
23315	MBTA Dudley South/Silver Line Phase IV Corridor Assessment	7-12
MBTA 1	MBTA ITS Architecture	7-13
11359	MBTA Post-2007 Fare Increase Analysis	7-14
14303	MBTA Rider Oversight Committee Support	7-15
14309	MBTA Systemwide Onboard Passenger Survey	7-16
53307&53308	MetroWest RTA Service Planning Assistance	7-17
11111	Mobility Assistance Program and Section 5310 Review	7-18
11124	Statewide Planning Assistance	7-19
11363	Strategic Visioning for MBTA Bus Service	7-20
90040	Travel Operations Analysis	7-21

**STAFF:** Metropolitan Area Planning Council**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** MAPC 8**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

The Metropolitan Area Planning Council (MAPC) provides alternative-mode transportation planning support to the Boston Region MPO and municipalities in the MPO region for bicycle and pedestrian transportation, transportation demand management (TDM), and transit in areas currently underserved by the region's existing regional transit authorities. Efforts in the coming year will continue to focus on implementation of the regional bike plan, including the bicycle parking program, completion of the regional pedestrian plan, analysis of Congestion Mitigation Air Quality and Enhancement program applications, advancing the MPO's Suburban Mobility/TDM Subcommittee programs, and continued development of a Toolkit for Sustainable Mobility.

Suburban Mobility/TDM Program: MAPC will continue to work with the MPO to implement its Suburban Mobility/TDM program. This program funds services that improve the mobility of residents in areas currently unserved or underserved by transit. In federal fiscal year (FFY) 2008, MAPC focused particularly on improving the TDM aspect of the program. MAPC will also continue to work with the Suburban Mobility/TDM Subcommittee and CTPS to identify promising locations and ideas for future projects and to provide technical support and assistance to municipalities in developing these projects.

Congestion Mitigation and Air Quality (CMAQ): The federal Congestion Mitigation and Air Quality program provides funding to the Boston Region MPO for projects that reduce automobile congestion and improve air quality in the region. Work under this program includes coordinating with the MPO and the region's municipalities to identify potential projects eligible for funding, and providing technical support and assistance to municipalities in developing these projects. MAPC will continue to work with the Suburban Mobility/TDM Subcommittee, cities and towns, and agencies to suggest useful program concepts across modes for the CMAQ annual targets. MAPC will also work with the MPO and state agencies to implement improvements to the CMAQ program. Additionally, MAPC is a member of the statewide CMAQ Consultation Committee, which is responsible for reviewing potential projects and approving their eligibility.

Transportation Enhancement Program: MAPC provides technical assistance to, and reviews projects for, municipalities and organizations proposing transportation enhancements to the existing transportation system; screens proposals for completeness; and provides staff support for the regional Transportation Enhancement Selection Committee. MAPC will continue to visit project application sites, gather photo documentation, and meet on-site with proponents to more fully understand the proposed projects. This information will then be shared with the MAPC Regional Enhancement Committee to help that committee make more fully informed decisions on project proposals. In addition, MAPC expects to participate in the effort currently being undertaken by the Executive Office of Transportation and Public Works (EOTPW) to improve the implementation of the Enhancement Program.

Mobility Assistance Program: MAPC reviews proposals submitted to this EOTPW-administered statewide program. Current program guidelines require applicants to coordinate



STAFF: Metropolitan Area Planning Council

CLIENT: Boston Region Metropolitan Planning Organization

ID #: MAPC 8

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

with regional planning agencies and to provide regional service that is coordinated with other entities to eliminate duplicative service.

Bicycle and Pedestrian Activities: Work on the regional pedestrian plan will be completed in FFY 2009. Implementation of bicycle and pedestrian improvements will continue to be pursued in the development of the Transportation Improvement Program, and through assistance to communities preparing and implementing projects through various funding programs. MAPC will specifically focus on developing program concepts to increase pedestrian mobility in the MAPC region for consideration and support by the Boston Region MPO. In addition, MAPC will continue to operate and administer the Boston Region MPO's Regional Bike Parking Program.

Transportation Demand Management (TDM): TDM activities will receive additional emphasis in FFY 2009 as MAPC works with municipalities and other stakeholders to add to the Toolkit for Sustainable Mobility. This toolkit provides guidelines and standards for best practices for communities that wish to adopt practices leading to more sustainable methods of getting around. Based on initial community interest, MAPC developed a parking component of the toolkit in 2007. Development of additional bicycle topics was begun in 2008, and will be enhanced and added to the MAPC website in 2009. MAPC expects to complete one or two additional toolkit components in FFY 2009. Possible topics for this federal fiscal year include: planning for community-based transit services and development mitigation strategies.

The parking toolkit is available on the MAPC website and will be updated as needed. The toolkit has led to requests by communities and subregions for additional information and presentations. Based on past community interest, MAPC has allocated in this budget sufficient resources to provide technical assistance on parking issues to six communities, for up to three days each. This assistance will include participating in meetings, providing information, assisting with parking study design, and revising zoning regulations.

FFY 2009 Activities and Expected Work Products: MAPC will continue this ongoing work effort as described above, supporting the MPO subcommittees, developing the regional pedestrian plan and implementation strategies, and producing one or more new components of the Toolkit for Sustainable Mobility.

ALTERNATIVE-MODE PLANNING AND COORDINATION [CONT.]**STAFF:** Metropolitan Area Planning Council**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** MAPC 8**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing**FHWA/FTA Grant Application Task and Element:** 44.22.03**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
		\$195,000	\$195,000	\$136,500			\$58,500			

ASSISTANCE TO MBTA DEVELOPMENT**STAFF:** Central Transportation Planning Staff**CLIENT:** MBTA**ID #:** 11347**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

In addition to other projects presented in this UPWP, the MBTA identified a number of issues and projects through the 2003 Program for Mass Transportation process that also warrant further analysis and review. Example of types of projects that may be included are:

- MBTA Peer Property Performance Comparison
- MBTA Systemwide Travel-Time-Improvements Action Plan
- Technical support to the MBTA Rapid Transit Infrastructure Program

FFY 2009 Activities and Expected Work Products: Detailed work scopes outlining the new FFY 2009 projects listed above will be presented to the Transportation Planning and Programming Committee for approval to proceed. This project is partially funded with \$47,400 in FFY 2008 MBTA Section 5303 funds.

This project will further the implementation of the Regional Transportation Plan and the Program for Mass Transportation.

FHWA/FTA Grant Application Task and Element: 44.23.02**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$62,200			\$62,200					\$14,800	\$47,400	

CUSTOMER SATISFACTION REVIEW FOR MBTA TAP PILOT PROGRAM



STAFF: Central Transportation Planning Staff

CLIENT: MBTA

ID #: 14312

BUDGET: \$35,000

STATUS: 57%

During the winter of 2008, the MBTA initiated a pilot program to distribute Transportation Access Pass (TAP) CharlieCards to authorized users of THE RIDE paratransit service. Given improvements in accessibility of the MBTA fixed-route transit system over the past few years, especially with respect to buses, trackless trolleys, and the Green Line, it may be more convenient for customers to use these services rather than THE RIDE in certain circumstances. Furthermore, the MBTA encourages use of the fixed-route system whenever possible because of both substantially higher costs of providing trips on THE RIDE and capacity constraints resulting from continuing increases in the number of authorized users of THE RIDE.

As part of this pilot program, new TAP CharlieCard holders who are also authorized users of THE RIDE were asked to indicate their willingness to participate in a customer satisfaction survey about using the CharlieCard. Such a survey would be executed as part of this project, possibly in the form of printed and online survey instruments, focus groups, or a combination of these strategies. In particular, CTPS will seek to determine the reasons why authorized users of THE RIDE choose to use fixed-route service sometimes and not others, how the use of fixed-route services makes trips more or less convenient compared to THE RIDE, and customer perceptions of CharlieCard functionality.

FFY 2009 Activities and Expected Work Products: CTPS will distribute surveys and/or conduct focus groups to collect customer feedback about use of TAP CharlieCards by authorized users of THE RIDE; and will compile and interpret the results in a written report. The project will utilize \$10,000 in FFY 2007 MBTA Section 5303 funds and \$14,000 in FFY 2008 MBTA Section 5303 funds.

FHWA/FTA Grant Application Task and Element: 44.24.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$24,000			\$24,000						\$24,000	



STAFF: Central Transportation Planning Staff

CLIENT: MBTA

ID #: 14307

BUDGET: \$78,700

STATUS: 96%

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 state fiscal year (SFY) 2008 National Transit Database estimates of passenger boardings and passenger-miles for various transit modes to the Federal Transit Administration (FTA) with the aid of CTPS. The final reports, however, will not be completed until federal fiscal year (FFY) 2009.

FFY 2009 Activities and Expected Work Products: Staff will prepare final reports on SFY 2008 passenger-miles and boardings estimates for heavy rail, light rail, motor bus, and trolley bus services.

FHWA/FTA Grant Application Task and Element: 44.24.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$3,000			\$3,000						\$3,000	



STAFF: Central Transportation Planning Staff

CLIENT: MBTA

ID #: 14306

BUDGET: \$37,800

STATUS: 96%

The objective of this project is to develop estimates of passenger boardings and passenger-miles for bus routes operated as part of the 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 2008 National Transit Database estimates of passenger boardings and passenger-miles to the FTA with the aid of CTPS. The final reports, however, will not be completed until FFY 2009.

FFY 2009 Activities and Expected Work Products: Staff will prepare passenger-miles and boardings estimates for SFY 2008 purchased transportation services.

FHWA/FTA Grant Application Task and Element: 44.24.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$1,000			\$1,000						\$1,000	



STAFF: Central Transportation Planning Staff

CLIENT: MBTA

ID #: 14311

BUDGET: \$85,900

STATUS: 24%

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 are collected through onboard ridechecks, station turnstile observations, and passenger surveys. The MBTA will be submitting its SFY 2009 National Transit Database estimates of passenger boardings and passenger-miles for various transit modes to the FTA with the aid of CTPS. The final reports, however, will not be completed until FFY 2010.

FFY 2009 Activities and Expected Work Products: Ridechecks will be conducted for the bus and trackless-trolley portions of the SFY 2009 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 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$65,800			\$65,800						\$65,800	



STAFF: Central Transportation Planning Staff

CLIENT: MBTA

ID #: 14310

BUDGET: \$37,100

STATUS: 25%

The objective of this project is to develop estimates of passenger boardings and passenger-miles for bus routes operated as part of the 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 2009 National Transit Database estimates of passenger boardings and passenger-miles to the FTA with the aid of CTPS. The final reports, however, will not be completed until FFY 2010.

FFY 2009 Activities and Expected Work Products: Ridechecks will be conducted onboard a random sample of bus trips for the purpose of generating estimates of annual passenger-miles and boardings for SFY 2009.

FHWA/FTA Grant Application Task and Element: 44.24.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$27,700			\$27,700						\$27,700	



STAFF: Central Transportation Planning Staff

CLIENT: MBTA

ID #: 11360

BUDGET: \$321,500

STATUS: 6%

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: bus routes undergo comparative evaluations for cost-effectiveness, crowding, schedule adherence, and other indicators.

FFY 2009 Activities and Expected Work Products: CTPS will produce summaries of boardings, alightings, and on-time performance of selected bus routes, and recommendations of service reallocation to respond to demand and improve cost-effectiveness.

Results from this work will also be used to update the regional model that is used to develop the Regional Transportation Plan (RTP) and the Program for Mass Transportation (PMT).

FHWA/FTA Grant Application Task and Element: 44.24.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$253,800			\$253,800						\$253,800	



STAFF: Central Transportation Planning Staff

CLIENT: MBTA

ID #: 14313

BUDGET: \$138,000

STATUS: 0%

In January 2007, the MBTA fully implemented the new automated fare-collection (AFC) system on its bus, trackless trolley, and rapid transit services. A key feature of AFC is the CharlieCard, which is a contactless fare medium that interacts with bus and trackless trolley fareboxes, rapid transit faregates, and various types of sales equipment. Over the course of the coming year, the MBTA will be taking additional steps toward the installation of fare collection equipment on the commuter rail system to accommodate the use of CharlieCards. This will provide the MBTA with a unique opportunity to reexamine the existing fare structure for commuter rail and consider possible changes that would be revenue neutral, yet increase ridership and encourage customers to view commuter rail as a fully integrated piece of the MBTA’s intermodal network of bus, rail, and boat services.

Possible changes to the existing fare structure would include the extension of the “step-up” fare policy now in place on buses and rapid transit to the commuter rail system. Under this policy, customers may transfer from one mode to another over the course of a single trip, and pay only the fare for the highest priced link of their trip. Another fare-structure-change concept that was endorsed by the MBTA’s Rider Oversight Committee in advance of the 2007 fare increase was the institution of a single fare level for commuter rail that would apply to all stations outside the region’s urban core, but within Route 128. This project would estimate the impacts of these and other fare-structure-change concepts identified by the MBTA or through additional public outreach arranged by the MBTA.

FFY 2009 Activities and Expected Work Products: CTPS will conduct a peer review of fare structures of peer commuter rail properties in North America and on other continents; identify commuter rail fare-structure-change concepts; conduct an analysis of ridership on the MBTA’s recently begun Greenbush commuter rail service; and provide an estimation of the impacts of changes in the commuter rail fare structure.

FHWA/FTA Grant Application Task and Element:

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$138,000			\$138,000					\$138,000		



STAFF: Central Transportation Planning Staff

CLIENT: MBTA

ID #: 23315

BUDGET: \$79,400

STATUS: 20%

The objectives of this study, which began in 2008, are to conduct an assessment of the bus corridor south of Dudley Station comprising Route 23 and Route 28 and to identify potential improvements to the corridor or routes. The assessment will consider operational issues, such as crowding and schedule adherence, as well as ridership characteristics and whether the current routing and scheduling adequately meet the needs of this ridership.

In 2008, demographic and travel profiles were developed to determine transportation needs for the corridor, and Blue Hill Avenue signalized intersections were identified for further analysis. In 2009, ideas for improving bus transportation will be considered and analyzed with respect to the extent to which they address the corresponding identified need.

FFY 2009 Activities and Expected Work Products: CTPS will define bus related improvement measures for the corridor; conduct an analysis of selected signalized intersections along Blue Hill Avenue; and complete a final report, using \$63,500 in FFY 2008 MBTA Section 5303 funds.

FHWA/FTA Grant Application Task and Element:

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$63,500			\$63,500						\$63,500	

MBTA ITS ARCHITECTURE**STAFF: MBTA****CLIENT: MBTA****BUDGET: \$45,000****ID #: MBTA 1****STATUS: 0%**

The MBTA has been implementing a variety of intelligent transportation systems (ITS) and ITS related projects, including automated fare collection, Silver Line bus rapid transit (BRT), systemwide radio, and customer information systems. This project will update the MBTA's 2001 ITS architecture and prioritize the next generation of ITS projects.

FFY 2009 Activities and Expected Work Products: The MBTA will update its ITS architecture and produce an updated ITS plan using \$45,000 in FFY 2007 MBTA Section 5303 funds.

FHWA/FTA Grant Application Task and Element: 44.24.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
	\$45,000		\$45,000						\$45,000	

MBTA POST-2007 FARE INCREASE ANALYSIS**STAFF: Central Transportation Planning Staff****CLIENT: MBTA****ID #: 11359****BUDGET: \$152,900****STATUS: 90%**

On January 1, 2007, the MBTA instituted a fare increase across nearly all modal and fare media categories. At the same time, the MBTA introduced several new types of fare payment media and equipment as well as a new fare structure for local bus, rapid transit, and express bus modes. A major aspect of the new fare structure is a differential in prices and benefits depending on the fare media used. This analysis of the 2007 changes will therefore consider more than just the change in ridership mode shares and revenue resulting from the fare increase. It will also describe changing characteristics in fare media usage and trip patterns.

FFY 2009 Activities and Expected Work Products: CTPS will prepare a final report summarizing average fares per passenger by mode, and ridership changes, attributable to the 2007 fare increase.

FHWA/FTA Grant Application Task and Element: 44.24.01**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$15,000			\$15,000						\$15,000	

MBTA RIDER OVERSIGHT COMMITTEE SUPPORT**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 2009 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: 44.24.01

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$11,500			\$11,500						\$11,500	

MBTA SYSTEMWIDE ONBOARD PASSENGER SURVEY**STAFF: Central Transportation Planning Staff****CLIENT: MBTA****ID #: 14309****BUDGET: \$1,035,000****STATUS: 12%**

In the 12 years since the last set of comprehensive onboard passenger surveys was conducted for the MBTA, the Boston region has experienced significant demographic shifts, transit fare policy changes, and major roadway improvements (namely the Central Artery/Tunnel project). Additionally, the MBTA transit system has grown, adding new commuter rail and bus rapid transit (BRT) services. Gauging how these changes have influenced passenger behavior and characteristics is critical to effective and efficient transportation planning.

The MBTA has been awarded a discretionary grant under the FTA’s Alternatives Analysis Program for a new systemwide onboard survey of the rapid transit, bus, BRT, commuter rail, and water transportation services. The results of this survey will provide the MBTA, state and federal agencies, consultants, and the public with more up-to-date analytical tools to effectively and efficiently conduct transportation-planning activities. In particular, these new survey data will enhance CTPS’ ability to validate and calibrate the Boston Region MPO’s regional travel demand model.

FFY 2009 Activities and Expected Work Products: CTPS will complete the survey distribution at most rapid transit stations and boat docks, and on board most commuter rail and bus trips; compile survey responses in a database; and summarize survey results for the Orange Line and commuter boats, as well as bus route clusters and other rail lines as survey distribution allows.

FHWA/FTA Grant Application Task and Element:**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$572,000			\$572,000						\$114,400	\$457,600

METROWEST RTA SERVICE PLANNING ASSISTANCE**STAFF:** Central Transportation Planning Staff**CLIENT:** Boston Region Metropolitan Planning Organization**ID #:** 53307&53308**BUDGET:** \$80,000**STATUS:** 40%

53307 MetroWest RTA Service Planning Assistance: CTPS will provide support to the MetroWest Regional Transit Authority (MWRTA) in evaluating its transit services and in identifying improvements to present routes and schedules or possible new routes that could be implemented without increasing the net operating cost of the system. In particular, the MWRTA has requested technical assistance with its evaluation of a redesign of its network as a pulse system, with buses on all routes departing simultaneously from a hub in the Natick Collection/Shoppers World commercial area. The work for this federal fiscal year is funded with \$30,000 in FFY 2007 MBTA Section 5303 funds, which is matched by \$10,000 from the MetroWest Regional Transit Authority.

53308 MetroWest RTA Ongoing Planning Assistance: Following completion of the work described above, staff will continue to provide assistance to the MWRTA in implementing study recommendations. The project will be funded with \$10,000 in FFY 2009 MPO Section 5303 funds.

FFY 2009 Activities and Expected Work Products: The staff will complete final recommendations of service improvements and provide ongoing support, as needed.

FHWA/FTA Grant Application Task and Element:**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$50,000			\$50,000				\$10,000		\$30,000	\$10,000



STAFF: Central Transportation Planning Staff

CLIENT: Executive Office of Transportation and Public Works

ID #: 11111

BUDGET: Not applicable to ongoing projects

STATUS: Ongoing

Pre-applications and final applications from organizations located in the Boston Region MPO area for funding under the Federal Transit Administration’s Section 5310 program and the state’s Mobility Assistance Program will be reviewed for their consistency with regional goals. These programs award, to eligible organizations, capital grants for providing transportation services to elderly individuals and people with disabilities. Staff will comment in detail on each application, attend all relevant meetings, and participate in the selection of funding recipients.

FFY 2009 Activities and Expected Work Products: Evaluations of grant applications and guidance to program participants.

FHWA/FTA Grant Application Task and Element: 44.26.03

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$1,000			\$1,000				\$1,000			

STATEWIDE PLANNING ASSISTANCE**STAFF:** Central Transportation Planning Staff**CLIENT:** Executive Office of Transportation and Public Works**ID #:** 11124**BUDGET:** Not applicable to ongoing projects**STATUS:** Ongoing

Work on this project is performed as requested by the state's Office of Transportation Planning (EOT Planning). CTPS will provide general technical assistance on EOT Planning activities. This assistance may include:

- 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 MassHighway
- Preparation of supporting data, graphics, maps, and other materials for EOTPW studies and presentations
- Technical assistance on EOT Planning activities, such as development of travel demand models and development of the Statewide Transportation Plan
- Support of environmental document preparation for projects under development

FFY 2009 Activities and Expected Work Products: Activities and work products will depend on tasks requested by EOT Planning. Projects of appropriate scope will be submitted to the Transportation Planning and Programming Committee before proceeding.

FHWA/FTA Grant Application Task and Element: 44.24.01**FFY 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$555,000			\$555,000		\$555,000					



STAFF: Central Transportation Planning Staff

CLIENT: MBTA

ID #: 11363

BUDGET: 100,000

STATUS: 0%

In accordance with its Service Delivery Policy, the MBTA allocates service with a goal that no location in the urban fixed-guideway service area (i.e., the original 14 Massachusetts Transit Authority cities and towns) is more than a one-fourth-mile walk from the nearest bus stop. Furthermore, excluding some routes classified as “community routes” and “commuter routes,” peak-period service frequency must be at least every 30 minutes. While this approach to allocating bus routes assures most residents within Route 128 of access to reasonably frequent bus service within a short walk, it may be somewhat outdated given the dramatic increase in area auto ownership rates over the past few decades.

Recent ridership counts on MBTA bus routes suggest that residents in the region’s urban core are growing less and less attracted to their neighborhood bus route (if one is available). Instead, there appears to be a growing willingness among transit users to walk a long distance to access limited-stop rapid-transit lines characterized by readily identifiable stop locations that are clearly part of a streamlined network that feels safe, reliable, and familiar. This may be due to a number of factors, including increased transiency among area residents that results in less familiarity with long-standing local bus routes, and a higher propensity to have work, shopping, and other personal destinations outside of one’s residential area.

This study will review the MBTA’s existing service coverage and frequency policies in light of current demographic and trip making characteristics in the region. In addition, new trends in peer metropolitan areas of consolidating bus service along high-frequency limited-stop corridors will be reviewed for their applicability to the MBTA service area. In particular, the study will make recommendations about how the MBTA should position its bus system to be more competitive in the commuting (and discretionary trip) market in a 10-year timeframe.

FFY 2009 Activities and Expected Work Products: Peer review of service coverage and frequency standards, as well as initiatives to consolidate bus service along key routes; review of route-level trends in MBTA bus ridership; identification of potential high-frequency limited-stop bus corridors; and recommendations for improved competitiveness of MBTA bus service.

FHWA/FTA Grant Application Task and Element:

FFY 2009 Budget

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$100,000			\$100,000					\$100,000		

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 2009 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 2009 Budget**

Funding Recipient(s)			FFY 09 Total Budget	Funding Source(s)						
CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
\$17,000			\$17,000				\$17,000			

8 BOSTON REGION MPO BUDGET AND OPERATING SUMMARIES

This chapter contains overall budget information by recipient agency and by funding source for projects listed in the previous chapters. The information is presented according to the same UPWP categories used in those chapters:

Administration and Resource Management Projects	\$1,415,300
Certification Requirements	2,296,680
Planning Studies	1,692,650
Technical Support/Operations Analysis Projects	2,200,500
<u>EOTPW Section 5303 Local Match*</u>	<u>248,050</u>
Total	\$7,853,180

Funding for the MPO projects in the FFY 2008 UPWP comes from the following sources, which are described in Chapter 1:

FHWA 3C Planning (PL) and EOT PW Local Match	\$3,307,045
FHWA/MassHighway Statewide Planning and Research (SPR)	841,200
FTA/EOTPW, MAPC, and MBTA, with Local Match to Section 5303	2,033,235
EOTPW	195,000
MBTA**	959,100
<u>Other</u>	<u>517,600</u>
Total\$	\$7,853,180

On the following pages, the funding information presented in the preceding chapters is summarized in four tables. These tables are followed by a one-page summary that shows the entire budget by recipient agency and funding source. The next table in this chapter shows the grant application categories for Section 5303 funding, as required by the Federal Transit Administration. The purpose of these summaries is to assist federal and state contract administrators in reviewing the budget in detail.

The last table in the chapter presents a schedule and staff assignments for CTPS projects in this UPWP. This schedule is subject to revision, particularly for new projects whose work scopes have not yet been developed.

* EOTPW Section 5303 matching funds have been applied to the UPWP categories as a whole rather than to individual projects.

** Includes \$262,900 in MBTA 5303 carryover funds as described on pages 6-13, 6-14, 7-3, and 7-11.

FY 2009 UNIFIED PLANNING WORK PROGRAM BUDGET SUMMARIES

ADMINISTRATION AND RESOURCE MANAGEMENT PROJECTS

	Funding Recipient			FFY 09 Budget	Funding Source							
	CTPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other	
Computer Resource Management	388,600			388,600	252,600			136,000				
Data Resources Management	512,500			512,500	333,100			179,400				
Direct Support	514,200			514,200	345,000	24,200		55,000			90,000	
Total	\$1,415,300			\$1,415,300	\$930,700	\$24,200		\$370,400	\$0		\$90,000	

FY 2009 UNIFIED PLANNING WORK PROGRAM BUDGET SUMMARIES

CERTIFICATION REQUIREMENTS

	Funding Recipient			FFY 09 Budget	3C PL	SPR	EOTPW	Funding Source				
	CTPS	MBTA	MAPC					MPO \$5303	MBTA \$5303	MBTA	Other	
3C Planning Process and Public Outreach Activities	775,400			775,400	504,000				271,400			
Air Quality Conformity Determinations	16,000			16,000	10,400				5,600			
Air Quality Support Activities	50,000			50,000	32,500				17,500			
Boston Region MPO Title VI Reporting	40,000			40,000	28,000				12,000			
Disability Access Support (also includes provision of materials in accessible formats)	77,800			77,800	50,600				27,200			
MPO/MAPC Liaison and Support Activities			185,000	185,000	129,500				55,500			
Regional Equity/Environmental Justice Support	95,000			95,000	61,700				33,300			
Regional Model Enhancement	590,000			590,000	383,500				206,500			
Regional Transportation Plan	50,000			50,000	32,500				17,500			
Subregional Support Activities			126,880	126,880	88,815				38,065			
Transportation Improvement Program (CTPS)	150,000			150,000	105,000				45,000			
Transportation Improvement Program (MAPC)			65,000	65,000	45,500				19,500			
Unified Planning Work Program (CTPS)	55,600			55,600	36,100				19,500			
Unified Planning Work Program (MAPC)			20,000	20,000	14,000				6,000			
Total	\$1,899,800		\$396,880	\$2,296,680	\$1,522,115				\$774,565			

FY 2009 UNIFIED PLANNING WORK PROGRAM BUDGET SUMMARIES

PLANNING STUDIES

	Funding Recipient			FFY 09 Budget	3C PL	SPR	EOTPW	Funding Source					
	CTPS	MBTA	MAPC					MPO \$5303	MBTA \$5303	MBTA	Other		
2007-08 I-93 North and Southeast Xway HOV Lane Monitoring	57,000			57,000		57,000							
Arterial Traffic-Signal Improvements and Coordination	45,000			45,000	45,000								
Assembly Square Station Feasibility Study	42,000			42,000							42,000		
Bicycle/Pedestrian Studies	67,700			67,700	67,700								
Corridor/Subarea Planning Studies: Land Use Reviews			116,100	116,100	81,270				34,830				
Green Line Extension Environmental Review Support	20,000			20,000			20,000						
Inner Suburban Mobility Study	75,000			75,000					75,000				
Land Use Development Project Reviews			125,350	125,350	62,760				62,590				
Massachusetts Turnpike Authority Boston Ramps Study	75,000			75,000		75,000							
Massport Transportation Studies	50,000			50,000								50,000	
MBTA Program for Mass Transportation	79,000			79,000					15,000		64,000		
Mobility Management System Monitoring Program	220,000			220,000	220,000								
North Shore Transportation Improvements	50,000			50,000			50,000						
Operational Improvements at Congested & High-Crash Locations	45,000			45,000	45,000								
Red Line-Blue Line Connector Study Support	75,000			75,000			75,000						
Regional Vision: MetroFuture			100,000	100,000	70,000				30,000				
Route 126 Corridor Study	116,500			116,500	101,000				15,500				
Route 3 South Corridor Study	75,000			75,000		75,000							
Safety Evaluation of TIP Projects	25,000			25,000	25,000								
Silver Line Project Support	50,000			50,000							50,000		
South Coast Rail Commuter Rail Extension	50,000			50,000			50,000						
State Fiscal Years 2009-2011 MBTA Service Benchmarking	51,000			51,000							40,000		11,000
Suburban Mobility/Transportation - Demand Management Support	28,000			28,000					28,000				
Urban Ring Phase 2 Revised DEIR/DEIS Support	55,000			55,000		55,000							
Total	\$1,351,200		\$341,450	\$1,692,650	\$717,730	\$262,000	\$195,000	\$40,000	\$260,920	\$167,000	\$50,000		

FY 2009 UNIFIED PLANNING WORK PROGRAM BUDGET SUMMARIES

TECHNICAL SUPPORT/OPERATIONS ANALYSIS PROJECTS

	Funding Recipient			FFY 09 Budget	Funding Source						
	CITPS	MBTA	MAPC		3C PL	SPR	EOTPW	MPO \$5303	MBTA \$5303	MBTA	Other
Alternative-Mode Planning and Coordination			195,000	195,000	136,500			58,500			
Assistance to MBTA Development	62,200			62,200					14,800	47,400	
Customer Satisfaction Review for TAP Pilot Program	24,000			24,000						24,000	
MBTA 2008 National Transit Database: Directly Operated	3,000			3,000						3,000	
MBTA 2008 National Transit Database: Purchased Bus	1,000			1,000						1,000	
MBTA 2009 National Transit Database: Directly Operated	65,800			65,800						65,800	
MBTA 2009 National Transit Database: Purchased Bus	27,700			27,700						27,700	
MBTA Bus Service Data Collection VI	253,800			253,800						253,800	
MBTA Commuter Ridership Growth Strategy	138,000			138,000					138,000		
MBTA Dudley South/Silver Line Phase IV Corridor Assessment	63,500			63,500						63,500	
MBTA ITS Architecture		45,000		45,000						45,000	
MBTA Post-2007 Fare Increase Analysis	15,000			15,000						15,000	
MBTA Rider Oversight Committee Support	11,500			11,500						11,500	
MBTA Systemwide Onboard Passenger Survey	572,000			572,000						114,400	457,600
MetroWest RTA Service Planning Assistance	50,000			50,000				10,000		30,000	10,000
Mobility Assistance Program and Section 5310 Review	1,000			1,000				1,000			
Statewide Planning Assistance	555,000			555,000		555,000					
Strategic Visioning for MBTA Bus Service	100,000			100,000					100,000		
Transit Operations Analysis	17,000			17,000				17,000			
Total	1,960,500	\$45,000	\$195,000	\$2,200,500	\$136,500	\$555,000	\$0	\$86,500	\$252,800	\$702,100	\$467,600

Estimated FFY 2009 UPWP Total Budget by Recipient Agency

Category	MAPC				CTPS				EOTPW			
	UPWP Total	Total MAPC	3C PL*	MPO \$5303*	Total CTPS	3C PL*	SPR*	MPO \$5303*		MBTA \$5303**	Other	EOTPW
Administration and Resource Mgt.	1,415,300				1,415,300	930,700	24,200	370,400		90,000		
Certification Requirements	2,296,680	396,880	277,815	119,065	1,899,800	1,244,300		655,500				
Planning Studies	1,692,650	341,450	214,030	127,420	1,351,200	503,700	262,000	133,500	40,000	167,000	50,000	195,000
Tech. Support/ Oper. Analysis	2,200,500	195,000	136,500	58,500	2,005,500		555,000	28,000	252,800	702,100	467,600	
EOTPW \$5303 Local Match	248,050											248,050
Total	\$7,853,180	\$933,330	\$628,345	\$304,985	\$6,671,800	\$2,678,700	\$841,200	\$1,187,400	\$292,800	\$959,100	\$517,600	\$195,000

* Includes Local Match , which is presented below

** Includes Match and \$262,9000 in MBTA FFYs 2007 and 2008 \$5303 carryover funds as described on pages 6-4, 6-23, 7-4, 7-5, 7-12, and 7-17.

Estimated FFY 2009 UPWP Total Budget by Funding Source

Category	UPWP Total	Highway Sources				Transit Sources				Other		
		Total Highway	3C PL*	SPR	EOTPW PL and SPR Match	Total Transit	MPO \$5303	MBTA \$5303 Match	MBTA \$5303 Match		EOTPW	MBTA**
Administration and Resource Mgt.	1,415,300	954,900	744,560	19,360	190,980	460,400	370,400					90,000
Certification Requirements	2,296,680	1,522,115	1,217,690		304,425	774,565	750,750		23,815			
Planning Studies	1,692,650	979,730	574,185	209,600	195,945	662,920	235,440	26,800	25,480	13,200	195,000	167,000
Tech. Support /Oper. Analysis	2,200,500	691,500	109,200	444,000	138,300	1,041,400	74,800	169,375	11,700	83,425	702,100	467,600
EOTPW \$5303 Local Match	248,050					248,050					248,050	
Total	\$7,853,180	\$4,148,245	\$2,645,635	\$672,960	\$829,650	3,187,335	\$1,431,390	\$196,175	\$60,995	\$96,625	\$443,050	\$959,100

* Please note that the total shown in the 3C PL column is different from the total shown on page 8-8 for the 2009 RPA distribution to the Boston Region MPO. This is due to rounding discrepancies that occurred when applying the local match to the individual categories.

**Includes \$87,900 in FFY 2008 Section 5303 carryover funds as described on pages 6-4, 6-23, 7-4, 7-5, 7-12, and 7-17.

FFY 2009 UNIFIED PLANNING WORK PROGRAM BY FTA TASK AND ELEMENT

Estimated Budget, FTA § 5303 by Agency (in \$1,000s)

UPWP Number	UPWP Task Title	FTA § 5303	MAPC		CTPS	MBTA		EOT
		Total	Fed	Local	Fed	Fed	Local	Local
44.21.00	Program Support and Administration	296.900	4.800	1.200	290.900			
21.01	Unified Planning Work Program	25.500	4.800	1.200	19.500			
21.02	3C Plan. Process and Public Outreach Activities	271.400			271.400			
44.22.00	Gen. Dev. And Comprehensive Planning	237.900	46.800	11.700	179.400			
22.01	Data Resources Management	179.400			179.400			
22.03	Alternative-Mode Coordination	58.500	46.800	11.700				
44.23.00	Long-Range Transportation Planning	160.420	101.940	25.480	33.000			
23.01	Systems-Level Planning							
	Corridor/Subarea Studies: Land Use Reviews	34.830	27.870	6.960				
	Regional Transportation Plan	17.500			17.500			
	Regional Vision: MetroFuture	30.000	24.000	6.000				
23.02	Project-Level Planning							
	Land Use Development Project Reviews	62.590	50.070	12.520				
	Route 126 Corridor Study	15.500			15.500			
44.24.00	Short-Range Transportation Planning	669.850	0.000	0.000	129.000	196.175	96.625	248.050
24.01	Special Activities							
	Assistance to MBTA Development	14.800				9.900	4.900	
	Boston MPO Title VI Reporting	12.000			12.000			
	MBTA Program for Mass Transportation				15.000			
	SFY 2009-2011 MBTA Service Benchmarking	40.000				26.800	13.200	
	Inner Suburban Mobility	75.000			75.000			
	MBTA Commuter Rail Fare Structure Analysis	138.000				92.809	45.191	
	MetroWest RTA Planning Assisance				10.000			
	Strategic Visioning for MBTA Bus Service					66.666	33.334	
	Travel Operations Analysis	17.000			17.000			
44.25.00	Transportation Improvement Program	64.500	15.600	3.900	45.000			
25.01	Transportation Improvement Program (TIP)	64.500	15.600	3.900	45.000			
44.26.00	Planning Emphasis Areas	548.665	74.850	18.715	455.100			
26.01	Linking the Planning and NEPA Processes							
	Air Quality Conformity Determinations	5.600			5.600			
	Air Quality Support Activities	17.500			17.500			
26.02	Consultation with Local Officials							
	Subregional Support Activities	38.065	30.450	7.615				
	MPO/MAPC Liaison and Support Activities	55.500	44.400	11.100				
26.03	Coordination of Human Services Transportation							
	Mobility Assistance/§5310 Program	1.000			1.000			
	Disability Access Support	27.200			27.200			
	Regional Equity/Environmental Justice Support				33.300			
26.04	Enhancing Technical Capacity							
	Computer Resource Management	136.000			136.000			
	Regional Model Enhancement	206.500			206.500			
26.05	Consideration of Management and Operations							
	Suburban Mobility/TDM Support	28.000			28.000			
44.27.00	Other Activities	55.000	0.000	0.000	55.000	0.000	0.000	
27.01	Direct Support	55.000			55.000			
GRAND TOTAL		2033.235	243.990	60.995	1187.400	196.175	96.625	248.050

Metropolitan Planning (PL) Fund Distribution (federal funds only)

	Berkshire	Boston	Cape Cod	Central	Merrimack	Montachusett	NMiddlesex	Old Colony	Pioneer	Southeast	Subtotal	TOTAL
Distribution Factor	0.01164	0.57587	0.01410	0.06661	0.04482	0.01739	0.04904	0.03402	0.09824	0.08827		1.00
Distribution Factor, updated 2003	0.00936483	0.527864225	0.03542297	0.07439209	0.05285859	0.02654686	0.04695953	0.050057062	0.08474535	0.091788493		1.00
Distribution Factor, updated 2007	0.04928403	0.34335966	0.06128872	0.08719251	0.07114080	0.05890295	0.06758006	0.07044230	0.09461633	0.09619265		1.00
	8,224,988											
2006 Fiscal year allocation	412,489	2,758,047	530,369	706,655	609,243	490,216	582,557	596,570	753,491	785,352	8,224,988	
Auth. RPA Distribution	341,920	2,274,240	447,853	665,600	510,392	524,000	483,415	509,440	649,257	624,000	7,030,117	
De-Oblig.				(17,665)		(166,703)					(184,368)	
Oblig.	10,400			147,206	110,640	20,000			28,0		316,246	
Balance	170,441	1,241,988	647,761	240,070	921,158	536,678	1,747,069	1,148,572	516,549	1,200,081	8,370,366	8,370,366
	8,029,652											
2007 Fiscal year allocation	402,699	2,692,546	517,773	689,873	594,774	478,573	568,722	582,402	735,596	766,701	8,029,652	
Auth. RPA Distribution	341,920	2,274,240	447,854	665,600	510,392	524,000	483,415	509,440	649,257	624,000	7,030,118	
De-Oblig.								(98,415)			(98,415)	
Balance	231,213	1,660,294	717,680	264,343	1,005,540	491,251	1,832,376	1,319,949	602,888	1,342,782	9,468,315	9,468,315
	8,243,226											
2008 FISCAL year allocation	406,259	2,830,391	505,217	718,748	586,430	485,550	557,078	580,672	779,944	792,938	8,243,226	
Auth. RPA Distribution	365,752	2,547,651	454,779	646,928	527,484	436,973	501,518	522,291	701,828	713,699	7,418,903	
Oblig.				53,890							53,890	
Balance	271,720	1,943,034	768,117	390,052	1,064,486	539,829	1,887,936	1,378,329	681,004	1,422,021	10,346,528	10,346,528
	8,374,270											
2009 FISCAL year allocation	412,718	2,875,386	513,248	730,174	595,752	493,269	565,934	589,903	792,343	805,543	8,374,270	
Auth. RPA Distribution	379,700	2,645,356	472,188	671,760	548,092	453,808	520,659	542,711	728,955	741,100	7,704,328	
De-Oblig.												
Oblig.												
Balance	304,738	2,173,065	809,177	448,466	1,112,146	579,290	1,933,210	1,425,522	744,391	1,486,464	11,016,469	11,016,469

Explanation of each line in the segment for each year

2007 FISCAL year allocation = Distribution of the annual apportionment

Auth. RPA Distribution = Authorized funding for the year

De-Oblig. = Any deobligation. Entered as a negative number

Balance = The unobligated balance for each MPO

Special Notes:

If any additional authorization of funds was made in any particular year, an additional row was inserted to record them

In FFY 2005 there were two authorizations, one at the beginning of the federal fiscal year and one in September before the end of the federal fiscal year.

In 1998 the amounts received under the congressional legislations, ISTEA -97 and TEA -21 are listed separately and added together.

In 2001 the de-obligations were made at the request of FHWA to make the authorized amounts equal to the amounts in the UPWP.

In 2007 MARPA revised the formula to include 40% takedown, 30% as a % of urban population, and 30% as a % of total population. The percentage shown is the result of the new formula.

This new formula was derived differently than the 2003 version.

FFY 2008 Unified Planning Work Program CTPS Schedule and Staff Assignments

The charts below present estimated schedules and staff assignments for the projects in this UPWP. It is subject to revision as the projects move through implementation.

Project #	Ongoing Planning Activities	CTPS Staff	FFY 2009 UPWP Status
90011& 90019-90029	3C Planning Process and Public Outreach Activities	Certification Activities Group	Ongoing
10112	Air Quality Conformity Determinations	Certification Activities Group and Transportation Systems Analysis Group	Ongoing
90061	Air Quality Support Activities	Certification Activities Group and Transportation Systems Analysis Group	Ongoing
11347	Assistance to MBTA Development	Transit Service Planning Group	
13208	Bicycle/Pedestrian Studies	Certification Activities Group	Ongoing
11355	Boston Region MPO Title VI Reporting	Certification Activities Group	Ongoing
60400-92	Computer Resource Management	Information Technology and Services Group	Ongoing
60110-600	Data Resources Management	Information Technology and Services Group	Ongoing
90000	Direct Support	Administrative Group	Ongoing
90024	Disability Access Support	Certification Activities Group	Ongoing
22117	Massport Transportation Studies	Transit Service Planning Group	Ongoing
13396	MBTA Rider Oversight Committee Support	Transit Service Planning Group	Ongoing
11351	MBTA Service Benchmarking	Transit Service Planning Group	Ongoing
11111	Mobility Assistance Program and Section 5310 Review	Certification Activities Group	Ongoing
11130	Mobility Management System Monitoring Program	Traffic Analysis and Design Group	Ongoing
11131&2	Regional/Environmental Justice Support	Certification Activities Group	Ongoing
11244	Regional Model Enhancement	Regional Model Development Group	Ongoing
11354	Regionwide Suburban Transit Opportunities	Transit Service Planning Group	Ongoing
10101	Regional Transportation Plan	Certification Activities Group and Transportation Systems Analysis Group	Ongoing
11124	Statewide Planning Assistance	Transportation Systems Analysis Group and Traffic Analysis and Central Area Group	Ongoing
10103	Transportation Improvement Program (CTPS)	Certification Activities Group	Ongoing
90040	Travel Operations Analysis	Transit Service Planning Group	Ongoing
10104	Unified Planning Work Program (CTPS)	Certification Activities Group	Ongoing

FFY 2009 Unified Planning Work Program CTPS Schedule and Staff Assignments

Project #	Studies Currently Underway	CTPS Staff	Anticipated Completion Date
23316	Assembly Square Station Feasibility Study	Transportation Systems Analysis Group	Nov-08
14312	Customer Satisfaction Review for MBTA TAP Pilot Program	Certification Activities Group	Dec-08
22328	Green Line Extension Environmental Review Support	Transportation Systems Analysis Group	Jul-09
22331	Red Line–Blue Line Connector Study Support	Transportation Systems Analysis Group	Jan-09
11360	MBTA Bus Service Data Collection VI	Transit Service Planning Group	Jun-09
14307	MBTA 2008 National Transit Database: Directly Operated	Transit Service Planning Group	Oct-08
14306	MBTA 2008 National Transit Database: Purchased Bus	Transit Service Planning Group	Oct-08
23315	MBTA Dudley South/Silver Line Phase IV Corridor Assessment	Transit Service Planning Group	Mar-09
11357	MBTA Post-2007 Fare Increase Analysis	Transit Service Planning Group	Oct-08
10116	MBTA Program for Mass Transportation	Transit Service Planning Group	Dec-08
14309	MBTA Systemwide Onboard Passenger Survey	Transit Service Planning Group	Dec-09
53307	MetroWest RTA Service Planning Assistance	Transit Service Planning Group	Feb-09
82104	North Shore Transportation Improvements	Transportation Systems Analysis Group	Jan-09
22331	Red Line–Blue Line Connector Study Support	Transportation Systems Analysis Group	Feb-09
23311	Silver Line Project Support	Transportation Systems Analysis Group	Jul-09
22325	Urban Ring Phase 2 Revised DEIR/DEIS Support	Transportation Systems Analysis Group	Feb-09

FFY 2009 Unified Planning Work Program CTPS Schedule and Staff Assignments

Project #	Studies with Work Scopes to Be Developed	CTPS Staff	Anticipated Completion Date
13243	Arterial Traffic-Signal Improvements and Coordination	Traffic Analysis and Design Group	TBD*
11362	Inner Suburban Mobility Study	Transit Service Planning Group	TBD*
22205	Massachusetts Turnpike Boston Ramps Study	Regional Model Development Group	TBD*
14313	MBTA Commuter Rail Ridership Growth Strategy	Transit Service Planning Group	TBD*
13244	Operational Improvements at Congested and High-Crash Locations	Traffic Analysis and Design Group	TBD*
43108	Route 126 Corridor Study	Traffic Analysis and Design Group	TBD*
11363	Strategic Visioning for MBTA Bus Service	Transit Service Planning Group	TBD*

* Schedule to be determined at the time of work scope development.

APPENDIX A
OTHER BOSTON REGION TRANSPORTATION PLANNING PROJECTS

The following are brief descriptions of planning studies that will be conducted in the Boston Region MPO area by individual agencies, such as MassHighway or 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 (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 Executive Office of Transportation and Public Works (EOTPW) Red Line–Blue Line Connector Study; CTPS support work is described in Chapter 6, and the EOTPW project itself is presented in this appendix.

The projects in this appendix are not subject to the Boston Region 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.

Assembly Square Orange Line Station

Agency: MBTA

This study involves analyzing the feasibility of a new Orange Line station at Assembly Square. The City of Somerville is working in close coordination with the MBTA to determine the potential of such a station and the possibility of a public-private partnership to construct it.

Bus Maintenance Facility Planning/Design

Agency: MBTA

The MBTA is implementing recommendations of its 2003 Bus Maintenance Facilities Strategic Plan. Among those recommendations is planning, permitting, and design work for a North Side facility at Wellington Station that will support the Authority's efforts in upgrading its bus fleet and service with modern, state-of-the-art maintenance operations.

Green Line Extension Environmental Review

Agency: EOTPW

This project is a legal commitment under the proposed amendment to the State Implementation Plan, and involves an extension of Green Line service from a relocated Lechmere Station through Cambridge to Somerville and Medford. This effort involves the development of a draft environmental impact report and federal environmental review documents.

See Chapter 6 for related work being conducted by CTPS.

I-95 South Corridor Study

Agency: EOTPW

The I-95 South Corridor Study is being conducted by EOTPW's Office of Transportation Planning. This study will evaluate and address transportation issues in the I-95 corridor from Route 128 in Canton to the Rhode Island state line, and along I-495 from Route 1A in Wrentham to Route 140 in Mansfield. The study area extends beyond I-95 to reflect the heavy influence that parallel transportation corridors—such as Route 1 and the Attleboro/Providence commuter rail line—have on the interstate. The study area is located in both the Boston Region Metropolitan Planning Organization and Southeastern Massachusetts Metropolitan Planning Organization regions. A full range of alternatives, including interchange, highway, and non-highway improvements, as well as multimodal options, will be developed and analyzed as the study progresses. A recommended plan of future transportation improvements (short-term and long-term), based on the alternatives analysis, will be the end product of this study, which will run through 2008. CTPS will provide travel-demand forecasting services to supplement the work of the consultant team. For more information, visit the study website, www.I95southinfo.com.

Intelligent Transportation Systems: Development and Implementation

Agency: EOTPW

EOTPW is engaged in planning, developing, and implementing intelligent transportation systems (ITS) to more effectively operate the transportation system in Massachusetts. EOTPW'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 tools to improve system performance and function; and providing assistance in planning for the use of ITS for all modes.

MassHighway has 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.

Long-Range Ground Access Policy Plan for Logan International Airport

Agency: Massport

The purpose of the plan is to define a set of policies, programs, and initiatives that would allow the airport to grow to 37.5 million annual passengers while maintaining acceptable levels of service in the ground transportation facilities serving the airport. CTPS will provide data and analytical support to the effort, supplementing the work of a consultant team.

See Chapter 6 for related work being conducted by CTPS.

Maintenance Facility Needs Assessment

Agency: MBTA

The MBTA is investing assets in its maintenance facilities and coordinating the prioritization of upgrades of these facilities through the establishment of a facilities management system.

Massachusetts Turnpike Authority Boston Ramps Study

Agency: EOTPW & MassHighway

EOTPW's Office of Transportation Planning (EOT Planning) is conducting a study that will evaluate and address connectivity issues between the Boston neighborhoods of Back Bay, Fenway, and the Longwood Medical Area to the Seaport District, Logan Airport, and Interstate 93 serving points north and south of the city. The anticipated growth in these neighborhoods, combined with traffic generated by the existing educational institutions, medical community, convention center, cultural community, and residents, could lead to worsening congestion issues on the local roadway and regional highway system.

The study's primary focus will be to investigate the potential for new or revised access to/ from the express highway system using Interstate 90 (the Massachusetts Turnpike), from east of Commonwealth Avenue to just west of Interstate 93. A full range of ramp alternatives will be developed and analyzed as the study progresses. A recommended plan of future transportation improvements (short-term and long-term), based on the alternatives analysis, will be the end product of this study.

See Chapter 6 for related work being conducted by CTPS.

North Shore Draft Environmental Impact Statement (DEIS) Agency: EOTPW & MBTA

This study began with an examination of individual feasibility studies previously conducted in the area that analyzed Blue Line extensions, commuter rail improvements, and the construction of a commuter rail connection at Wonderland Station. Because of the significant environmental issues associated with several of the alternatives, the MBTA expanded the planning process to include a draft environmental impact statement (DEIS).

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

Red Line–Blue Line Connector Study Agency: EOTPW

Design for this project is a legal commitment under the proposed amendment to the State Implementation Plan. It will involve the development of DEIR/DEIS and engineering documents for a 0.4-mile extension of the Blue Line from the Government Station to the Charles/MGH station on the Red Line.

**Region One University Transportation Center Colleges and Universities
Universities Research Program**

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.

Route 3 South Agency: EOTPW & MassHighway

This project consists of the addition of a general-purpose travel lane generally between Exit 16/Route 18 in Weymouth and Exit 11/Route 14 in Duxbury, replacing the shoulder's peak-hour use as a third lane. The current effort is the completion of a supplemental draft environmental impact report/environmental assessment.

See Chapter 6 for related work being conducted by the Central Transportation Planning Staff.

South Coast Rail Commuter Rail Extension Agency: EOTPW & MBTA

EOTPW 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 will include the construction of passenger stations and terminal layover facilities.

See Chapter 6 for related work being conducted by the Central Transportation Planning Staff.

**Urban Ring Phase 2: Revised
Draft Environmental Impact Report/
Environmental Impact Statement**

Agency: EOTPW

The Urban Ring is a proposed major new transit service that would run in a roughly circular corridor just outside of central Boston. The corridor passes through residential neighborhoods, employment centers, and major educational and medical institutions in Boston, Brookline, Cambridge, Chelsea, Everett, Medford and Somerville. The Urban Ring is designed to provide more direct trips around this “ring” and to improve connections between the corridor and the “spokes” of the MBTA’s existing rapid-transit system. The Executive Office of Transportation and Public Works is currently developing a revised draft environmental impact report/draft environmental impact statement (RDEIR/DEIS) for Phase 2 of the Urban Ring, which entails the implementation of bus-rapid-transit (BRT) service in the Urban Ring corridor.

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

APPENDIX B PUBLIC PARTICIPATION

Public involvement in the development of the FFY 2009 UPWP followed the procedures set forth in the MPO's adopted "Public Participation Process for Planning Documents in the Boston MPO," which are designed to ensure early and continued public involvement in the transportation planning process. Steps to develop this year's UPWP began in March 2008, when the MPO staff held three roundtable discussions to review the safety and mobility concerns expressed during the outreach conducted for the FFY 2008 UPWP. Staff identified potential studies and presented them to the UPWP Subcommittee of the MPO's Transportation Planning and Programming Committee. The Subcommittee met three times to review the budgets for ongoing work and to recommend new studies for inclusion in the draft UPWP to the Transportation Planning and Programming Committee for approval.

Upon the approval of a circulation draft UPWP by the Transportation Planning and Programming Committee on June 26, 2008, notice of its availability and a 30-day period for public review and comment on it was published, in English, in the *Boston Globe*, the *Bay State Banner*, and *TRANSREPORT*, the MPO's newsletter. The notice was also published, in Spanish, in the two major Spanish-language newspapers in the region, *La Semaña* and *El Mundo*. In addition, notices were sent to the MPO's e-mail listserve and to municipal officials in the region. Press releases in English and in Spanish were sent to local and regional newspapers. The draft document was distributed to the chief elected officials and planning directors of the region's 101 municipalities, the Regional Transportation Advisory Council, the Metropolitan Area Planning Council's subregional groups, participants in the MPO's regional equity work, and state legislators. The document was available for viewing at public libraries in the region and for downloading from the Boston MPO website, www.bostonmpo.org.

During the review period, the MPO sponsored one public workshop and two open houses for discussion of the draft UPWP and for gathering input from members of the public about their planning priorities. The workshop was held at Norfolk Town Hall and the open houses were held at the State Transportation Building in Boston. In addition, staff presented the draft UPWP to the MetroWest Growth Management Committee's Transportation Task Force, the North Shore Task Force, the North Suburban Planning Council, the Regional Transportation Advisory Council, and the SouthWest Advisory Planning Committee.

A summary of the comments received during the review period and the MPO's responses to them are presented on the following pages. The comments are in order by the name of the organization or community making the comment.

Draft Summary of Comments Received on the Draft FFY 2009 Unified Planning Work Program with MPO Responses

Dated	Community/ Organization	Name and Title	Comment	MPO Response
8/04/08	495/MetroWest Corridor Partnership	Paul Matthews, Executive Director; Jessica Strunkin, Manager of Public Policy and Public Affairs	<p>Provides background on the 495/MetroWest region and the transportation challenges it confronts.</p> <p>Supports the Regional Model Enhancement project, especially since it will provide critical data for transportation and land-use planning in the region. Hopes that it will move forward in FFY 2009.</p> <p>Supports the Suburban Mobility/Transportation-Demand-Management project and the themes of the Regionwide Suburban Transit Study.</p>	<p>MPO staff, the Executive Office of Transportation and Public Works (EOTPW), and the Metropolitan Area Planning Council (MAPC) are currently engaged in the process of selecting a consultant for the survey and anticipate that preliminary work with the consultant will begin in the late fall. The project is expected to take two years to complete.</p> <p>The Suburban Mobility/Transportation-Demand-Management Program implements the MPO's policy of supporting programs that meet public transportation needs in its suburban communities. The MPO appreciates the support for this program and the Regionwide Suburban Transit Opportunities Study, which is expected to be completed in the fall.</p> <p>Opportunities for ongoing public involvement in the PMT are posted on the Boston MPO's PMT website at www.bostonmpo.org/bostonmpo/pmt/pi/pi.html.</p> <p>The PMT will include a discussion of capacity for reverse commuting for the MBTA system as a whole. It will also include the infrastructure improvements on the Fitchburg Line, which are already underway, as part of the no-build scenario. The PMT is a broad-brush, visioning document. As such, it will not address the many issues surrounding adding service on the Framingham/Worcester Line. These issues would be more appropriately addressed through a separate planning study.</p>
			<p>Supports the Onboard Passenger Survey and asks that the MBTA collect data identifying the need for reverse commute on the Fitchburg and Framingham/Worcester lines.</p>	<p>The survey instrument for the Onboard Passenger Survey has already been approved for distribution and does not specifically ask about reverse-commuting needs. However, it is expected that in analyzing the data generated by the survey, reverse-commuting trends will be identifiable and included in the final report.</p>
			<p>Thanks the MPO for the Route 126 Corridor Study, looks forward to learning more about the work scope, and offers assistance in gaining a regional perspective. Also supports the Operation</p>	<p>MPO staff plan to visit with the South West Advisory Planning Council and other MAPC subregions prior to the development of a work scope for the Operation Improvements at High-Crash</p>

Draft Summary of Comments Received on the Draft FFY 2009 Unified Planning Work Program with MPO Responses

Dated	Community/ Organization	Name and Title	Comment	MPO Response
8/04/08	495/MetroWest Corridor Partnership (Cont.)	Paul Matthews, Executive Director; Jessica Strunkin, Manager of Public Policy and Public Affairs	<p>Improvements at High-Crash Locations project and asks that the 495/MetroWest region be considered in the process of selecting locations.</p> <p>Supports the Metropolitan Area Planning Council (MAPC) Corridor/Subarea Planning Studies: Land Use Reviews project. Is pleased that the work on the development of design concepts and mobility strategies in the vicinity of the I-495/I-290, I-495/Route 9, and I-495/I-90 interchanges is being done in tandem with the Central Massachusetts Regional Planning Commission.</p> <p>Supports the MAPC Alternative-Mode Planning and Coordination project. Hopes that the regional pedestrian plan and bike plan will address shortcomings in the 495/MetroWest region, as well as the Greater Boston region. Supports the additional emphasis on transportation-demand-management activities included in the project and the development of a toolkit for sustainable mobility. Also supports the identification of projects eligible for funding through the Congestion Mitigation and Air Quality Program, and the work being done under the Transportation Enhancement Program.</p> <p>Thanks the MPO for providing planning support to the MetroWest Regional Transit Authority and the attention given to suburban transportation needs.</p>	<p>Locations project and the Route 126 Corridor Study.</p> <p>The MPO and MAPC appreciate the support for these projects.</p> <p>The MPO and MAPC appreciate the support for these projects. It should be noted that the bicycle plan has been approved and work is now directed toward its implementation. The MPO has approved a scope of work for a pedestrian plan. As with the bicycle plan, MAPC will hold conversations with MPO municipalities and MAPC subregions and would be happy to also include the 495/MetroWest Partnership in discussions about the plan.</p>
8/04/08	Hanscom Area Towns Committee (HATS)	Sara A. Matties, Chair	<p>Notes the need for a study of planning needs along Route 128 and the Route 4/225 corridor to reduce congestion and improve mobility to Hanscom Field, especially in light of the impacts of the proposed new Cyber Command Center.</p> <p>Believes that the studies included in the draft UPWP will be useful to the 128 Central Corridor Coalition, which was formed in January 2008 to discuss the opportunities and challenges in the 128 Central area (bounded by Route 3 North and I-90). Adds that local communities and stakeholders will need to seek other funding sources to study land-use and transportation challenges in this corridor.</p>	<p>The MPO acknowledges the pressing need for a study of the impacts of the proposed Cyber Command Center on area roadways and urges the Committee to pursue funding for a planning study from another source, such as the Executive Office of Housing and Economic Development. However, if necessary, the project can be considered for funding in the FFY 2010 UPWP.</p> <p>The MPO is pleased to hear that the UPWP projects will be used to inform the planning process for the 128 Central Area and is appreciative of the Coalition's efforts to secure additional planning funds.</p>
7/24/08	Inner Core Committee	Laura Wiener, Chair Elect	<p>Is awaiting the results of the Alewife, Phase II Study to determine whether further analysis is needed at this location.</p>	<p>This study is expected to be completed in the fall.</p>

Draft Summary of Comments Received on the Draft FFY 2009 Unified Planning Work Program with MPO Responses

Dated	Community/ Organization	Name and Title	Comment	MPO Response
7/24/08	Inner Core Committee (Cont.)	Laura Wiener, Chair Elect	Supports the regional household survey included in the draft UPWP and urges that it proceed expeditiously. Requests an analysis of the existing travel model for the region using existing funding. Urges that the following studies previously proposed by the Committee be included in the UPWP: An exploration of transportation options for serving users of the Jamaicaaway and Riverway.	MPO staff, EOTPW, and MAPC are currently engaged in the process of selecting a consultant for the survey and anticipate that preliminary work with the consultant will begin in late fall. The project is expected to take two years to complete. Further discussion on the details of the requested analysis is necessary. Please contact the MPO's technical director, Karl Quackenbush, at (617) 973-7100 or karlq@bostonmipo.org.
8/4/08	MetroWest Growth Management Committee	Donna Jacobs, Director	An extension of the Community Path from Somerville to North Point along the Green Line corridor to be conducted in tandem with the Green Line environmental process. An exploration of ways to address roadway congestion near the I-93 interchange in the Albany Street/Massachusetts Avenue/South Bay area. A freight study to determine truck traffic impacts forecast in the Boston region.	Both MPO staff and the UPWP Subcommittee evaluated this project during the development of the draft UPWP and determined that it is a worthwhile study to perform. However, an important criterion used for selecting UPWP projects is the ability to implement study recommendations. The project did not rank as high as others in this regard and was, therefore, not selected for funding this year. It will, however, be reconsidered in the development of the FFY 2010 UPWP. The feasibility of the extension of the Community Path is included in the development of a draft environmental impact report/ environmental assessment for the Green Line expansion that is currently underway. This project was included in the UPWP's universe of projects, but was not selected by the UPWP Subcommittee for funding this year. It will be reevaluated during the development of the FFY 2010 UPWP. EOTPW is currently engaged in the development of a statewide freight plan. Following its completion, which is expected in July 2009, the MPO will evaluate the need for additional study in the Boston region.
8/4/08	MetroWest Growth Management Committee	Donna Jacobs, Director	Describes the economic, quality-of-life, and transportation challenges confronting the MetroWest region and expresses appreciation that the draft UPWP includes an analysis of the public transportation needs of members of the MetroWest Regional Transit Authority. Also supports the Arterial Traffic Signal Improvements and Coordination project, the Inner	The MPO appreciates the Committee's support for these projects.

Draft Summary of Comments Received on the Draft FFY 2009 Unified Planning Work Program with MPO Responses

Dated	Community/ Organization	Name and Title	Comment	MPO Response
8/4/08	MetroWest Growth Management Committee (Cont.)	Donna Jacobs, Director	Suburban Mobility Study, the Operational Improvements at High Crash Locations project, the Route 126 Corridor Study, and the Safety Evaluation of TIP Projects.	
8/04/08	North Shore Task Force	Brian Watson, Chairman	Supports the projects included on the draft UPWP, especially the North Shore Transportation Study. Proposes consideration of the following corridor studies for future UPWPs: Route 35, Route 97 from Haverhill to the Cummings Center in Beverly; and congested areas on Route 133, Route 1, and Route 97, especially downtown Georgetown. Also suggests a future corridor study from Routes 114/1A and 127 from Swampscott to Rockport of ways to improve bicycle facilities and bicycle connections to rail and an exploration of the feasibility of providing a new park-and-ride lot on Route 1 North for commuting to Beverly and Salem, based on a recent CTSPS inventory in this area.	The MPO appreciates the support for the UPWP and will consider the projects proposed by the North Shore Task Force in the development of the FFY 2010 UPWP. It should be noted that coordination with the Merrimack Valley MPO would also be necessary for portions of studies outside the Boston Region MPO.
8/05/08	North Suburban Planning Council	Tony Fields, Chairman	Expresses support for the projects in the draft FFY 2009 UPWP. Asks that the selection criteria for the Arterial Traffic-Signal Improvements and Coordination project be circulated to the subregions for communities to review and decide if there is a location of particular importance to the subregions as a whole. Suggests that the MPO consider the intersection of Cross Street and North Main Street in Winchester for inclusion in the study due to its current level of congestion, the large amount of pending development, and its impact on Woburn, which borders the location.	MPO staff will be discussing potential locations for this study, including the intersection of Cross Street and North Main Street in Winchester, with the Council and other MAPC subregions prior to the development of a work scope for this project.
7/17/08	Regional Transportation Advisory Council	Kristina Johnson, Chair	Recognizes the value of the projects included in the draft UPWP and requests attention to the following issues: Study implementation – The MPO should establish a mechanism to coordinate with implementing agencies or provide a method for implementing entities to fund study recommendations. MPO staff should follow up with implementing entities to review progress and use this review to inform decisions regarding future studies and actions.	The MPO staff is in the process of developing an inventory on the status of study recommendations that will be available in the near future. As part of this work, staff will identify the steps needed to implement the recommendations and the entity responsible.
			Funding constraints – Appreciates existing funding constraints this fiscal year and urges the MPO to examine new funding streams in order to maintain and expand our transportation infrastructure and advance alternative modes of transportation	This suggestion will be considered in the development of the FFY 2010 UPWP.

Draft Summary of Comments Received on the Draft FFY 2009 Unified Planning Work Program with MPO Responses

Dated	Community/ Organization	Name and Title	Comment	MPO Response
7/17/08	Regional Transportation Advisory Council (Cont.)	Kristina Johnson, Chair	<p>when additional funds are available.</p> <p>HOV studies – Suggests that, following the conclusion of the development of the Statewide Transportation Plan, a regionally specific HOV study be included in the FFY 2010 UPWP.</p> <p>Freight studies – Recognizes the state’s commitment to studying the Commonwealth’s rail infrastructure, including passenger and freight service, and expresses belief that that there remains a need for the MPO to examine freight issues in the Boston Region MPO.</p> <p>UPWP process – Appreciates the involvement of the Advisory Council in the UPWP development process through the Council’s participation on the Transportation Planning and Programming Committee’s UPWP Subcommittee and would like to see this process continued.</p>	<p>An HOV study was included in the UPWP’s universe of projects, but was not selected by the UPWP Subcommittee for funding this year. It will be reevaluated during the development of the FFY 2010 UPWP.</p> <p>EOTPW is currently engaged in the development of a statewide freight plan. Following its completion, which is expected in July 2009, the MPO will evaluate the need for additional study in the Boston region.</p> <p>The MPO values the Council’s ongoing participation on the UPWP Subcommittee and looks forward to its continued involvement.</p>
7/18/09	South West Advisory Planning Committee	Gino Carlucci, Chair	<p>Expresses support for the Route 126 Corridor Study and is looking forward to working with CTPS as it unfolds. SWAP would also like to make suggestions for areas to be studied under the Arterial Traffic-Signal Improvements and Coordination and Operational Improvements at Congested and High-Crash Locations projects. The letter also transmitted comments on the TIP.</p>	<p>The MPO appreciates the Committee’s support. MPO staff plan to visit with the South West Advisory Planning Council prior to the development of work scopes for both of these projects.</p>
7/09/08	Town of Bedford	Richard Reed, Town Manager	<p>Recommends the inclusion of a Route 4 and Route 225 corridor study in the FFY 2009 UPWP and provides background information supporting the recommendation, including the observation that the intersection of the two routes is a gateway to Hanscom Field, and employment and commercial centers. Also notes that the proposed U.S. Air Force Cyber Command Center at Hanscom Field will merit infrastructure improvements in this area.</p>	<p>The MPO acknowledges the pressing need for a study of the impacts of the proposed Cyber Command Center on area roadways and urges the Town to pursue funding for a planning study from another source, such as the Executive Office of Housing and Economic Development. However, if necessary, the project can be considered for funding in the FFY 2010 UPWP.</p>
6/23/08	Town of Brookline	Jeff Levine, Director, Department of Planning and Community Development	<p>Urges the inclusion of the proposed study of the Jamaicaaway and Riverway in the FFY 2009 UPWP. The project is time sensitive, as there are other studies and projects underway in the vicinity (redevelopment of 2 Brookline Place, Gateway East/Village Square improvements, Bicycle/Pedestrian access for Brookline Village study, Joslin Diabetes Center proposal at Brookline and Brookline avenues, and ongoing transportation planning in the Longwood Medical Area). The parkways are significantly congested roadways.</p>	<p>Both MPO staff and the UPWP Subcommittee evaluated this project during the development of the draft UPWP and determined that it is a worthwhile study to perform. However, an important criterion used for selecting UPWP projects is the ability to readily implement study recommendations. The project did not rank as high as others in this regard and was, therefore, not selected for funding this year. It will, however, be reconsidered during the development of the FFY 2010 UPWP.</p>

Draft Summary of Comments Received on the Draft FFY 2009 Unified Planning Work Program with MPO Responses

Dated	Community/ Organization	Name and Title	Comment	MPO Response
8/05/08	Town of Concord	Christopher Whelan, Town Manager	Supports the FFY 2009 UPWP, especially if the Arterial Traffic-Signal Improvements and Coordination project focuses on the Route 2 corridor. Also cites specific support for Walkable Community Workshops, the development of TIP criteria, land-use reviews, and the Suburban Mobility/Transportation-Demand-Management Programs.	The MPO appreciates the Town's support for these UPWP projects. MPO staff will evaluate the Route 2 corridor for possible inclusion in the Arterial-Traffic Signal Improvements and Coordination project.
7/28/09	Town of Lincoln	Sara Mattes, Chair, Board of Selectmen	<p>Requests studies of two corridors that it believes have regional and national significance:</p> <p>1) A new study for the Routes 4/225 corridor in Lexington and Bedford. It is one of the high-priority corridors in the region, as identified by MPO staff. These routes carry high volumes of both regional and local traffic and are the main access routes for the area's large employers (5,000 employees), Hanscom Air Force Base (expected to expand operations and staff) and MIT Lincoln Laboratories. This corridor also links with the national highway network (at Route 128/I-95). These corridors are vital economic-development and transportation links.</p> <p>2) The Route 128 corridor (particularly the section in Lexington, Lincoln, Waltham, and Weston) should be addressed, too. It encompasses 15 proposed development sites. Would like to see a study of the land-use/transportation challenges in this corridor.</p> <p>Supports: Bicycle/Pedestrian Studies, Corridor/Subarea Planning Studies; Land-Use Reviews, Land-Use Development Project Reviews, and suburban mobility/transportation-demand management support work. Programs support mobility and alternative modes in the Route 128 corridor.</p>	<p>The MPO acknowledges the pressing need for a study of the impacts of the proposed Cyber Command Center on area roadways and urges the Town to pursue funding for a planning study from another source, such as the Executive Office of Housing and Economic Development. However, if necessary, the project can be considered for funding in the FFY 2010 UPWP.</p> <p>The MPO and MAPC appreciate the Town's support for the projects in the draft UPWP. The draft document contains an Inner Suburban Mobility study, which, while not of the scope suggested in the comment, will identify the potential for transit to serve commercial and residential centers and promote circumferential connectivity in inner Route 128 communities. It will also take into consideration existing and planned land-use development along the Route 128 corridor.</p>
7/22/08	Town of Lexington	Norman Cohen, Board Chairman, Board of Selectmen	<p>The Board requests studies in two corridors that it believes have regional and national significance:</p> <p>1) A new study for the Routes 4/225 corridor in Lexington and Bedford. It is one of the high-priority corridors in the region, as identified by MPO staff. These routes carry high volumes of both regional and local traffic and are the main access routes for the</p>	See response above.

Draft Summary of Comments Received on the Draft FFY 2009 Unified Planning Work Program with MPO Responses

Dated	Community/ Organization	Name and Title	Comment	MPO Response
7/22/08	Town of Lexington (Cont.)	Norman Cohen, Chairman, Board of Selectmen	<p>area's large employers (5,000 employees), Hanscom Air Force Base (expected to expand operations and staff) and MIT Lincoln Laboratories. This corridor also links with the national highway network (at Route 128/I-95). These are all high-volume corridors. They are vital for economic development, and for commercial and transportation links.</p> <p>2) The Lexington section of the Route 128 corridor (particularly at the Route 128/I-95 interchange) should be addressed. It has daily volumes averaging 29,000 vehicles. The central section of Route 128 has 15 proposed development sites. Would like to see a study of the land-use/transportation challenges in this corridor.</p> <p>Supports: the Bicycle/Pedestrian Studies, the Corridor/Subarea Planning Studies: Land-Use Reviews, the Land-Use Development Project Reviews, and suburban mobility/transportation-demand management support work. These programs would support mobility and alternative modes in the Route 128 corridor.</p>	<p>See the response to the Town of Lincoln on the previous page.</p> <p align="center">"</p> <p align="center">"</p>
8/5/08	Town of Swampscott	Danielle McKnight, Town Planner/ Conservation Agent	<p>Supports the household survey and the resulting update for the regional travel models, the Inner Suburban Mobility Study, and I-93 Southeast Expressway HOV Lane Monitoring, North Shore Transportation Improvements (including Routes 16, 1, and 1A), and work supporting the Green Line extension, Red-Blue Connector, Urban Ring, and South Coast Rail. In addition, proposes numerous additional studies including: air quality and climate change (as part of the household survey and the Inner Suburban Mobility Study), congestion charging, smart growth policy, transportation effects of 40R developments, transit improvements in the Revere-to-Lynn corridor, potential benefits of coordinated statewide land-use planning and economic development for communities and the environment, freight (including replacing truck traffic in high-traffic areas), all alternatives to MBTA fare increases and/or reduction in service, mobility and air quality studies for low-income and environmental-justice neighborhoods, and air quality studies of ultrafine particulate levels.</p>	<p>The MPO and MAPC appreciate the Town's support for the projects in the draft UPWP and will consider the additional study ideas proposed in the comments during the development of the FFY 2010 UPWP.</p> <p>For further discussion of the details on the analysis requested for the household survey and the Inner Suburban Mobility Study, contact the MPO's technical director, Karl Quackenbush, at (617) 973-7100 or karlq@bostonmmpo.org.</p>

APPENDIX C GLOSSARY

The following terms, acronyms, and abbreviations are used in planning documents produced by the Boston Region Metropolitan Planning Organization. Acronyms and abbreviations are listed separately, after the list of terms.

Sources: With each definition, the source is given if it is outside the MPO. Key to the citations: AC Transit—Alameda-Contra Costa Transit District; APTA—American Public Transportation Association; Mineta—Mineta Transportation Institute at San Jose State University; NCDOT—North Carolina Department of Transportation Public Transportation Division.

3C process - *A continuing, comprehensive transportation-planning process carried out cooperatively by metropolitan planning organizations as they plan for the future and program federal transportation funds for studies, projects, and programs in their region.*

Access Advisory Committee to the MBTA (AACT) - Consumer group that provides input to the MBTA on the transportation concerns of people with disabilities and assists in monitoring the MBTA's ADA compliance. Also provides input to the MPO on accessibility matters.

accessibility - Ability to reach a destination or use a facility or service without being impeded by physical or other barriers due to auditory, visual, mobility, or cognitive disabilities.

accessible station - A station that provides ready access, and does not have physical barriers that prohibit and/or restrict access by individuals with disabilities, including individuals who use wheelchairs. (APTA)

accessible vehicle - A public transportation revenue vehicle that does not restrict access, is usable, and provides allocated space and/or priority seating for individuals who use wheelchairs. (APTA)

adult base cash fare - The minimum cash fare paid by an adult for one transit ride; excludes transfer charges, zone or distance charges, express service charges, peak-period surcharges, and reduced fares. (APTA)

Americans with Disabilities Act (ADA) - Federal legislation prohibiting discrimination on the basis of disability and requiring accessible transportation services.

arterial - A highway serving primarily through traffic and also providing access to abutting properties.

average fare - The overall average amount per ride paid by cash-fare passengers and pass users on a given service, equal to combined total cash-fare and pass revenue divided by total riders.

average farebox deposit - Total cash-fare revenue from a given service divided by combined total cash-fare passengers and pass users. This average can be used to calculate subsequent total ridership from cash-fare revenue alone.

average speed - Vehicle revenue miles divided by vehicle revenue hours. (APTA)

average trip length - The average distance ridden for an unlinked passenger trip by time period (weekday, Saturday, Sunday), computed as passenger-miles divided by unlinked passenger trips. (APTA)

bus - Bus mode uses vehicles powered by diesel, gasoline, battery, or alternative fuel engines contained within the vehicle. (APTA)

bus rapid transit (BRT) - A type of limited-stop service developed in the 1990s that relies on technology to help speed up the service. It combines the quality of rail transit and the flexibility of buses. It can operate on exclusive transitways, high-occupancy-vehicle lanes, expressways, or ordinary streets. A BRT line combines intelligent-transportation-systems technology, priority for transit, rapid and convenient fare collection, and integration with land use policy in order to substantially upgrade bus system performance. (APTA)

busway (or bus lane) - A roadway reserved for buses only. It may be a grade-separated (meaning it is above or below the level of the public street or other roadway) or a controlled-access roadway. (APTA)

capital costs - Expenses incurred that are related to the purchase of facilities, vehicles, and equipment.

Capital Investment Program (CIP) - The MBTA's five-year capital expenditures plan.

carbon monoxide (CO) - A colorless, tasteless gas produced primarily by the combustion of organic fuels in transportation and industrial activities. Overly high levels of CO reduce oxygen in the bloodstream, preventing normal respiration. CO emissions are regulated by the Clean Air Act Amendments of 1990.

Central Transportation Planning Staff (CTPS) - The staff of the Boston Region Metropolitan Planning Organization (MPO). CTPS provides technical and policy-analysis support for transportation planning in the MPO area.

Clean Air Act Amendments of 1990 (CAAA) - Federal legislation that establishes allowable levels for various air pollutants. Where these standards are not attained, officials must take specified actions within a set time frame or face sanctions, such as the loss of federal highway funds.

commuter rail (also called metropolitan rail, regional rail, or suburban rail) - An electric- or diesel-propelled multicar railway utilizing exclusive rights-of-way for urban passenger train service consisting of local, short-distance travel, operating between a central city and adjacent suburbs. Service must be operated on a regular basis by or under contract with a transit operator for the purpose of transporting passengers within urbanized areas, or between urbanized areas and outlying areas. Such rail service, using either locomotive-hauled or self-propelled railroad passenger cars, is generally characterized by multitrip tickets, specific station-to-station fares, and usually only one or two stations in the central business district. Intercity rail service is excluded, except for that portion of such service that is operated by or under contract with a public transit agency for predominantly commuter services, which means that for any given trip segment (i.e., the distance between any two stations), more than 50 % of the average daily ridership travels on the train at least three times a week. (APTA)

complementary paratransit service - Complementary paratransit service is required by law for those disabled persons and others not able to use fixed-route service. Generally it must operate in the same areas and during the same hours. The fare is limited to twice the fixed-route fare. Service may be provided by the fixed-route bus agency or by a completely separate agency. (APTA)

conformity - The requirement that state or metropolitan transportation plans, programs, and projects be consistent with the State Implementation Plan for attaining air quality standards. A conformity finding by the U.S. Environmental Protection Agency is required as part of the federal review of Regional Transportation Plans and Transportation Improvement Programs.

Congestion Mitigation and Air Quality Improvement Program (CMAQ) - A federal funding program that directs funding to projects that contribute to meeting National Ambient Air Quality Standards. Generally, CMAQ funds cannot be used for projects that result in the construction of new capacity available to single-occupant vehicles.

demand response (or demand responsive) service – Demand response (also called paratransit or dial-a-ride) is composed of passenger cars, vans, or small buses operating in response to calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick up the passengers and transport them to their destinations. A demand response operation is characterized by the following: (a) the vehicles do not operate over a fixed route or on a fixed schedule except, perhaps, on a temporary basis to satisfy a special need; and (b) typically, the vehicle may be dispatched to pick up several passengers at different pick-up points before taking them to their respective destinations and may even be interrupted en route to these destinations to pick up other passengers. The following types of operations fall under the above definitions provided they are not on a scheduled fixed-route basis: many origins–many destinations, many origins–one destination, one origin–many destinations, and one origin–one destination. The transit agency may limit the service to certain people, such as persons with disabilities, their attendants and companions, and seniors, or it may be available to anyone. Some such services operate during late-night and weekend hours in place of fixed-route services. (APTA)

Department of Conservation and Recreation (DCR) - Agency that maintains 15,000 acres of parkland, numerous public beaches, and 650 miles of parkways within the Boston region. DCR is the successor to the Metropolitan District Commission.

Department of Environmental Protection (DEP) - The state regulatory agency within the Executive Office of Energy and Environmental Affairs charged with protecting the natural environment of the commonwealth.

directly operated service - Service provided by a transit agency using its own employees, as opposed to service operated under contract by a separate company.

discretionary funds - Federal funds that are distributed based upon agency action or congressional action, rather than upon an established formula.

environmental impact statement (EIS) - Document developed as part of a federal environmental review process that studies all impacts likely to result from a project, including a major transportation project. Impacts include those on the natural environment, as well as impacts on the economy and society and those on the built environment of historical and aesthetic significance.

environmental justice - Balancing the benefits and burdens of government policies and actions so that no racial, ethnic, or socioeconomic community bears a disproportionate share of the negative environmental consequences. The MPO works to provide an equitable distribution of transportation benefits and burdens and encourages full participation by minority and low income communities in advising the MPO during its planning and decision-making process.

Environmental Protection Agency (EPA) - The federal agency charged with protecting the nation's environmental quality. The agency reviews all Regional Transportation Plans and Transportation Improvement Programs to ensure compliance with the Clean Air Act Amendments of 1990.

Executive Office of Energy and Environmental Affairs (EOEEA) - The cabinet agency that oversees energy and environmental issues for the state and is responsible for State Implementation Plan adoption.

Executive Office of Transportation and Public Works (EOTPW) - The cabinet agency that sets state policies and plans for all modes of transportation and that oversees public transit services, general aviation programs, and the state and local highway network. This agency is also the chair of the Boston Region Metropolitan Planning Organization.

expressway - A multilane, divided highway without traffic signals and with limited access and egress.

fare mix - The percentage distribution of passengers by fare payment method on a given service. This information is obtained by sample observations onboard vehicles that have onboard fare collection, and at fare collection areas of stations with off-vehicle fare collection.

fare recovery ratio (farebox recovery ratio) - Measure of the proportion of operating expenses covered by passenger fares; found by dividing farebox revenue by total operating expenses for each mode and/or systemwide. (Mineta)

Federal Highway Administration (FHWA) - The federal agency that administers federal highway programs. The agency reviews all Regional Transportation Plans, Transportation Improvement Programs, and Unified Planning Work Programs to ensure compliance with federal planning and funding requirements.

Federal Transit Administration (FTA) - The federal agency that administers federal transit programs. The agency reviews all Transportation Plans, Transportation Improvement Programs, and Unified Planning Work Programs to ensure compliance with federal planning and funding requirements.

fixed-route service - Service provided on a repetitive, fixed-schedule basis along a specific route, with vehicles stopping to pick up and deliver passengers to specific locations; each fixed-route trip serves the same origins and destinations, unlike demand responsive service. Includes route deviation service, where revenue vehicles deviate from fixed routes on a discretionary basis. (APTA)

flexible funds - Transportation-funding categories that may be used for either highway or transit programs. Within the Boston region, highway funds have been flexed to the MBTA to fund commuter rail extensions, transit station improvements, and park-and-ride facilities.

formula funds - Funds distributed on a quantified basis according to legislative or administrative criteria.

GIS - geographic information systems

heavy rail (transit) – Generally applies to higher speed, multicar rail transportation that utilizes exclusive, grade separated rights-of-way in subway tunnels, on the surface, or on elevated structures. The MBTA's Red Line is an example of heavy rail.

high occupancy vehicle (HOV) - A vehicle carrying two or more persons. Examples of high occupancy vehicles are a bus, vanpool, and carpool. These vehicles sometimes have exclusive traffic lanes called “HOV lanes,” “busways,” “transitways,” or “commuter lanes.” (APTA)

high occupancy vehicle (HOV) lane - A lane designated for the exclusive use of high occupancy vehicles, such as carpools, vanpools, other ridesharing modes, and buses.

highway Safety Management Program (HSMP) - A method for evaluating highway safety needs and making recommendations to address deficiencies.

intelligent transportation system (ITS) - Computer and communications technology that provides real-time information to operators of vehicles about transportation system conditions. Also includes technologies that identify, monitor, or control vehicles.

intermodal (multimodal) - Those issues or activities that involve or affect more than one mode of transportation, including transportation connections and choices, and cooperation and coordination between various modes. (APTA)

intermodal planning - Planning that reflects a focus on connectivity between modes as a means of facilitating linked trip-making.

JOURNEY TO 2030 - The current Boston Region MPO's long-range transportation plan (and a certification document), which defines the overarching vision for the future of transportation in the region, establishes principles and policies that will lead to the achievement of that vision, and allocates projected revenue to transportation programs and projects that reflect those principles and policies.

key station plan - A document designating critical transit facilities needed to expand accessibility for individuals with disabilities and to meet ADA requirements.

land use - The purpose for which land or the structures on the land are being utilized; for example: commercial, residential, retail.

layover - Time built into a schedule between arrival at the end of a route and the departure for the return trip, used for the recovery of delays and preparation for the return trip. (Mineta)

level of service (LOS) - A qualitative measure used to characterize the operating conditions of a transportation service as perceived by its users. Most commonly applied to traffic operations, where designations range from A (best) to F (worst).

linked trip - A trip from origin to destination on the transit system. Even if a passenger must make several transfers during a journey, the trip is counted as one linked trip on the system. (NCDOT)

major investment study (MIS) - An alternatives analysis required to support decisions on significant transportation investments. The purpose of an MIS is to examine the possible impacts and consequences of various alternatives to address an identified transportation need at the subarea or corridor level.

Massachusetts Bay Transportation Authority (MBTA) - Authority that provides public-transportation service in eastern Massachusetts. A member of the Boston Region Metropolitan Planning Organization.

Massachusetts Bay Transportation Authority (MBTA) Advisory Board - Legislatively created group representing the 175 cities and towns within the MBTA service district. Powers include: approval or reduction of the MBTA budget; approval of the Program for Mass

Transportation; approval of changes to the fare structure; approval of the appointment of the general manager and three MBTA board members. A member of the Boston Region Metropolitan Planning Organization.

Massachusetts Environmental Policy Act (MEPA) Unit - Section of the Executive Office of Energy and Environmental Affairs responsible for administration of the Massachusetts Environmental Policy Act, which establishes a process for evaluating impacts from a public or private infrastructure project and for identifying steps to be taken to avoid or minimize negative impacts. This process may require preparation of an environmental impact report. MEPA permits are required for most large transportation projects.

Massachusetts Highway Department (MassHighway) - Agency responsible for the design, construction, and maintenance of state highways and bridges. A member of the Boston Region Metropolitan Planning Organization.

Massachusetts Port Authority (Massport) - Agency charged with operating and developing major commercial maritime and aviation facilities in the Boston region. Owns and operates Logan Airport, Hanscom Field, maritime terminals located in the Port of Boston, and the Tobin Bridge. A member of the Boston Region Metropolitan Planning Organization..

Massachusetts Turnpike Authority (MassPike) - Agency responsible for the operation of the Massachusetts Turnpike, the Metropolitan Highway System, which consists of the I-90 east of Route 128, and the three harbor tunnels (Sumner, Callahan, and Ted Williams). A member of the Boston Region Metropolitan Planning Organization.

MassRIDES - Organization implementing the Executive Office of Transportation and Public Works' statewide travel options program that provides free assistance to commuters, employers, students, and other traveler markets.

Metropolitan Area Planning Council (MAPC) - Regional comprehensive-planning agency for the Boston metropolitan area, comprising 101 communities. Composed of officials from cities, towns, and state agencies, and independent gubernatorial appointees. A member of the Boston Region Metropolitan Planning Organization.

metropolitan planning organization - The regional organization responsible, under federal regulations, for comprehensive transportation planning and for programming of federal funds for projects and programs in an urbanized area. Work products include the Regional Transportation Plan, Transportation Improvement Program, and Unified Planning Work Program.

Mobility Management System (MMS) - A method for evaluating the level of congestion on the region's transportation system and for identifying strategies that will reduce this congestion. Federal regulations refer to this program as the congestion management process.

mode - A particular means of transportation (for example, transit, automobile, bicycle, walking).

multimodal - See **intermodal**.

multimodal planning - Planning that reflects consideration of more than one mode to serve transportation needs in a given area.

National Ambient Air Quality Standards (NAAQS) - Federal standards that set allowable concentrations and exposure limits for pollutants such as ozone, carbon monoxide, and particulate matter.

National Environmental Policy Act (NEPA) - Federal legislation that requires agencies to give full consideration to environmental effects in planning and implementing federal programs and that may require the preparation of an environmental impact statement. NEPA permits are required for most large transportation projects.

nitrogen oxides (NO_x) - Precursor emission that forms from high-temperature combustion processes. Reacts with volatile organic compounds in the presence of heat and sunlight to form ozone.

nonattainment area - A geographic region that the Environmental Protection Agency has designated as failing to meet National Ambient Air Quality Standards. The Boston area has been designated as being in “moderate nonattainment” for the eight-hour standard.

operating expenses - The expenses associated with the operation of the transit agency, and classified by function or activity and the goods and services purchased. (APTA)

ozone - A colorless gas with a sweet odor that is not a direct emission from transportation sources, but is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_x) from car exhaust and from certain industrial emissions combine in the presence of sunlight. Ground-level ozone is associated with smog conditions and initiates damage to lungs, trees, crops, and materials. Regulated by the Clean Air Act Amendments of 1990.

paratransit - Any one of a variety of smaller, flexibly scheduled and routed, demand responsive transportation services using low capacity vehicles. Primarily used by persons for whom use of standard mass transit services is difficult or impossible.

park-and-ride facility - A parking garage and/or lot used for parking passengers' automobiles, either free or for a fee, while they use transit agency facilities. Park-and-ride facilities are generally established as collector sites for rail or bus service. Park-and-ride facilities may also serve as collector sites for vanpools and carpools, and as transit centers. (APTA)

passenger fares - Revenue earned from carrying passengers in regularly scheduled and demand response service. Passenger fares include: the base fare; zone premiums; express-service premiums; extra-cost transfers; and quantity-purchase discounts applicable to the passenger's ride. (APTA)

passenger-miles - Passenger-miles is the cumulative sum of the distances ridden by each passenger. (APTA)

pass-ride value - The average revenue per trip obtained from pass users. This figure is calculated from pass sales figures and from survey data on the number of trips by mode that pass users make per day or per week.

pointcheck - An observation of the arrival times, departure times, and passenger loads of a transit service at a single location.

Program for Mass Transportation (PMT) - A long-range plan prepared by the Massachusetts Bay Transportation Authority and approved by the MBTA Advisory Board. It describes scheduled MBTA capital projects.

pulse system - A transit system in which vehicles from all or several routes simultaneously converge at a central location at regular intervals (such as hourly or half-hourly) to allow passengers to transfer directly between vehicles arriving on any of the routes and vehicles departing on any of the others.

purchased transportation - Transportation service provided to a public transit agency or governmental unit by a public or private transportation provider based on a written contract. The provider is obligated in advance to operate public transportation services for a public transit agency or governmental unit for a specific monetary consideration. Purchased transportation does not include franchising, licensing operation, management services, cooperative agreements, or private conventional bus service. (APTA)

Regional Transportation Advisory Council - Citizen group that advises the Boston Region Metropolitan Planning Organization on transportation issues and reviews the Regional Transportation Plan, Transportation Improvement Program, and Unified Planning Work Program. Composed of state agencies, municipalities, and civic and private associations with an interest in regional transportation planning.

Regional Transportation Plan - A long-range certification document that identifies facilities and programs that should function as an integrated metropolitan transportation system and includes a financial plan that demonstrates how the long-range plan can be implemented. The plan must show that the current system can be operated and maintained over the long term, as well as recommend capital expansion projects to be constructed.

reverse commuting - Movement in a direction opposite the main flow of traffic, such as from the central city to a suburb during the morning peak period. (APTA)

ridership - The number of rides taken by people using a public transportation system in a given time period. (Mineta)

ridesharing - A form of transportation, other than that provided by a transit agency, in which more than one person shares the use of the vehicle, such as a van or car, to make a trip. Also known as “carpooling” or “vanpooling.” (APTA)

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) - The federal legislation governing federally funded surface transportation projects and planning through 2010. Provides the framework and contemporary guidance for metropolitan transportation planning and the programming of federal funds.

single occupant vehicle (SOV) - A vehicle containing only the driver and no other passengers.

State Implementation Plan (SIP) - A document that contains procedures detailing how a state will attain or maintain compliance with National Ambient Air Quality Standards. Prepared by the state and submitted to the U.S. Environmental Protection Agency for approval.

State Transportation Improvement Program (STIP) - A short-range transportation-planning document detailing the federally assisted projects planned to be undertaken in a given three-year period. By federal law, the STIP consists of a compilation of regional MPO transportation improvement programs and a list of projects to be undertaken outside of MPO boundaries.

station - A passenger boarding/alighting facility with a platform, which may include stairs; elevators; escalators; passenger controls (e.g., faregates or turnstiles); canopies; wind shelters; lighting; signs; and buildings with a waiting room, ticket office or machines, restrooms, or concessions. Includes all fixed-guideway passenger facilities (except for on-street cable car and light rail stops), including busway passenger facilities; underground, at-grade, and elevated rail stations; and ferryboat terminals. Includes transportation/transit/transfer centers, park-and-ride facilities, and transit malls with the above components, including those only utilized by motor buses. Does not include bus, light rail, or cable car stops (which are typically on-street locations at the curb or in a median, sometimes with a shelter, signs, or lighting). (APTA)

timecheck - An observation of the arrival times, departure times, and passenger loads of a transit service at multiple locations, usually the start and end of the route and at least one midpoint.

Title VI - Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving federal financial assistance.

transportation analysis zone (TAZ) - An area delineated by state and/or local transportation officials for tabulating transportation-related data, especially journey-to-work and place-of-work statistics. A TAZ usually consists of one or more census blocks, block groups, or census tracts.

transfer surcharge - An extra fee charged . . . when boarding another transit vehicle to continue a trip. (APTA)

transportation control measure (TCM) - Actions, usually found in a State Implementation Plan, that improve traffic flow or reduce vehicle use or congestion with the objective of reducing air pollutant emissions.

transportation demand management (TDM) - In its most general form, any action or actions that attempt to control or alter existing travel patterns or choices. Included in this group is a wide

range of strategies, such as promoting ridesharing, requiring alternative work hours or flextime, and increasing travel costs for single-occupant vehicles.

Transportation Improvement Program (TIP) - A short-range certification document of transportation projects, consistent with the Regional Transportation Plan, to receive federal capital funding. The Boston Region MPO's TIP shows projects to be funded within the region during a given four-year period.

transportation management area (TMA) - Defined by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) as any urban area with a population over 200,000. Within a TMA, all transportation plans and programs must be based on the 3C process. The TMA boundary affects the responsibility for the selection of transportation projects that receive federal funds.

transportation management association (TMA) - A voluntary association of public agencies and private firms that develop, fund, or implement transportation programs or services in a given area.

Transportation Planning and Programming Committee - A standing committee of the Boston Region Metropolitan Planning Organization (MPO) comprising a designated representative of each MPO agency and a representative of the Regional Transportation Advisory Council. The committee reviews and approves the preparation and distribution of reports, studies, and other documents, including the Regional Transportation Plan, Transportation Improvement Program, and Unified Planning Work Program, and recommends the approval of these and other actions to the MPO.

Unified Planning Work Program (UPWP) - A certification document that contains a description of all proposed transportation-related planning activities and air quality planning activities undertaken in a metropolitan region in a given year.

unlinked passenger trips - The number of passengers who board public transportation vehicles. When a count is conducted to ascertain this number, passengers are counted each time they board vehicles no matter how many vehicles they use to travel from their origin to their destination. (APTA)

unlinked trip - A trip on a particular mode or vehicle; any segment of a linked trip.

vehicle-miles - The miles a vehicle travels from the time it pulls out from its garage to go into revenue service to the time it pulls in from revenue service. They are often called platform-miles. For conventional scheduled services, they include revenue miles and deadhead miles. (APTA)

volatile organic compounds (VOCs) - A group of chemicals that react in the atmosphere with nitrogen oxides in the presence of heat and sunlight to form ozone. Examples include gasoline fumes and oil-based paints.

List of Acronyms and Abbreviations

AACT	Access Advisory Committee to the MBTA
ADA	Americans with Disabilities Act
AFC	automated fare collection
APC	automatic passenger counter
BMS	bridge management system
BRT	bus rapid transit
BTPR	Boston Transportation Planning Review
CA/T	Central Artery/Tunnel
CAAA	Clean Air Act Amendments of 1990
CMAQ	Congestion Mitigation/Air Quality
CMP	congestion management program
CO	carbon monoxide
CTPS	Central Transportation Planning Staff
DCR	Department of Conservation and Recreation
DEP	Department of Environmental Protection
DOER	Department of Energy Resources
FHWA	Federal Highway Administration
EIS	environmental impact statement
EOEEA	Executive Office of Environmental Affairs
EOTPW	Executive Office of Transportation and Public Works
EPA	Environmental Protection Agency
FTA	Federal Transit Administration
HOV	high-occupancy vehicle
HSMP	Highway Safety Management Program
IMS	Intermodal Facilities and Systems Management System
ISTEA	Intermodal Surface Transportation Efficiency Act of 1997
ITS	intelligent transportation systems
LOS	level of service
MAPC	Metropolitan Area Planning Council
MassHighway/MHD	Massachusetts Highway Department
MassPike/MTA	Massachusetts Turnpike Authority
Massport/MPA	Massachusetts Port Authority
MBTA	Massachusetts Bay Transportation Authority
MEPA	Massachusetts Environmental Policy Act
MIS	major investment study
MMS	Mobility Management System
MOE	measure of effectiveness
MPO	metropolitan planning organization
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NOx	nitrogen oxides

NTD	National Transit Database
NTS	National Transportation System
PMS	pavement management system
PMT	Program for Mass Transportation
RPA	regional planning agency
RTA	regional transit authority
RTP	Regional Transportation Plan
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SAR	Strategic Assessment Report
SIP	State Implementation Plan
SOV	single-occupant vehicle
STIP	State Transportation Improvement Program
3C	comprehensive, continuous, and cooperative
TAZ	traffic analysis zone
TCM	transportation control measure
TDM	transportation demand management
TEA-21	Transportation Equity Act for the 21st Century
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TMA	Transportation Management Association
UPWP	Unified Planning Work Program
VOCs	volatile organic compounds

