

To: Participant in the MPO Transportation Planning Process  
From: Pam Wolfe  
Subject: MPO Certification Review

July 12, 2010

Over the past several years, you have been following or been involved in some aspect of the Boston Region Metropolitan Planning Organization's (MPO's) transportation planning program. You may have served on an MPO committee, participated in an MPO study, attended an MPO meeting or workshop, made a comment to the MPO, or kept up with MPO news. Therefore you have had the opportunity to observe one or more parts of the MPO's transportation planning process. We are contacting you to invite you to participate in an evaluation of that process.

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) will soon be conducting a review of our transportation planning process. They carry out such an evaluation every four years in order to certify our activities as the MPO for the Boston Transportation Management Area. They are particularly interested in hearing from people who have participated in some aspect of our work.

We are inviting you to submit comments or any thoughts you might have based on your observations of how we have undertaken the transportation planning process. Written comments may be sent to either FHWA or FTA at the addresses below. If you submit comments, please indicate the general nature of your involvement or acquaintance with the Boston Region MPO.

**FHWA:** Ms. Lucy Garliauskas, Division Administrator  
55 Broadway, 10<sup>th</sup> Floor, Cambridge, MA 02142  
Or via email: michael.chong@dot.gov

**FTA:** Ms. Mary Beth Mello, Deputy Regional Administrator  
55 Broadway, Suite 920, Cambridge, MA 02142  
Or via email: william.gordon@dot.gov

You are also welcome to attend the on-site review, which is scheduled to take place at the times listed below. Should the need arise for additional discussion, a meeting time on July 30 will also be scheduled.

Tuesday, July 27, 2010, and Wednesday, July 28  
9:30 AM–4:00 PM

Wednesday, July 28  
7:00 PM–8:30 PM

Thursday, July 29  
9:00 AM–Noon

The meetings will take place in the second-floor conference rooms in the State Transportation Building, 10 Park Plaza, Boston, MA.

The State Transportation Building is accessible by:  
Silver and Orange Lines (Tufts Medical Center Station)  
Green Line (Boylston or Arlington Station)  
MBTA Bus Routes 43 & 55.

*Photo identification is required to enter the State Transportation Building*

The MPO's public involvement process will be on the agenda of topics to be discussed, and there will be an opportunity for the public to comment on that process. There will also be a few minutes for public comment at the end of each other agenda item.

Questions may be directed to the MPO at Boston Region MPO, 10 Park Plaza, Suite 2150, Boston, MA 02116 or at [www.bostonmpo.org](http://www.bostonmpo.org).

# Solicitation for Project Proposals

## Coordinated Human-Services Transportation Job Access and Reverse Commute (JARC) and New Freedom Programs

**Deadline: 4:00 PM on August 20, 2010**

### **A workshop for prospective applicants**

will be held at **10:00 AM** on **July 20, 2010**, at the State Transportation Building, MPO Conference Room, Suite 2150, 10 Park Plaza, Boston.

### **For more information,**

contact **Alicia Wilson** at [awilson@ctps.org](mailto:awilson@ctps.org) or 617-973-8008 or

**Mike Callahan** at [mcallahan@ctps.org](mailto:mcallahan@ctps.org) or 617-973-8853.

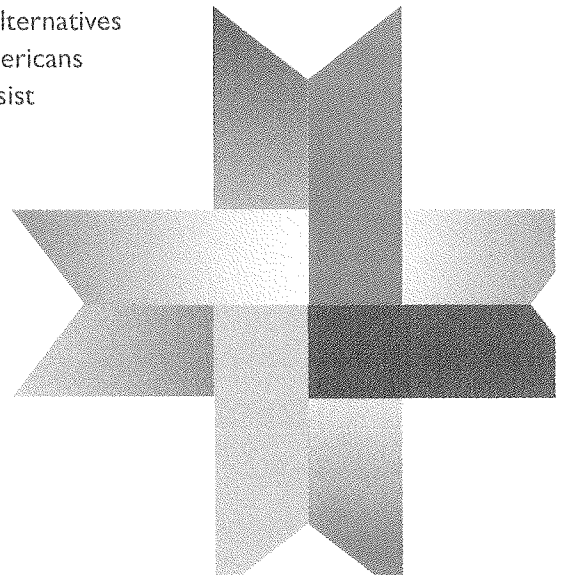
### **Send completed applications to:**

**Boston Region MPO**  
**Attn: Alicia Wilson**  
**10 Park Plaza, Suite 2150**  
**Boston, MA 02116-3968**

The Boston Region Metropolitan Planning Organization (MPO) is soliciting project proposals for the Federal Transit Administration's Job Access and Reverse Commute (JARC) (49 USC Section 5316) and New Freedom (49 USC Section 5317) Programs in the Boston Region MPO area. Proposals and projects should meet the objectives and requirements of these programs. Background information and materials needed for project applications can be found at the MPO's website, [www.bostonmpo.org](http://www.bostonmpo.org). Completed applications are due to the MPO by August 20, 2010, at 4:00 PM.

The available funding for the Boston Urbanized Area is \$3,047,098 for the JARC Program and \$2,264,720 for the New Freedom Program. Eligible applicants include private non-profit organizations, state and local government authorities, and operators of public transportation services, including private operators of public transportation services.

JARC provides grants to support the development and maintenance of projects designed to transport welfare recipients and eligible low-income individuals to and from jobs and activities related to employment. New Freedom provides grants for new public transportation services and public transportation alternatives beyond the requirements of the Americans with Disabilities Act of 1990 that assist individuals with disabilities.



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## EXECUTIVE SUMMARY

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This Unified Planning Work Program (UPWP) contains information about surface transportation planning projects that will be conducted in the Boston metropolitan region during the period of October 1, 2010, through September 30, 2011 (federal fiscal year 2011). The UPWP is an essential transportation-planning tool for the region and often a first step in determining whether or not a project will be constructed. It is integrally related to other planning initiatives conducted by the Boston Region Metropolitan Planning Organization (MPO), as well as by the Massachusetts Department of Transportation and the Massachusetts Port Authority.

The projects in this UPWP will be funded from federal, state, and local sources. It has been prepared in accordance with final regulations governing the implementation of the federal Safe, Accountable, Flexible, and 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 70 projects, of which 57 will be carried out by the Central Transportation Planning Staff (CTPS) and the Metropolitan Area Planning Council (MAPC) on behalf of the MPO, the Massachusetts Department of Transportation (MassDOT), and the Massachusetts Port Authority (Massport). The remaining 13 projects will be carried out by individual transportation agencies, municipalities, and academic institutions.

The majority of the FFY 2011 UPWP projects have been ongoing since FFY 2010. However, there are several new projects. Those to be undertaken on behalf of the MPO are:

- Low-Cost Improvements to Bottleneck Locations Phase II (page 6-13)
- Regional HOV System Planning (page 6-16)
- CharlieCard Trip Path Pilot Study (page 7-4)
- Early Morning Transit (page 7-6)
- Emergency Evacuation and Hazard Mitigation Mapping Phase II (page 7-7)
- Impact of Walking Radius on Transit Frequency and Reliability (page 7-8)
- Livable Communities Workshop Program (page 7-11)
- Maintenance Costs of Municipally Controlled Roadways (page 7-13)
- MPO Freight Study, Phase II (page 7-22)
- Roundabout Installation Screening Tool (page 7-24)

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

- Green Line Extension Environmental Review Support (page 6-9 and Appendix A)
- South Coast Commuter Rail Extension (page 6-21 and Appendix A)

The UPWP is intended to serve two purposes. The first is to provide information to government officials, local communities, and the general public about all surface-transportation planning

projects expected to be undertaken in the Boston region. The second is to provide complete budget information to federal and state officials about the expenditure of federal funds for those projects being carried out by the Boston Region MPO.

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

Chapter 2 provides a status report on the FFY 2010 UPWP projects that were conducted by CTPS and MAPC. It also includes a list of products for those projects and information on how to obtain copies of reports and certification documents.

Chapter 3 is an index of the FFY 2011 projects. They are organized by the name of the agency responsible for conducting them.

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

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

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

Appendix B will be completed following the close of the 30-day public review period and before the final document is presented to the MPO for adoption. It will describe the public participation process used for the development of the draft UPWP and the public workshops that were held during its public review period. It 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 contains the worksheets developed by staff to evaluate potential UPWP projects and used by the UPWP Subcommittee as a guide in selecting new projects.

Appendix D is a glossary of acronyms, abbreviations, 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.



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** TBD

**BUDGET:** \$20,000

**STATUS:** 0%

The impetus for the initial “bottlenecks” study came from federal guidance on the development of the FFY 2010 UPWP. Specifically, the MPO was asked to identify the three worst bottlenecks in the region and study low-cost countermeasures. As a result, “Low-Cost Improvements to Bottlenecks Phase I” was funded by the MPO in the FFY 2010 UPWP. That study is presently underway and will be completed by October 1, 2010.

This second-phase study is in response to the interest of FHWA, MPO members, and MPO staff to maximize the effectiveness of limited resources. In it, staff will identify up to three bottlenecks that are among the worst in the region, relying on professional judgment and the support of the Congestion Management Process. Professional judgment will be an important component of the bottleneck selection process, as they will be selected according to their potential for low-cost improvements. Staff will research and brainstorm potential low-cost countermeasures, which may include: using the shoulder as a peak-hour lane, re-striping travel lanes in merge areas to improve traffic flow, implementing ramp metering, improving traffic-signal timing, and improving the dissemination of traffic information to drivers.

**FFY 2011 Activities and Expected Work Products:**

This short study will consist of the following tasks:

- Identify up to three highway bottlenecks that are conducive to low-cost treatments
- Describe their characteristics (queue length, cause of bottlenecks, other)
- Assess qualitatively varied low-cost treatments
- Recommend appropriate low-cost measures for resolving bottleneck problems

Products will include data and maps describing the geographic location and duration of each bottleneck, and a brief memorandum documenting the findings and recommendations.

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

FFY 2011 Budget

FUNDING RECIPIENT(S)			FFY 11 Total Available	FUNDING SOURCE(S)								
CTPS	MAPC	MassDOT		PL	MPO \$5303	MPO \$5303 Carryover	SPR	MassDOT	MassDOT \$5303	MassDOT/MBTA \$5303 Carryover	MBTA	Other
20,000			20,000									



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** TBD

**BUDGET:** \$60,000

**STATUS:** 0%

Provision of HOV facilities can be helpful in making more efficient use of our existing express highways by providing a superior level of service for multiple-occupancy vehicles and encouraging the use of public transportation. Potential types of HOV facilities may include queue bypasses, contraflow lanes on existing pavement, and separate, new HOV lanes. The initial phase of an HOV study will be conceptual, where broad rule-of-thumb criteria will be used to gain some initial understanding of where HOV facilities might best be provided in the MPO region, including alternative HOV lane treatments. Emphases of the study will include the regionwide collection of vehicle-occupancy data and development/calibration of the regional travel-demand model set to allow its improved use in evaluating specific HOV proposals. A preliminary list of highway segments conducive to HOV treatments will be an end product of this study.

**FFY 2011 UPWP Activities and Expected Work Products:** Activities associated with this two-year project will be conducted as described above, and a report documenting the study results will be prepared in FFY 2012.

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

FFY 2011 Budget

FUNDING RECIPIENT(S)			FFY 11 Total Budget	FUNDING SOURCE(S)								
CTPS	MAPC	MassDOT		PL	MPO \$5303	MPO \$5303 Carryover	SPR	MassDOT	MassDOT \$5303	MassDOT/ MBTA \$5303 Carryover	MBTA	Other
30,000				18,000	12,000							



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** TBD

**BUDGET:** \$33,400

**STATUS:** 0%

Automated fare collection (AFC) data are currently used to report boarding totals by rapid transit station, surface light rail route, and bus route. However, because the AFC system only collects boarding information (not alighting), these data have not been used to estimate trip paths. This study seeks to investigate whether boarding-only AFC data could be used to reliably estimate trip paths.

**FFY 2011 Activities and Expected Work Products:** The first task of this study will be to conduct a literature review of how boarding-only automated ridership counts have been used by other transit agencies to estimate trip paths. Various “rules” are typically used to translate boarding counts into detailed trip matrices. In this first task, staff will summarize these rules and determine which rules to use in the subsequent tasks.

In order to determine whether AFC can reliably estimate trip paths, CTPS will compare actual trip paths to those estimated by AFC. CTPS will use the applicable data from the travel diaries conducted by Transit Works in 2005, 2007, and 2009 to obtain a universe of actual trip paths.

AFC-estimated trip paths will then be used to calculate actual trip paths based on predetermined rules (note that this study only refers to trip paths within the “closed” faregate system). A comparison of actual to estimated trip paths would then be made to determine the ability of AFC to accurately estimate trip paths.

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

FFY 2011 Budget

FUNDING RECIPIENT(S)			2011 State Aid	FUNDING SOURCE(S)								
CTPS	MAPC	MassDOT		PL	MPO \$5303	MPO \$5303 Carryover	SPR	MassDOT	MassDOT \$5303	MassDOT/ MBTA \$5303 Carryover	MBTA	Other
33,400					33,400							



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** TBD

**BUDGET:** \$20,000

**STATUS:** 0%

The MBTA currently does not have a systematic way of evaluating the need for additional early-morning bus service to provide mobility for shift workers in the service and medical industries, who tend to be minority and low-income. Presently there is a limited amount of early-morning service on a small number of routes, and when the MBTA has added earlier trips the service has been well utilized. This suggests there may be untapped demand for expansion of early-morning service to other parts of the network, expanding mobility options in the region as a whole.

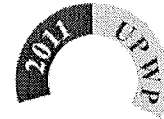
**FFY 2011 Activities and Work Products:** Staff will look at existing early-morning ridership and travel patterns across modes, analyze automated fare collection data for early morning rapid transit station arrivals, and identify employers and types of jobs that require early arrival times. Areas where a larger demand exists for early service will be identified, potential new trips proposed, and operating costs and ridership estimated. The study may also examine the potential for forming partnerships with employers to fund these services.

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

FFY 2011 Budget

FUNDING RECIPIENT(S)			FFY 11 Transit Budget	FUNDING SOURCE(S)								
CTPS	MAPC	MassDOT		PL	MPO \$5303	MPO \$5303 Carryover	SPR	MassDOT	MassDOT \$5303	MassDOT/ MBTA \$5303 Carryover	MBTA	Other
20,000			20,000		20,000							





**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** TBD

**BUDGET:** \$30,000

**STATUS:** 0%

This study advances the MPO’s Safety and Security Policy of protecting the region from natural and human threats, and addresses the SAFETEA-LU planning factor for security. It responds to guidance that the MPO has received from the Federal Highway Administration and Federal Transit Administration calling for MPOs to “increase their capacity to address climate change in transportation.” This study will continue the work started in the FFY 2010 UPWP work program for Emergency Evacuation and Hazard Mitigation Mapping, incorporating new information and data that become available on natural hazards, evacuation plans, and critical infrastructure in the region.

Building on the first study, Phase II will involve collecting and mapping critical infrastructure locations that have a bearing on the MPO’s work to protect transportation infrastructure from storm damage and climate change impacts, as well as, security threats, and to protect the users of the transportation system.

It will also involve identifying vulnerable infrastructure in the region that, if damaged, could have an impact on the transportation system, or that would affect the transportation system as it is used by emergency responders. Such vulnerable facilities could, for example, include dams or liquid natural gas facilities, as requested by the MPO’s Transportation Planning and Programming Committee members.

**FFY 2011 Activities and Expected Work Products:** This study will take an inventory of transportation services and infrastructure that could be impacted by rising sea levels and flooding. Staff will work with the appropriate agencies to collect drainage plans to respond to the federal agencies’ guidance that MPOs should review those plans to determine if the drainage is adequate for safeguarding the structures.

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

FFY 2011 Budget

FUNDING REQUEST(S)			FUNDING SOURCE(S)									
CTPS	MAPC	MassDOT	PL	MPO \$5303	MPO \$5303 Carryover	SPR	MassDOT	MassDOT \$5303	MassDOT \$5303 Carryover	MBTA	Other	
30,000			15,000	15,000								



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** TBD

**BUDGET:** \$50,000

**STATUS:** 0%

The current MBTA service delivery policy’s coverage guideline states that, in areas that are served by bus and/or rapid transit with a population density of greater than 5,000 persons per square mile, no individual should need to walk farther than 0.25 miles to access transit service. As part of this project, CTPS will analyze the potential and suggest possible system designs for local bus system consolidation if the 0.25-mile radius was relaxed to 0.33 miles, 0.4 miles, and 0.5 miles and the consolidated bus routes adhered to rapid-transit-service standards.

This modeling-based effort will build on the current Core Efficiencies study and will help the MPO better understand the implications of the tradeoff between eliminating poor-performing local bus routes and increasing service on a smaller number of transit corridors. It will consider the best option for providing mobility and accessibility through the bus network. The ultimate goal is to increase transit mode shares. The study will also consider the equity implications and potential tradeoffs of any of the potential systems.

**FFY 2011 Activities and Expected Work Products:** Analysis of all data collected will be completed, impacts of walking distance to transit will be determined, and a final technical memorandum documenting all of the findings of the study will be prepared.

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

FFY 2011 Budget

FUNDING RECIPIENT(S)			FUNDING SOURCE(S)	FUNDING SOURCE(S)			
CTPS	MAPC	MassDOT		PL	MPO	MPD	MassDOT
				\$5303	\$5303	MassDOT \$5303	MassDOT \$5303
50,000				50,000			



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

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** TBD

**BUDGET:** \$60,000

**STATUS:** Ongoing

Ray LaHood, Secretary of the U.S. Department of Transportation, has offered the following definition of a livable community: “It’s a community where if people don’t want to have an automobile, they don’t have to have one. A community where you can walk to work, your doctor’s appointment, pharmacy, or grocery store. Or you could take light rail, a bus, or ride a bike.”

This initiative, which furthers the goals of the states Healthy Transportation Compact and recent federal guidance, will continue and expand upon the well-established, MPO-supported Walkable Community Workshops (WCW) Program. It will address other aspects of the built environment that affect livability by providing technical assistance for municipalities that want to improve their community’s livability. This means offering information and stimulating discussion and exploration around a broad base of perspectives, such as transportation (including active transportation and transit), parking, air quality, environment, land use and urban planning (including transit-oriented development), urban design, and health.

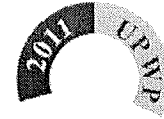
#### MPO WORKSHOP PROGRAM

The first part of the project will be to develop a menu of workshop topics to be made available to constituent communities. By the spring of 2011, staff will be available to provide Livable Community Workshops (LCWs) that can include these topics. While the specifics are still to be determined, some topics will be parking, land use, and bicycling, in addition to pedestrian issues. MPO staff will work with municipalities to plan an LCW on topics that meet the municipality’s objectives.

The LCW program will continue to serve the broad range of participants served in the WCWs: chief elected officials and municipal managers; elected officials and staff members serving planning and health boards, conservation commissions, departments of police, schools, public works, engineering departments, and councils on aging; members of chambers of commerce and local business owners; and residents and community groups.

As in the WCW program, the LCWs will focus on a locally selected area in the community. Staff will help develop short- and long-term recommendations that will improve the livability of an area, focusing on mobility, including active transportation, land use and other planning issues, as appropriate. Materials describing livability and ways to achieve it will be developed and distributed both at these workshops and at other MPO venues.

The WCW program will continue, and up to six workshops will be provided in FFY 2011. Staff will also plan and conduct two regional-level forums. These might bring together officials and



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization and  
Metropolitan Area Planning Council

**ID #:** TBD

**BUDGET:** \$60,000

**STATUS:** Ongoing

staff from many communities, with time for a presentation on state-of-the practice planning tools, and an open forum for participants to discuss challenges they face.

**TOOLKIT FOR SUSTAINABLE MOBILITY**

In addition to the workshop participation, MAPC will continue to work with municipalities and other stakeholders to add to the Toolkit for Sustainable Mobility. This toolkit provides guidelines and best practices for communities that wish to adopt practices leading to more-sustainable methods of getting around. To date, toolkits covering local parking issues and developer mitigation tools have been completed and are available on MAP’s website.

The components on parking and development mitigation will be updated and expanded as needed in FFY 2011. MAPC will also complete additional toolkit components on local applications of “complete streets” concepts. “Complete streets” are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and transit riders of all ages and abilities must be able to safely move along and across a complete street. This toolkit will help communities apply these concepts to all roadway projects. The toolkit will include a comprehensive review of what this concept means, local practices and measures, legal authority, and liability concerns. Both the parking and the complete-streets toolkits will be used in the Livability Workshops, providing a resource for communities to use in implementing ideas from the workshops.

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 2011 Activities and Expected Work Products:** CTPS and MAPC will continue this work  
**FHWA/FTA Grant Application Task and Element:** 44.24.01

**FFY 2011 Budget**

FUNDING RECIPIENT(S)			FUNDING SOURCE(S)									
CTPS	MAPC	MassDOT		PL	MPO	MPO	SPR	MassDOT	MassDOT	MassDOT/	MBTA	Other
					\$5303	\$5303			\$5303	MBTA		
30,000	25,000			27,500	27,500							



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** TBD

**BUDGET:** \$375,000

**STATUS:** 0%

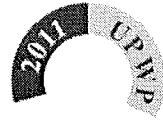
Discussions began in FFY 2010 both with the Pavement Management Subcommittee of the Massachusetts Association of Regional Planning Agencies (MARPA) and MassDOT on possible methods for conducting a study that identifies the cost of maintaining municipality-maintained (non-MassDOT or Department of Conservation) federal aid arterial roadways and urban collectors in the MPO area for use in developing the long-range transportation plan, which is currently under development. Guidance received from the Federal Highway Administration and the Federal Transit Administration in their FFY 2010 UPWP approval letter indicates that Massachusetts MPOs must develop a comprehensive pavement management system to be fully operational for cost-data input on municipality-maintained federal-aid roadways in the 2040 LRTP. Depending on the resources allocated, it will take two to three years to collect data for the more than 3,000 center miles in our region's federal aid system. The pavement management system will estimate the cost required to bring all the federal-aid MPO roadways to a "good-to-excellent" condition.

**FFY 2011 Activities and Expected Work Products:** This three-year project will continue in this fiscal year as described above.

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

FFY 2011 Budget

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)									
CTPS	MAPC	MassDOT	FFY 2011 Total Budget	PL	MPO	MPO	SPR	MassDOT	MassDOT	MassDOT/	MBTA	Other	
					\$5303	55303			\$5303	55303			
62,500			62,500										



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** TBD

**BUDGET:** \$30,000

**STATUS:** 0%

This study of freight activities in the MPO area will advance the recommendations of the Massachusetts Department of Transportation’s State Freight and Rail Plan and build upon the MPO Freight Study initiated in FFY 2010. One purpose of the MPO study initiated in FFY 2010 is to collect data that will help the MPO address freight problems in the region that are identified in the Statewide Freight and Rail Study, and also identified during the development of the MPO’s long-range transportation plan (LRTP).

The draft state plan, presented at public meetings in March 2010, indicates that the MPO studies may focus on improving truck and rail access to the port in South Boston, and make recommendations on how a greater share of freight in the region may be moved by rail, air, and water. The products of both parts of the MPO Freight/Rail Study may also provide additional information needed for understanding and evaluating existing and projected freight activities in the region, and possible identification of freight projects for consideration by the MPO, MassDOT, and other agencies involved in environmental issues and economic development. This project may also identify actionable programs for consideration for the LRTP and the Transportation Improvement Program (TIP), and improve and expand upon the methods by which projects are evaluated for their effect on freight transportation.

**FFY 2011 Activities and Work Products:** Following the completion of the Massachusetts Statewide Freight Plan and Statewide Rail Plan, staff will prepare a work scope for a study that will further the recommendations identified in these plans and present it to the Transportation Planning and Programming Committee for approval.

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

**FFY 2011 Budget**

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)								
CTPS	MAPC	MassDOT	FFY 2011 TIP Budget	PL	MPO	MPO	SPR	MassDOT	MassDOT	MassDOT/	MBTA	Other
					\$5303	\$5303			\$5303	MBTA		
30,000				30,000		Carryover			Carryover	Carryover		



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** TBD

**BUDGET:** \$40,000

**STATUS:** 0%

Presently, the MassDOT Highway Division does not have a concrete, consistent policy that would govern the design and construction of roundabouts, and a study such as this would make recommendations for the development of an appropriate policy. This is especially important for federally funded roundabout designs, which typically include state numbered routes, major and minor arterials and collectors.

Roundabouts can be a more efficient and safer way to manage traffic at unsignalized intersections and sometimes at signalized intersections. If the conditions are right for a roundabout treatment, designing an intersection in this manner can increase its processing capacity. Demand for roundabouts throughout the state has risen in the last decade.

The purpose of this study is to develop screening planning tools for the Highway Division's use when its staff reviews proposals for the construction of roundabouts. Some of the questions that this study will attempt to answer include:

- Desirable/optimum traffic volume conditions for considering a roundabout design, instead of a signalized intersection design
- Conditions for which a two-lane roundabout should be constructed
- Range of left-turn traffic volumes for which a roundabout treatment would be appropriate
- Appropriateness of roundabouts as speed-control devices
- Accommodation of bicycle and pedestrians when an intersection is designed as a roundabout

MPO staff will be responsible for this study and will work closely with MassDOT's Highway Division and Office of Transportation Planning. Work will include a review of literature on other states' guidelines on screening tools for considering roundabouts; identification of location and traffic characteristics under which a roundabout would be appropriate; and a recommendation on a procedure/policy for considering a roundabout as viable intersection treatment at certain locations.

**FFY 2011 Activities and Expected Work Products:** The product of this study will be a roundabout planning guide for screening locations under roundabout design consideration for various roadway classifications in the commonwealth.



**STAFF:** Central Transportation Planning Staff

**CLIENT:** Boston Region Metropolitan Planning Organization

**ID #:** TBD

**BUDGET:** \$40,000

**STATUS:** 0%

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

FFY 2011 Budget

FUNDING RECIPIENT(S)				FUNDING SOURCE(S)								
CTPS	MAPC	MassDOT	FFY 11 Total Budget \$40,000	PL	MPO \$5303	MPO \$5303 Carryover	SPR	MassDOT	MassDOT \$5303	MassDOT/ MBTA \$5303 Carryover	MBTA	Other
40,000				40,000								