### Memorandum for the Record Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization (MPO)

### August 4, 2011 Meeting

10:00 AM – 1:30 PM, State Transportation Building, Conference Rooms 5 & 6, 10 Park Plaza, Boston

David Mohler and Clinton Bench, Chairs, representing Jeffrey Mullan, Secretary and Chief Executive Officer, Massachusetts Department of Transportation (MassDOT)

### **Decisions**

The Transportation Planning and Programming Committee agreed to the following:

- release Draft Amendment Five of the federal fiscal year (FFY) 2011 element of the FFYs 2011 – 2014 Transportation Improvement Program (TIP) for a 30-day public review period
- release the Draft FFYs 2012 2015 TIP as proposed by MassDOT for a 30-day public review period
- approve the work program for the MBTA 2012 Review of Fare Structure, Tariffs, and Service
- release the draft Long-Range Transportation Plan (LRTP), *Paths to a Sustainable Region*, for a 30-day public review period
- approve the technical memorandum, Low-Cost Improvements to Bottleneck Locations
- approve the minutes of the meetings of July 7 and July 21

#### **Meeting Agenda**

#### 1. Public Comments

Glen Clancy, Town of Belmont, thanked the MPO for supporting the *Belmont – Trapelo Road* project. Thomas Younger, Town of Belmont, added that the project would be a regional improvement as it connects the communities of Belmont, Watertown, and Cambridge, and he said that it would benefit economic development.

James Marsh, City of Lynn, thanked the MPO for consideration of the *Lynn – Route 129* (*Broadway*) project and remarked that the project is vital for the City of Lynn. He requested that the MPO include the project on the FFY 2012 – 2015 TIP.

Ellin Reisner, Somerville Transportation Equity Partnership, expressed that many residents of Somerville are angry about the delays in the *Green Line Extension* project.

Rebecca Schrim, Friends of the Community Path, thanked the MPO for supporting the Cedar to Lowell section of the *Community Path* project in the LRTP.

James Salvie, Town of Stow, urged members to support the staff recommendation for the TIP, which contains a recommendation to fund the *Assabet River Rail Trail* project.

### **2.** Chair's Report – David Mohler, MassDOT

There was none.

### 3. Subcommittee Chairs' Reports

There were none.

**4.** Regional Transportation Advisory Council Report – Steve Olanoff, Regional Transportation Advisory Council

The Advisory Council did not meet in July. At the August meeting the Advisory Council will discuss recommendations for the MPO's Unified Planning Work Program (UPWP).

- **5. Director's Report** Karl Quackenbush, Acting Director, Central Transportation Planning Staff (CTPS)
- K. Quackenbush directed members' attention to a letter from the Federal Highway and Transit Administrations (FHWA and FTA) that certifies the Boston Region MPO's planning process. (See attached letter.) Staff has received the full report from FHWA and FTA, and will distribute the document to members. The federal agencies do not specify any corrective actions in the report, but they do have recommendations for the MPO. Staff will report to the Committee on the recommendations.
- K. Quackenbush then announced that Hayes Morrison, TIP Manager, MPO staff, is leaving her position at CTPS for a position with the City of Somerville. Also, Cathy Buckley, MPO staff, is retiring from CTPS after more than 35 years of service; a luncheon will be held on August 5.
- **6. State Implementation Plan Update** David Mohler, MassDOT

MassDOT's 2011 Status Report on the State Implementation Plan was distributed. (This report is available on the MassDOT website, <a href="www.massdot.state.ma.us">www.massdot.state.ma.us</a>.) D. Mohler gave an update on the State Implementation Plan (SIP) projects.

MassDOT is behind schedule on all of its SIP commitments:

- The *Fairmount Line Improvement* project must be complete by December 31, 2011. It is one to one and a half years behind schedule.
- The Construction of 1,000 New Parking Spaces must be complete by December 31, 2011. It is four to six months behind schedule due to delays in the construction of the parking garage near the Wonderland MBTA station in Revere.
- The *Red Line/Blue Line Connector* must have a final design complete by December 31, 2011. The Draft Environmental Impact Report is finished. MassDOT is petitioning the Department of Environmental Protection to amend the SIP to remove the requirement to complete the final design. The final design would cost \$50 million of public funds and would not result in any air quality improvements. (The SIP does not require the construction of the Connector.)
- The *Green Line Extension* project must be completed by 2014. The project is now on schedule for completion between 2018 and 2020.

Comments and questions were then heard:

Somerville Mayor Joseph Curtatone thanked the MPO for supporting transit projects in Somerville over the years. He then expressed strong opposition to the delays in the SIP projects and with the way in which MassDOT and the MBTA handled the situation without consulting stakeholders. He demanded answers to the question of when ground will be broken on the *Green Line Extension* project. He also remarked upon the amount of taxpayer money that has already been invested in the project and noted that the delays are stalling development.

Eric Bourassa, Metropolitan Area Planning Council (MAPC), asked if MassDOT remains committed to the Blue Hill Avenue station on the Fairmount commuter rail line. D. Mohler responded that MassDOT remains committed. Joe Cosgrove, MBTA, reported that the 60% design plans for the station will be complete next week.

Jim Gillooly, City of Boston, expressed the City's disappointment that MassDOT is seeking to stop the design of the *Red Line/Blue Line Connector*. He expressed hope that this project idea does not disappear.

Paul Regan, MBTA Advisory Board, asked D. Mohler to describe the process MassDOT went through for revising the SIP, and to explain the MPO's role in mitigation.

- D. Mohler explained that administrative procedures are in place to deal with project delays and to mitigate for air quality impacts resulting from those delays. The proposed amendment to the SIP is due to MassDOT's request to remove the requirement to complete the final design of the *Red Line/Blue Line Connector*. The MPO has three roles in the SIP process:
  - to analyze the air quality impacts of proposed mitigation projects (CTPS is conducting the analysis)
  - to serve as a forum for policy discussions
  - to program federal funding for mitigation projects if necessary
- S. Olanoff expressed the Advisory Council's support for the *Red Line/Blue Line Connector*. In response to the comment, D. Mohler reiterated that MassDOT does not believe it is appropriate to make further investment in the project design given that there is no funding available to construct the Connector and that the project is not included in the MPO's LRTP. He also noted that if funding were to become available for construction in the future, the design would likely have to be updated and the MEPA process redone given the space of time that would have elapsed.

Tom Bent, City of Somerville, raised several questions about the *Green Line Extension* project. He asked about whether the bids for Green Line vehicle procurement have been opened and when the vehicles will be procured. D. Mohler stated that the bids are currently under review by the MBTA. They will be public.

- T. Bent then asked about whether the public would have access to information regarding the refinement and analysis of alternatives. D. Mohler stated that the information is moving from conceptual to more defined and has already been made public.
- T. Bent asked for an update on the progress that MassDOT made on applying for federal New Starts funding for the project, and whether MassDOT has a contingency finance plan if the federal money is not awarded. He also asked what the projected cost of the project will be if the deadline is extended to 2018 2020. D. Mohler replied that the MBTA's finance plan will become the basis for the *Green Line Extension* finance plan. If the New Starts funding is not available the Commonwealth will have to fund the project. Funding for construction of the *Green Line Extension* will be included in the bond bill that will be filed in the fall. D. Mohler added that the *Green Line Extension* is a priority for MassDOT; however, it may have to find funding for the project at the expense of other projects in the event that the New Starts funding is not available. The project will cost approximately \$1.2 billion with the extended deadline to 2018 2020.
- T. Bent requested access to the risk analysis data that is the basis for MassDOT's decision to seek a delay in the project's deadline. D. Mohler stated that the information would be made available and added that there was never a risk analysis for the 2014 or 2015 completion dates. MassDOT had worked toward early action items, but some never materialized. The MBTA also had to reexamine some of the project elements.
- T. Bent asked about MassDOT's actions to acquire right-of-way and properties along the *Green Line Extension* corridor. D. Mohler replied that no properties have been taken since MassDOT is seeking federal funds, which requires that an environmental assessment be completed prior to land takings.
- E. Bourassa inquired about the timing of the New Starts submission. D. Mohler stated that MassDOT will submit the New Starts application by the end of this year. By February 2012, MassDOT should know if it has federal authorization to begin preliminary engineering. In the meantime, MassDOT will request state funding for the project in the transportation bond bill.
- T. Bent asked if the properties to be taken have been identified. D. Mohler stated yes and that the locations are in the public domain.
- T. Bent asked if the working group to be developed will include residents of Somerville, Cambridge, and Medford and whether they would take votes. D. Mohler answered that it would include residents of those municipalities, but that they would not be asked for their vote, and that instead, he expects they will be able to reach agreement after their discussions. Their input will be taken seriously.
- T. Bent asked if MassDOT will consider extending the Green Line to Route 16. D. Mohler replied that the state cannot commit to that segment of the project. If there are reductions in federal funding, the entire *Green Line Extension* project could be further delayed if that additional segment were added, he said.

### 7. Transportation Improvement Program Amendment – Pam Wolfe, Manager of Certification Activities, MPO Staff

Members were provided with Draft Amendment Five of the FFY 2011 element of the FFYs 2011 – 2014 TIP. (See attached.) The amendment includes the addition of earmarks and updates to project costs, but does not affect the MPO's target monies.

The amendment updates earmarks for the following projects:

- Boston Huntington Avenue/Symphony Area Streetscape Construction
- Chelsea Roadway Improvements (as part of the Chelsea Street Bridge project)
- Somerville Adaptive Reuse and Streetscape Improvements Study

It also updates costs for the following projects:

- Hudson Houghton Street over the Assabet River
- Wayland Pelham Island Road over the Sudbury River
- Chelsea Wright and Browne Schools

A motion to release Draft Amendment Five of the FFY 2011 element of the FFYs 2011-14 TIP for a 30-day public review period was made by P. Regan, and seconded by T. Bent. The motion carried.

## **8.** FFYs 2012 – 2015 Transportation Improvement Program – Pam Wolfe, Manager of Certification Activities, MPO Staff

Members were provided with the staff recommendation for the Highway portion of the FFYs 2012 – 2015 TIP, which was first presented at the meeting of July 21, and associated TIP tables, project evaluations, and other working documents. They were also provided with a list of projects recommended by the MPO's Clean Air and Mobility Subcommittee. (See attached.) P. Wolfe summarized the process for developing the TIP noting that this recommendation includes one new project, the *Belmont – Trapelo Road* project, which is the most highly rated project based on the MPO's project evaluation criteria.

D. Mohler then distributed an alternative proposal prepared by MassDOT. (See attached.) This proposal added funding for two projects: *Natick – Route 9/Oak Street* (in FFY 2012) and *Lynn – Route 129 (Broadway)* (in FFY 2013). These changes were possible due to reductions to the MPO's Clean Air and Mobility Program in FFYs 2014 and 2015, and newly updated costs for the *Concord/Lincoln – Route 2 (Crosby's Corner)* project, and updates to the cash flows for the *Needham/Wellesley – Route 128 Improvement Program (Contract 5)* project. MassDOT is also proposing to program \$1 million of Highway Safety Improvement Program (HSIP) funds in the Clean Air and Mobility Program for FFY 2013, making at total of \$1.9 million available for that program in that year.

#### Discussion of Highway Element

John Romano, MassDOT Highway Division, asked if funds could be added to the Clean Air and Mobility Program in FFYs 2014 and 2015 if other programmed projects come in a lower cost. D. Mohler answered yes.

E. Bourassa reported that two Clean Air and Mobility Program projects – the *Arlington – Intersection of Route 3 and Route 60* and the *Framingham – Cochituate Rail Trail* projects – are moving forward, and he suggested that those projects be restored to the FFY 2013 element of the TIP. He also reported that the *Scituate – Sidewalk Installation and Improvements* and *Westwood – Crosswalk Improvements on Washington Street* projects may not be able to go forward. He suggested that the MPO inform the proponents of the changes to the funds available for the Clean Air and Mobility program.

Chris Reilly, Town of Lincoln, asked for an explanation of the cost reduction for the *Concord/Lincoln – Route 2 (Crosby's Corner)* project. David Anderson, MassDOT Highway Division, explained that the new estimate reflects that bids are coming in approximately 15% below estimates. The new estimate for *Crosby's Corner* is about 5% lower than the previous estimate.

Members further discussed the Clean Air and Mobility Program and the possibility that the MPO might not solicit projects in years when there is reduced funding in that program. P. Wolfe asked if the MPO plans to maintain the program. E. Bourassa stated that the MPO should continue this program. J. Cosgrove remarked on the uncertainties in future federal funding.

David Koses, City of Newton, questioned why MassDOT recommended the *Natick* – *Route 9/Oak Street* project over other highly rated projects. Stephen Woelfel, MassDOT, indicated that economic development and geographic equity were factors, and that the project has an earmark.

A motion to accept MassDOT's recommendation for highway portion of the FFYs 2012 – 2015 TIP was made by T. Bent, and seconded by J. Gillooly. The motion carried.

T. Bent commented that this proposal does a good job of restoring municipalities' confidence in the MPO's process by showing that the MPO adheres to its decisions.

Dennis Giombetti, Town of Framingham, suggested that the MPO refrain from adding new projects to the Clean Air and Mobility Program until it can complete its current commitments to projects funded through that program.

#### Discussion of the Transit Element

Following the vote on the TIP, a discussion ensued regarding the MBTA's financial circumstances. Victor Rivas, of the MBTA's Capital Budget Group, provided an overview. He reported that the MBTA is preparing for a potential cut in federal funding which could result in a loss of as much as \$80 million in federal transit funds in this TIP cycle. Following advice from the FTA, the MBTA is preparing to reduce its backlog of projects by taking a new approach that involves drawing on federal funds for programs to be implemented over multiple years in one grant. Previously, the MBTA drew on federal funds incrementally at project milestones. The MBTA has committed all of its available funding for FFY 2011 and 2012. The MBTA is now preparing to make possible

reductions to the scope of projects in its Capital Investment Program (CIP), in the event that it must cut as much as \$460 million from the CIP.

P. Regan noted that the MBTA spends approximately \$470 million per year in capital spending to maintain the transit system, but that it should be spending \$575 million to \$700 million a year to address a backlog of projects, according to the Transportation Finance Committee and the D'Alessandro reports. He emphasized that potential new cuts would have a significant negative impact.

A motion to release the highway and transit portions of the FFYs 2012 – 2015 TIP for a 30-day public review period was made by D. Giombetti, and seconded by J. Romano. The motion carried.

J. Gillooly suggested that it would be helpful for the MPO to be able to see more information on the MBTA's programs so that it can better understand how the MBTA's programs fit into the larger funding picture. J. Cosgrove stated that much of the MBTA's program funding is now reflected in the TIP. V. Rivas added that the FTA funding is the lifeblood of the MBTA. As such, it is the practice of the MBTA to have all procurement activities comply to federal guidelines, even if those activities are bond funded.

Lourenço Dantas, Massachusetts Port Authority, asked if the MBTA would be getting to a point where it can no longer provide a 20% match to federal funds. V. Rivas replied that the MBTA continues its commitment to match federal funds. However, he noted that the backlog of projects that will cost billions of dollars is where the problem lies.

Following the discussion of the MBTA's financial situation, Clinton Bench, MassDOT, raised the issue of the need to remove SIP projects from the TIP given MassDOT recent action requesting the DEP to amend the SIP, which may result in changes to the projects' cash flows.

A motion to amend the FFYs 2012 – 2015 TIP, approved for release for public review, to remove the costs for the SIP projects (*Fairmount Line Improvement, Construction of 1,000 New Parking Spaces, Red Line/Blue Line Connector*, and *Green Line Extension*) was made by C. Bench, an seconded by J. Romano. The motion carried.

Prior to the vote on this motion, T. Bent inquired as to the impact the action would have on on-going activities of the *Green Line Extension* project. D. Mohler replied that the action would have no impact on those activities and noted that the projects were listed in the TIP for information only as they show only state cash flows. He added that MassDOT will give staff corrected cash flow figures for the SIP projects before the MPO takes its final vote to approve the TIP in September, and they can be added then.

Before moving on to the next agenda item, D. Mohler announced the resignation of Secretary of Transportation Jeffrey Mullan effective at the end of August. The Governor will appoint Richard Davey as Secretary.

9. Work Program for the MBTA 2012 Review of Fare Structure, Tariffs, and Service – Karl Quackenbush, Acting Director, Central Transportation Planning Staff (CTPS)

Members were provided with the work program for the *MBTA 2012 Review of Fare Structure, Tariffs, and Service*. (See attached.) K. Quackenbush provided an overview of the work program and Charles Planck, MBTA, assisted in answering questions.

CTPS will be assisting the MBTA in a review of its fare structure and fare levels, and will be evaluating alternative fare structures and tariff scenarios. This work will involve using the MPO's travel forecast model and another spreadsheet model to test these and other service change scenarios, and to forecast probable impacts in terms of ridership, revenues, air quality, and environmental justice. The MBTA's Rider Oversight Committee will have significant involvement in the developing of scenarios; CTPS staff will be interacting with that body.

CTPS conducted similar work for the MBTA in 1991, 2000, 2004, and 2007. This new work program is similar in approach to the work CTPS conducted in 2007. At that time, CTPS predicted that the fare structure ultimately chosen by the MBTA would result in a 21.2% increase in revenues; the forecast was very accurate as, in actuality, the increase was 23%.

Members asked questions.

- E. Bourassa and P. Regan both inquired whether the timeframe of this 12- month work program would dovetail with the potential timing for an MBTA fare increase. C. Planck replied that the potential date of a fare increase would be July, 1, 2012.
- S. Olanoff asked if the work would take into account the potential for a decrease in ridership if the MBTA increases fares, and the impact an increase might have on mode choice. K. Quackenbush replied that elasticities are contained in the models and spreadsheets tools that CTPS would be using, which will account for such factors. C. Planck added that the MBTA Rider Oversight Committee will be working with the MBTA to develop scenarios for study and that the Committee may likely raise similar questions. D. Mohler noted that the MBTA will hold a public process prior to raising fares.
- L. Dantas asked if scenarios would be re-evaluated if the modeling shows that there may be unintended consequences such as negative air quality impacts or impacts to environmental justice communities. C. Planck replied that there is a feedback loop that allows for public review of the scenarios and for re-assessment.

A motion to approve the work program for the *MBTA 2012 Review of Fare Structure, Tariffs, and Service* was made by P. Regan, and seconded by T. Bent. The motion carried.

**10.** Long-Range Transportation Plan – Anne McGahan, LRTP Manager, MPO Staff Members were provided with draft Chapters 7, 8, and 10 of the LRTP, Paths to a Sustainable Region. A. McGahan provided an overview of each chapter.

### Chapter 7: The Financial Plan

A. McGahan explained that Chapter 7 provides the MBTA's spending plan through 2035. (See attached MBTA financial spreadsheet.) This plan is based upon the finance plan for the *Green Line Extension* project, which was based upon the *Silver Line 3* finance plan. The finance plan assumes no fare increases and does not address the MBTA's state-of-good-repair needs.

The chapter includes information about the funding available for operations and maintenance. Tables show the revenue sources, which include the sales tax, local MBTA assessments, fare revenue, and non-fare revenue.

Members discussed the transit finances.

In response to questions, D. Mohler explained that the finance plan shows the MBTA's structural deficits and shows that the MBTA does not have the funding to maintain and operate its existing system. He stated that a fare increase would not fully address that deficit. MassDOT will be submitting to FTA a menu of possible solutions to the deficit; service cuts may be among the options. This year the MBTA has no structural deficit, but it will have a deficit of \$161 million in FFY 2012 which will grow to \$303 million in FFY 2016.

A. McGahan continued with an overview of the highway finances. The chapter documents financial information regarding the payments for the Central Artery/Tunnel project (which will be paid off by FFY 2014), the statewide road and bridge program, highway maintenance funding, and pavement management cost estimates for the region.

Members then discussed this information.

- D. Giombetti asked if MassDOT requires municipalities to report how much local monies are spent on pavement management. D. Mohler replied that MassDOT conducts an annual survey of municipal transportation spending, but that pavement management costs are not broken out. A. McGahan added that the MPO conducted an additional survey of municipalities.
- L. Dantas asked for clarification about how much of the MPO's discretionary funding is reflected in the financial information shown. A. McGahan stated that the financials in Chapter 7 include TIP projects. L. Dantas then asked about what other activities, besides pavement management, are included in the statewide maintenance finance category. D. Anderson replied that the category also includes costs for maintenance facilities, emergency repairs, guardrails, signs, and the like.

#### Chapter 8: The Recommended Plan

A. McGahan explained that Chapter 8 contains descriptions of the recommended projects for the LRTP and projects in adjacent MPOs that affect travel within the Boston region. It also includes the modeling results for the recommended transportation plan.

She noted that staff will make changes to the chapter to reflect the actions that the members just took on the TIP to adjust funding for the Clean Air and Mobility Program, to add the *Belmont – Trapelo Road* project, and to update costs for several projects: the *Reading, Stoneham, Wakefield, and Woburn – Interstates 93/95 Interchange; Malden, Revere, and Saugus – Route 1 Improvements*; and *Salem – Bridge Street*.

Members discussed this information.

- D. Koses asked staff to conform figures regarding the *Needham/Wellesley Route 128 Improvement Program (Contract 5)* project to recent MPO action.
- T. Bent and E. Bourassa raised questions about the programming of the *Green Line Extension from College Avenue to Route 16*, given MassDOT's action to amend the SIP. S. Woelfel advised leaving the project programmed as is until more information is available and MAPC completes its public outreach process.
- J. Cosgrove raised a question about the status of the *Russia Wharf* project. A. McGahan stated that the project is a SIP commitment. MassDOT is required to build the wharf, but not to provide ferry service. (The full project description is in Chapter 10.)
- J. Cosgrove suggested giving some recognition to Illustrative Projects in the LRTP, given that there is a potential for the state to receive federal TIGER funds. If those funds become available, the MPO would have to amend its LRTP. E. Bourassa noted that it would be helpful for the MPO to have a briefing on the TIGER applications that the MBTA is submitting.
- E. Bourassa asked if the modeling results showed any mode shifts between the no-build and build scenarios. K. Quackenbush and Scott Peterson, MPO staff, explained that the modeling showed a small increase in transit trips in the build network, which is largely due to the *Green Line Extension* project.
- L. Dantas then raised the question of whether the MPO is actually meeting any of its goals and policies, and noted that the MPO was not able to conduct modeling to test alternative analyses. He noted that the modeling results for projects in the recommended plan show that trips are increasing for all modes and that auto trips are still being added to the system. He asked about what impact that would have on congestion and vehicle miles traveled. S. Peterson replied that due to projects that improve highway interchanges, vehicle miles traveled are projected to increase, but vehicle hours traveled would decrease.

P. Regan noted that due to the *Green Line Extension*, some transit riders would shift from bus to light rail. D. Koses expressed concern that the projects in the recommended plan would result in a decrease in local and express bus ridership.

### Chapter 10: Air Quality Conformity Determination

A. McGahan explained that Chapter 10 provides information showing that the recommended plan is in conformity with federal air quality standards. It also provides a status update of the State Implementation Plan projects.

Members discussed this information.

implement some of the recommendations.

E. Bourassa inquired about the status of MassDOT's work to review all MPO projects in relation to the GreenDOT goals, and about the process that would ensue if the target greenhouse gas (GHG) reductions are not achieved. D. Mohler indicated that MPO's LRTPs would not be held up in this cycle, but that it would be of concern if GHGs were to increase as a result of projects. E. Bourassa then requested that MassDOT give a presentation on this topic in the future.

A motion to release the draft LRTP for a 30-day public review period was made by D. Giombetti, and seconded by J. Gillooly. The motion carried. (The Massachusetts Port Authority was not present for this vote.)

11. Technical Memorandum: Low-Cost Improvements to Bottleneck Locations – Karl Quackenbush, Acting Director, Central Transportation Planning Staff (CTPS) At the meeting of June 9, Seth Asante, MPO staff, gave a presentation about a study that recommended low-cost improvements to four highway locations that could help reduce bottlenecks. K. Quackenbush reported that S. Asante is working with MassDOT to

A motion to approve the technical memorandum, *Low-Cost Improvements to Bottleneck Locations*, was made by J. Gillooly, and seconded by J. Romano. The motion carried. (The Massachusetts Port Authority was not present for this vote.)

**12. Meeting Minutes** – *Pam Wolfe, Manager of Certification Activities, MPO Staff* A motion to approve the minutes of the meeting of July 7 was made by T. Bent, and seconded by P. Regan. The motion carried.

A motion to approve the minutes of the meeting of July 21 was made by R. Reed, and seconded by L. Dantas. The motion carried. (The Massachusetts Port Authority was not present for this vote.)

**13. Work Programs** – Karl Quackenbush, Acting Director, Central Transportation Planning Staff (CTPS)

Members were presented with two draft work programs: the *Regional HOV Lane System Planning Study* and the *Boston Ramp Study*. (See attached.) K. Quackenbush provided an

overview of each work program. Members will vote on these work programs at the next meeting.

### Regional HOV Lane System Planning Study

The work program for the *Regional HOV Lane System Planning Study* is the first step toward conducting a systemic review of HOV treatments on the express highway system. CTPS will conduct a systems level assessment to determine where on the highway system it is feasible to implement HOV treatments. The tasks involve data gathering, developing criteria to evaluate whether certain highway segments could be candidates for these treatments, evaluation of those segments, and the development of conceptual level plans for candidate locations. This study is in the MPO's FFY 2011 and FFY 2012 UPWP.

Members discussed the work program and asked questions.

- J. Gillooly asked if the study would consider treatments such as zipper lanes on Interstate 93. K. Quackenbush replied that staff is preparing the final report from an ongoing study effort that addresses HOV treatments in that area.
- D. Mohler asked if the study would factor in the feasibility of building new HOV treatments (factoring costs and impacts due to land takings, for example). K. Quackenbush replied that feasibility will be considered.

Anthony Komornick, Merrimack Valley Planning Commission (MVPC), commented that the MVPC has a project in its UPWP that involves examining the feasibility of installing an HOV lane on Interstate 93. He noted that the MVPC study would dovetail with this work program and suggested that the two MPOs coordinate regarding modeling work. K. Quackenbush replied that CTPS is uncertain if it will do modeling for this work program. CTPS will be focused on getting a good sense of vehicle occupancies on the highways and estimating potential HOV lane usages using sketch-planning methods. Formal modeling may be unnecessary.

#### Boston Ramp Study

The *Boston Ramp Study* will support a study being conducted by MassDOT's Office of Transportation Planning. MassDOT is studying the potential for building new ramps on the Massachusetts Turnpike between Brookline Avenue and Berkeley Street in Boston. CTPS will conduct travel forecasting for four potential ramp configurations and provide data on predicted traffic volumes on the Turnpike, on the potential new ramps, and on surface streets. MassDOT will then subject that data to more microscopic traffic analysis at selected locations.

Members discussed the work program and asked questions.

J. Gillooly asked why three scenarios defined in the study are focused only on off-ramps whereas previous studies have identified that there is a lack of access to the Turnpike

from the waterfront area. K. Quackenbush noted that the fourth scenario could be used to test possibilities for eastbound on-ramp traffic.

- J. Gillooly asked staff to revisit an idea that was proposed in the past that envisioned a reverse lane loop near Copley Square that would allow westbound traffic to reverse direction. He also noted that any new bus service using the Turnpike would have to use surface streets on its return route due to eastbound access problems on the Turnpike.
- L. Dantas asked staff to strike a sentence from the work program that references the potential for improving access to Logan Airport since the three scenarios presented would not improve access. K. Quackenbush noted that a fourth scenario could test alternatives that would improve access to Logan.
- D. Koses asked for clarification regarding the addition of tolls. K. Quackenbush stated that MassDOT is considering tolling all ramps with a distance-based tolling system.
- S. Olanoff asked how the locations of the potential new ramps were chosen. K. Quackenbush and D. Mohler replied that MassDOT and a Study Advisory Committee identified the locations.

#### 14. Members Items

- E. Bourassa announced that the MPO elections will be held on October 26 at the Cambridge Marriott. Nomination papers are due on September 23.
- J. Romano announced upcoming hearings on proposed routing of non-radioactive hazardous materials through Boston. (See attached notice.) The City of Boston is seeking state approval to route trucks carrying such materials through Boston from Interstate 93 to 95, and to prohibit such through traffic from city streets (unless permitted by the City). J. Gillooly provided background on this action. He noted that the City made a similar proposal in 2006, and the restriction was in place for four years. However, because the city did not follow a federal process to justify the restriction, it was required to conduct a study before the ban could be maintained. The city has since funded a study that shows that the restriction is appropriate and will improve safety on Boston's streets. This study is available on MassDOT's website.

#### 15. Adjourn

A motion to adjourn was made by P. Regan, and seconded by D. Giombetti. The motion carried.

### Transportation Planning and Programming Committee Meeting Attendance Thursday, August 4, 2011, 10:00 AM

<b>Member Agencies</b>	Representatives and Alternates	MPO Staff/CTPS	
MassDOT	David Mohler	Maureen Kelly	
	Clinton Bench	Robin Mannion	
	Stephen Woelfel	Anne McGahan	
MassDOT Highway	David Anderson	Hayes Morrison	
-	John Romano	Scott Peterson	
City of Boston	Jim Gillooly	Sean Pfalzer	
	Tom Kadzis	Karl Quackenbush	
City of Newton	David Koses	Alicia Wilson	
City of Somerville	Tom Bent	Pam Wolfe	
MAPC	Eric Bourassa		
	Eric Halvorson		
MBTA	Joe Cosgrove	Other Attendees	
MBTA Advisory Board	Paul Regan	Marc Cabot	Patrick Engineering
Massachusetts Port	Lourenço Dantas	Matthew Cibarowski	MassDOT
Authority		Glen Clancy	Town of Belmont
Regional Transportation	Steve Olanoff	Mayor Joseph Curtatone	City of Somerville
Advisory Council		Mike Gowing	Town of Acton
Town of Bedford	Richard Reed	Anthony Komornick	Merrimack Valley Planning
Town of Braintree	Christine Stickney		Commission
Town of Framingham	Dennis Giombetti	James Marsh	City of Lynn
		Barbara Miranda	Office of State Representative
			William Brownsberger
		Mark Paolillo	Town of Belmont Board of
			Selectmen
		Karen Pearson	MassDOT Office of
			Transportation Planning
		Charles Planck	MBTA
		Chris Reilly	Town of Lincoln

Ellin Reisner Somerville Transportation Equity

Partnership

Victor Rivas MBTA

James Salvie Town of Stow

Rebecca Schrim Friends of the Community Path Sheri Warrington Office of State Senator McGee

Thomas Younger Town of Belmont



Massachusetts Division 55 Broadway, 10th Floor Cambridge, MA 02142-1093 617-494-3657 617-494-3355 (fax)

Federal Highway Administration Federal Transit Administration Region I 55 Broadway Suite 920 Cambridge, MA 02142-1093 617-494-2055 617-494-2865 (fax)

JUL 1 9 2011

Jeffrey Mullan, Secretary and CEO Massachusetts Department of Transportation 10 Park Plaza, Room 4150 Boston, MA 02116-396

Re:

**Boston Region Metropolitan Planning Organization** Transportation Planning Certification Review Final Report

Dear Secretary Mullan:

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) are pleased to submit the final MPO Certification Review Report that documents the recent FHWA/FTA planning certification review of the Boston Regional MPO.

This review of the MPO planning process relied largely upon a site visit conducted by representatives from FHWA and FTA on July 27, 28, and 29th, 2010. Significant time was spent with staff from the MPO, the MassDOT and the Massachusetts Bay Transportation Authority (MBTA) to discuss the current status of the MPO's "3-C" planning process.

This report summarizes the various discussions from the site visit and provides a series of commendations and recommendations. As indicated in the report, the FHWA and the FTA have determined that the transportation planning process substantially meets the requirements of 23 CFR Part 450 Subpart C and 49 CFR Part 613. The FHWA and the FTA are therefore jointly certifying the transportation planning process.

The MPO certification review is one of several methods employed by FHWA and FTA to monitor and assess the metropolitan transportation planning process. Other methods include the review and approval of the MPO's Unified Planning Work Program; review of the MPO's Long-Range Transportation Plan; issuance of the Federal planning finding that the MPO's Transportation Improvement Program resulted from a continuing, cooperative, and comprehensive process; and periodic meeting attendance.

The FHWA and FTA would like to thank Boston Region MPO and MassDOT staff for their participation and look forward to working with them. If you have any questions or comments, please contact William Gordon at (617) 494-3514 or Michael Chong at (617) 494-3275.

Sincerely,

Pamela S. Stephenson

Division Administrator

Federal Highway Administration

Mary Beth Mello

Regional Administrator

Federal Transit Administration

Enclosure: Boston Regional MPO TMA Certification Review Report

cc: Mr. David Mohler, Executive Director of Planning, MassDOT, w/enclosure

Mr. Richard Davey, Administrator, Rail and Transit, MassDOT, w/enclosure

Mr. Frank DePaola, Acting Administrator for Highways, MassDOT, w/enclosure

Mr. Mark Guenard, MassDOT MPO Liaison, w/enclosure

### FFYs 2012-15 Staff Recommendation Version Two

Municipality	Project #	Project Name	2012	2012	2013	2013	2014	2014	2015	2015	Total Target Funds Programmed Previously	Total Target Funds Programmed in this Staff Recommendatio n	Other Funds (Including Federally Legislated Funds)	Total in TIP
Boston Region	456661	Clean Air and Mobility Program	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$3,000,000	\$2,500,000	\$9,000,000	\$8,500,000		\$8,500,000
Concord & Lincoln	602984	Route 2 (Crosby's Corner)	\$16,596,710	\$15,406,710	\$10,696,710	\$16,016,710	\$12,326,710	\$12,606,710	\$22,253,710	\$17,860,000	\$61,873,840	\$61,890,130	\$6,316,197	\$68,206,327
Milford	606142	Route 16 Intersection Improvements												\$0
Somerville		Assembly Square Flex to Transit												\$0
Canton, Randolph & Westwood	087800	Route 128 Improvement Program Contract 3												\$0
Dedham, Needham & Westwood	603206	Route 128 Improvement Program Contract 4	\$9,000,000	\$23,330,000	\$9,000,000	\$0	\$5,000,000				\$23,000,000	\$23,330,000		\$23,330,000
Needham & Wellesley	603711	Route 128 Improvement Program Contract 5	\$13,700,000	\$0	\$28,000,000	\$21,000,000	\$30,000,000	\$33,000,000	\$30,000,000	\$32,000,000	\$101,700,000	\$86,000,000		\$86,000,000
Hudson	604812	Route 85												\$0
Marshfield	604915	Route 139												\$0
Ipswich	604945	North Green Improvements (Construction)												\$0
Arlington	604687	Massachusetts Ave	\$3,548,404			\$3,690,340					\$3,548,404	\$3,690,340	\$2,196,996	\$5,887,336
Belmont	604688	Trapelo Road	\$14,591,678	\$14,591,678							\$14,591,678	\$14,591,678		\$14,591,678
Cambridge	605188	Cambridge Common (Construction)	\$1,000,000			\$1,040,000					\$1,000,000	\$1,040,000	\$1,124,874	\$2,164,874
Somerville	604331	Community Path, phase 1	\$690,000	To be fund	ed via Clean Air a	nd Mobility					\$690,000	\$690,000	\$1,012,389	\$1,702,389
Weymouth	601630	Route 18			\$8,820,000	\$11,470,000	\$7,650,000	\$6,200,000			\$16,470,000	\$17,670,000	\$14,933,980	\$32,603,980
Somerville	601820	Beacon Street			\$1,319,690					\$1,902,222	\$1,319,690	\$1,902,222	\$2,484,748	\$4,386,970
Boston	604761	South Bay Harbor Trail (Construction)					\$3,850,000			\$4,330,726	\$3,850,000	\$4,330,726		\$4,330,726
Lynn	602094	Route 129 (Broadway)							\$4,600,000	\$0	\$4,600,000	\$0		\$0
		Total Committed Regional Discretionary Funds:	\$61.126.792	\$55,328,388	\$59,836,400	\$55,217,050	\$60,826,710	\$53,806,710	\$59,853,710	\$58,592,948	\$282,834,668	Indicates N	NEW Staff Recom	nmendation
		Tom Committee Regional Discretionally Punds.	ψ01,120,772	ψυυ,υ20,υ00	Ψ22,030,400	ψυυ,211,000	\$00,020,710	φου,000,710	\$57,055,710	ψυσ,υνω,ν4σ	Ψ202,034,000		ject that is not full	
Pre	viously Availal	ble Regional Discretionary Funds (FFYs 2011-15):	\$61,134,000		\$61,134,000		\$61,134,000		\$61,134,000		\$305,670,000		TIP	
	•	ble Regional Discretionary Funds (FFYs 2011-15):		\$55,398,024		\$55,254,051		\$53,814,653		\$58,589,372	\$282,953,283	Indicate	es a project in the	last Staff
	Dif	fference in Total Available Funds (FFYs 2012-15):		(\$5,735,976)		(\$5,879,949)		(\$7,319,347)		(\$2,544,628)	(\$21,479,900)	Recommendation	on that is not inclu Recommendation	uded in this Staf

Indicates a change in project cost

Indicates removed from TIP (cost not reflected in total)

Indicates a project moved in from another TIP element

Indicates a project moved out to another TIP element (cost not reflected in total)

*Indicates a new addition to the TIP (action taken as denoted)* 

Indicates a new funding category

### Regional Highway Program

### FEDERAL-AID TARGET PROJECTS

<b>Congestion Mitigation and Ai</b>	r Quality Imp	rovement Program	Federal Funds	State/Local Funds	Total Funds	Previous Funds/Notes
Somerville	604331	Somerville Community Path, phase 1	\$0	\$0	\$0	to be included in the Clean Air Program
Boston Region		Clean Air and Mobility Program	\$1,600,000	\$400,000	\$2,000,000	
	Arlington	Intersection of Route 3 and Route 60				
	Framingham	Cochituate Rail Trail				
	Hopkinton	Crosswalk Beacon at Church and Main Sts.				
	Scituate	Scituate Sidewalk Installation and Improvements				
	Somerville	Community Path, phase 1			\$690,000	
	Westwood	Crosswalk Improvements on Washington St.				
	C	Congestion Mitigation and Air Quality Improvement Program Total	\$1,600,000	\$400,000	\$2,000,000	
			Minimum CM	'AQ Regional Target	\$0	
Clean Air and Mobility Awards listed	d above will be fo	1 1' '4 2012 2012 1 1' B ' 4 4' 4 4' 4 (C. 1' 1	1 • •			
<b>.</b>	u above will be iu	anded in either 2012 or 2013 depending on readiness. Project estimates are not finalized	at this time.			
National Highway System	d above will be it	inded in either 2012 or 2013 depending on readiness. Project estimates are not finalized	at this time.  Federal Funds	State Funds	Total Funds	Previous Funds/Notes
·	87800	Route 128 Improvement Program Contract 3, Year Six of Six		State Funds \$0	Total Funds	Previous Funds/Notes \$6,000,000
National Highway System			Federal Funds			
National Highway System Canton, Randolph & Westwood	87800	Route 128 Improvement Program Contract 3, Year Six of Six	Federal Funds \$0	\$0	\$0	\$6,000,000
National Highway System Canton, Randolph & Westwood Dedham, Needham & Westwood	87800 603206	Route 128 Improvement Program Contract 3, Year Six of Six Route 128 Improvement Program Contract 4, Year Four of Six	Federal Funds \$0 \$18,664,000	\$0 \$4,666,000	\$0 \$23,330,000	\$6,000,000 \$12,000,000 \$9,000,000
National Highway System Canton, Randolph & Westwood Dedham, Needham & Westwood	87800 603206 603711	Route 128 Improvement Program Contract 3, Year Six of Six Route 128 Improvement Program Contract 4, Year Four of Six Route 128 Improvement Program Contract 5, Year One of Six	Federal Funds \$0 \$18,664,000 \$0	\$0 \$4,666,000 \$0	\$0 \$23,330,000 \$0	\$6,000,000 \$12,000,000 \$9,000,000
National Highway System Canton, Randolph & Westwood Dedham, Needham & Westwood Needham & Wellesley	87800 603206 603711	Route 128 Improvement Program Contract 3, Year Six of Six Route 128 Improvement Program Contract 4, Year Four of Six Route 128 Improvement Program Contract 5, Year One of Six	Federal Funds \$0 \$18,664,000 \$0 \$18,664,000	\$0 \$4,666,000 \$0 \$4,666,000	\$0 \$23,330,000 \$0 \$23,330,000	\$6,000,000 \$12,000,000 \$9,000,000 \$12,000,000 \$13,700,000
National Highway System Canton, Randolph & Westwood Dedham, Needham & Westwood Needham & Wellesley Surface Transportation Progr	87800 603206 603711	Route 128 Improvement Program Contract 3, Year Six of Six Route 128 Improvement Program Contract 4, Year Four of Six Route 128 Improvement Program Contract 5, Year One of Six National Highway System Total	Federal Funds \$0 \$18,664,000 \$0 \$18,664,000 Federal Funds	\$0 \$4,666,000 \$0 <b>\$4,666,000</b> State Funds	\$0 \$23,330,000 \$0 \$23,330,000 Total Funds	\$6,000,000 \$12,000,000 \$9,000,000 \$12,000,000 \$13,700,000 Previous Funds/Notes
National Highway System Canton, Randolph & Westwood Dedham, Needham & Westwood Needham & Wellesley  Surface Transportation Programmers Arlington	87800 603206 603711 ram	Route 128 Improvement Program Contract 3, Year Six of Six Route 128 Improvement Program Contract 4, Year Four of Six Route 128 Improvement Program Contract 5, Year One of Six National Highway System Total  Massachusetts Ave	Federal Funds \$0 \$18,664,000 \$0 \$18,664,000 Federal Funds \$0	\$0 \$4,666,000 \$0 <b>\$4,666,000</b> State Funds \$0	\$0 \$23,330,000 \$0 \$23,330,000 <i>Total Funds</i> \$0	\$6,000,000 \$12,000,000 \$9,000,000 \$12,000,000 \$13,700,000 Previous Funds/Notes

\$8,888,000

\$2,222,000

\$25,701,678

**Surface Transportation Program Total** 

Indicates a change in project co	ost					
Indicates removed from TIP (co	ost not reflected in tota	I)				
Indicates a project moved in fro	om another TIP elemen	rt				
Indicates a project moved out t	o another TIP element	(cost not reflected in total)				
Indicates a new addition to the	TIP (action taken as de	enoted)				
Indicates a new funding catego	ry					
TT. 1 G A . T						
Highway Safety Improve	· ·	, •	Federal Funds	State Funds	Total Funds	
Concord & Lincoln	602984	Route 2 (Crosby's Corner), Year Two of Five	\$3,867,039	\$429,671	\$4,296,710	
		Highway Safety Improvement Program Total	\$3,867,039	\$429,671	\$4,296,710	
			Minimum HS	SIP Regional Target	\$4,296,710	
Surface Transportation I	Program/Enhancer	nent	Federal Funds	State Funds	Total Funds	Previous Funds/Notes
Cambridge	605188	Cambridge Common (Construction)	\$0	\$0	\$0	moved to 2013
Arlington	604687	Massachusetts Ave	\$0	\$0	\$0	moved to 2013
		Surface Transportation Program/Enhancement Total	\$0	\$0	\$0	
		T.	4-1 D: 1 T	-4 D	¢55 220 200	
			otal Regional Targe		\$55,328,388 \$55,308,034	
		*Boston Region MP	O Regional Target	with State Match	\$55,398,024	
FEDERAL AID NON-TA	RGET PROJECTS					
High-Priority Projects (T	TEA-21)		Federal Funds	State/Local Funds	Total Funds	Previous Funds/Notes
Weymouth	601630	Route 18 Construction (HPP 1236)	\$0	\$0	\$0	\$14,933,980 - to 2013
Framingham	606209	Reconstruction of Route 126 (Concord Street) (HPP 684)	\$0	\$0	\$0	moved to 2013
High-Priority Projects (S	AFETEA-LU)					
Acton/Stow	604531	Assabet River Rail Trail Design (HPP 1761)	\$1,079,881	\$269,970	\$1,349,851	
Arlington	604687	Massachusetts Ave Construction (HPP 47)	\$0	\$0	\$0	to 2013
Boston	606134	Warren St/Blue Hill Ave Construction (HPP 2129)	\$0	\$0	\$0	\$2,392,496 - to 2014
Boston	605789	Melnea Cass Blvd Construction (HPP 756)	\$0	\$0	\$0	\$2,423,248 - moved to 20
Boston	605789	Melnea Cass Blvd Construction (HPP 4284)	\$0	\$0	\$0	\$5,007,375 - moved to 20
Boston		Improvements to Gainsborough and St. Botolph Sts. Design (HPP 2012)	\$400,000	\$100,000	\$500,000	
Franklin	604988	Route 140 Improvements Construction (HPP 4279)	\$0	\$0	\$0	\$5,759,219 - moved to 20
Cambridge	605188	Cambridge Common (Construction HPP 3536)	\$0	\$0	\$0	to 2013
Malden	605173	Pleasant Ave Construction (HPP 589)	\$1,367,848	\$341,962	\$1,709,810	
Somerville	604331	Somerville Community Path Design and Construction (HPP 2782)	\$809,911	\$202,478	\$1,012,389	from 2011
Section 117						
Malden	605173	Pleasant Ave Construction	\$1,657,656	\$0	\$1,657,656	

		Accelerated Bridge Program Total Federal-Aid Bridge Total			\$608,689,690 \$642,122,690	
Quincy	604382	Fore River Bridge			\$285,854,891	from 2011
Medford	605510	Revere Beach Parkway (Route 16) over the MBTA			\$8,840,000	
Everett & Medford	604660	Revere Beach Parkway (Route 16) over the Malden River			\$41,319,200	
Boston	603654	Morton Street over the MBTA/CSX			\$10,574,787	from 2012
Accelerated Bridge Program - F Boston/Cambridge	604421	Longfellow Bridge	Federal Funds	State Funds	Total Funds \$262,100,812	from 2011
A loo-4 d Doddon Donoson - E	V- J 1 A 2 J 4	CLANIA Dara da akawa		Aid Bridge Total	\$26,000,000	
		Advance Construction Bridge Total	\$20,800,000	\$5,200,000	\$26,000,000	
Needham, Wellesley	603711	Route 128 Improvement Program	\$0	\$0	\$0	
Dedham, Needham & Westwood	603206	Route 128 Improvement Program Contract 4	\$0	\$0	\$0	
Boston	603370	Route 99 (Alford Street) over Mystic River	\$11,200,000	\$2,800,000	\$14,000,000	\$15,000,000
Boston	604517	Chelsea Street Bridge	\$9,600,000	\$2,400,000	\$12,000,000	\$11,000,000
<b>Advance Construction Bridge</b>			Federal Funds	State Funds	Total Funds	
	000122	Bridge Total	\$5,946,400	\$1,486,600	\$7,433,000	
Lexington	603722	Route 2A over I-95	\$1,600,000	\$400,000	\$2,000,000	
Framingham	602839	Central Street over the Sudbury River	\$2,426,400	\$606,600	\$3,033,000	
Foxborough	605414	I-95 over Green Street	\$1,920,000	\$480,000	\$2,400,000	
FEDERAL-AID BRIDGE PROJ. Bridge	ECTS	ingn-ritority riojects rotar	Federal Funds	State Funds	Total Funds	
Cambridge	604361	Longfellow Bridge Gateway Improvements  High-Priority Projects Total	\$889,200 <b>\$6,204,496</b>	\$222,300 <b>\$1,136,710</b>	\$1,111,500 \$7,341,206	from 2011
Transportation Community and			Federal Funds	State/Local Funds	Total Funds	Previous Funds/Notes
Framingham  Transportation Community and	606209	Reconstruction of Route 126 (Concord Street)	\$0	C /I 1 F 1	\$0	to 2013
Arlington	604687	Massachusetts Ave Construction	\$0		\$0	to 2013
FEDERAL AID NON-TARGET Section 129			Federal Funds	Other Funds	Total Funds	
Indicates a new funding category						
Indicates a new addition to the TIP (act	ion taken as de	enoted)				
Indicates a project moved out to anothe	r TIP element	(cost not reflected in total)				
Indicates a project moved in from anoth	er TIP elemen	t				
Indicates removed from TIP (cost not re	eflected in total					

Indicates a change in project cost

Indicates removed from TIP (cost a	not reflected in total					
Indicates a project moved in from	another TIP elemen	t				
Indicates a project moved out to a	nother TIP element	(cost not reflected in total)				
Indicates a new addition to the TII	P (action taken as de	enoted)				
Indicates a new funding category						
FEDERAL AID MAJOR IN	FRASTRUCTU	RE AND STATEWIDE CATEGORIES				
<b>Interstate Maintenance</b>			Federal Funds	State Funds	Total Funds	
Foxborough/Sharon	605596	Interstate 95	\$0	\$0	\$0	\$8,393,600 to 2013
Boston/Somerville	606167	Interstate 93	\$9,664,200	\$1,073,800	\$10,738,000	from 2011
Franklin to Milford	606169	Interstate 495	\$13,593,600	\$1,510,400	\$15,104,000	from 2013
		Interstate Maintenance Total	\$23,257,800	\$2,584,200	\$25,842,000	
<b>National Highway System P</b>	Pavement Preser	vation	Federal Funds	State Funds	Total Funds	
Acton to Littleton	604472	Route 2	\$4,261,295	\$1,217,513	\$6,087,564	\$4,670,160
Randolph/Canton	605607	Route 24	\$4,712,332	\$1,178,083	\$5,890,415	from 2014
	Natio	nal Highway System Pavement Preservation Total	\$9,582,383	\$2,395,596	\$11,977,979	
Safe Routes To School Prog	rnom		Endough Euroda	State Funds	Total Funds	Previous Funds/Notes
	gi aiii		Federal Funds	Siaie Funas	Total Funas	Trevious Funus/Notes
Newton	606520	Bowen School	\$368,000	\$92,000	\$460,000	Trevious Funas/Notes
Newton Swampscott		Bowen School Stanley School				Trevious Funus/ivoles
	606520		\$368,000	\$92,000	\$460,000	Trevious Funus/ivoles
	606520	Stanley School	\$368,000 \$320,000 <b>\$688,000</b>	\$92,000 \$80,000 <b>\$172,000</b>	\$460,000 \$400,000 \$860,000	Trevious Funus/Ivoles
	606520	Stanley School	\$368,000 \$320,000 <b>\$688,000</b>	\$92,000 \$80,000	\$460,000 \$400,000	Trevious Funus/Ivoles
	606520 605872	Stanley School	\$368,000 \$320,000 <b>\$688,000</b>	\$92,000 \$80,000 <b>\$172,000</b>	\$460,000 \$400,000 \$860,000	Trevious Funus/woies
Swampscott  CENTRAL ARTERY/TUNN	606520 605872	Stanley School	\$368,000 \$320,000 \$688,000 Total Higl	\$92,000 \$80,000 \$172,000 hway Program	\$460,000 \$400,000 \$860,000 \$743,472,263 Total Funds	Trevious Funus/Ivoles
Swampscott  CENTRAL ARTERY/TUNN  National Highway System (NHS)	606520 605872	Stanley School	\$368,000 \$320,000 \$688,000 Total Higl	\$92,000 \$80,000 \$172,000 hway Program	\$460,000 \$400,000 \$860,000 \$743,472,263	Trevious Funus/Ivoles
Swampscott  CENTRAL ARTERY/TUNN  National Highway System (NHS)  Bridge	606520 605872 VEL PROJECT	Stanley School	\$368,000 \$320,000 \$688,000 Total Higl	\$92,000 \$80,000 \$172,000 hway Program	\$460,000 \$400,000 \$860,000 \$743,472,263 Total Funds	Trevious Funus/Ivoles
CENTRAL ARTERY/TUNN National Highway System (NHS) Bridge State Transportation Program (STI	606520 605872 VEL PROJECT P)/ Flex	Stanley School	\$368,000 \$320,000 \$688,000 Total Higl Federal Funds \$70,000,000	\$92,000 \$80,000 \$172,000 hway Program	\$460,000 \$400,000 \$860,000 \$743,472,263 <i>Total Funds</i> \$70,000,000	Trevious Funus/Ivoles
CENTRAL ARTERY/TUNN National Highway System (NHS) Bridge State Transportation Program (STI	606520 605872 VEL PROJECT P)/ Flex	Stanley School	\$368,000 \$320,000 \$688,000 Total Higl Federal Funds \$70,000,000 \$75,960,000	\$92,000 \$80,000 \$172,000 hway Program	\$460,000 \$400,000 \$860,000 \$743,472,263 <i>Total Funds</i> \$70,000,000 \$75,960,000	Trevious Funus/Ivoles
Swampscott  CENTRAL ARTERY/TUNN  National Highway System (NHS)  Bridge	606520 605872 VEL PROJECT P)/ Flex	Stanley School	\$368,000 \$320,000 \$688,000 Total Higl Federal Funds \$70,000,000 \$75,960,000	\$92,000 \$80,000 \$172,000 hway Program	\$460,000 \$400,000 \$860,000 \$743,472,263 <i>Total Funds</i> \$70,000,000 \$75,960,000	Trevious Funus/Ivoles
CENTRAL ARTERY/TUNN National Highway System (NHS) Bridge State Transportation Program (STI State Transportation Program (STI	606520 605872 VEL PROJECT P)/ Flex P)	Stanley School	\$368,000 \$320,000 \$688,000 Total High Federal Funds \$70,000,000 \$75,960,000 \$20,000,000	\$92,000 \$80,000 \$172,000 hway Program	\$460,000 \$400,000 \$860,000 \$743,472,263 <i>Total Funds</i> \$70,000,000 \$75,960,000	Trevious Funus/Ivoles

Indicates a change in project cost

Indicates removed from TIP (cost not reflected in total)

Indicates a project moved in from another TIP element

Indicates a project moved out to another TIP element (cost not reflected in total)

*Indicates a new addition to the TIP (action taken as denoted)* 

Indicates a new funding category

### Commonwealth Funding Commitments

STATE IMPLEMENTATION PLAN	Fede	leral Funds	State Funds	Total Funds
Green Line Extension Project**	\$10	00,000,000	\$134,300,000	\$234,300,000
Fairmount Improvements	***		\$18,000,000	\$18,000,000
Red Line-Blue Line Connector Design			\$5,000,000	\$5,000,000
1,000 Parking Spaces			\$30,500,000	\$30,500,000
	State Implementation Plan Total			\$287,800,000

\*\*Green Line cash flows assume FTA New Starts funding. Should New Starts funding not be awarded, the Commonwealth will assume financing of the project. Green Line Extension Project is defined as extension to College Avenue with the Union Square Spur.

### Regional Transit Program

Section 5307		Federal Funds	MBTA Funds	Total Funds
Systemwide	Vehicles - Commuter Rail	\$12,012,172	\$3,003,043	\$15,015,215
Systemwide	Vehicles - Bus/THE RIDE/Ferry/Non-Revenue	\$23,000,000	\$5,750,000	\$28,750,000
	123 CNG Buses - Overhaul			
Systemwide	Vehicles - Subway	\$25,000,000	\$6,250,000	\$31,250,000
Systemwide	Station Upgrades (all modes)	\$26,000,000	\$6,500,000	\$32,500,000
	Station Improvements			
Systemwide	Accessibility Program	\$25,000,000	\$6,250,000	\$31,250,000
	Government Center			
	Elevator/Escelator Program			
Systemwide	Facilities Upgrades	\$5,000,000	\$1,250,000	\$6,250,000
Systemwide	Environmental Program	\$5,000,000	\$1,250,000	\$6,250,000
Systemwide	Preventative Maintenance	\$12,000,000	\$3,000,000	\$15,000,000
	Section 5307 MBTA Match Tot	tal \$133,012,172	\$33,253,043	\$166,265,215

Indicates a change in project cost

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Indicates a project moved in from another TIP element

Indicates a project moved out to another TIP element (cost not reflected in total)

*Indicates a new addition to the TIP (action taken as denoted)* 

Indicates a new funding category

Section 5207				C F. I	T . 1 F 1
Section 5307			Federal Funds	State Funds	Total Funds
Cape Ann	Cape Ann Transportation Authority		\$509,548	\$127,387	\$636,935
MetroWest	MetroWest Transportation Authority		\$1,668,698	\$417,175	\$2,085,873
		<b>Section 5307 State Match Total</b>	\$2,178,246	\$544,562	\$2,722,808
Section 5309 Infrastructure Program			Federal Funds	MBTA Funds	Total Funds
Blue Line	Blue Line Modernization		\$10,000,000	\$2,500,000	\$12,500,000
	Government Center				
Systemwide	System Upgrades		\$6,981,902	\$1,745,476	\$8,727,378
Systemwide	Signal System Upgrades		\$15,000,000	\$3,750,000	\$18,750,000
Systemwide	Power Program		\$37,000,000	\$9,250,000	\$46,250,000
Systemwide	Bridge and Tunnel Program		\$25,000,000	\$6,250,000	\$31,250,000
Systemwide	Track Upgrades		\$0	\$0	\$0
		Section 5309 MBTA Match Total	\$93,981,902	\$23,495,476	\$117,477,378

Federal-Aid Subtotal \$229,172,320

Federal-Aid State Matching Funds Subtotal
Federal-Aid MBTA Matching Funds Subtotal

\$544,562

\$56,748,519

Total FFY 2012 Regional Transit Funds \$286,465,400 Total FFY 2012 TIP Total \$1,483,697,663

Indicates a change in project cost

Indicates removed from TIP (cost not reflected in total)

Indicates a project moved in from another TIP element

*Indicates a project moved out to another TIP element (cost not reflected in total)* 

*Indicates a new addition to the TIP (action taken as denoted)* 

Indicates a new funding category

### Regional Highway Program

### FEDERAL-AID TARGET PROJECTS

### **Congestion Mitigation and Air Quality Improvement Program**

			Federal Funds	State/Local Funds	Total Funds	Previous Funds/Notes
Boston Region		Clean Air and Mobility Program	\$1,600,000	\$400,000	\$2,000,000	
	Arlington	Intersection of Route 3 and Route 60				
	Framingham	Cochituate Rail Trail				

Hopkinton Crosswalk Beacon at Church and Main Sts.

Scituate Scituate Sidewalk Installation and Improvements

Westwood Crosswalk Improvements on Washington St.

Congestion Mitigation and Air Quality Improvement Program Total \$1,600,000 \$400,000 \$2,000,000

Minimum CMAQ Regional Target \$8,593,421

Clean Air and Mobility Awards listed above will be funded in either 2012 or 2013 depending on readiness. Project estimates are not finalized at this time.

National Highway System			Federal Funds	State Funds	Total Funds	Previous Funds/Notes
Dedham, Needham & Westwood	603206	Route 128 Improvement Program Contract 4, Year Five of Six	\$0	\$0	\$0	\$12,000,000 \$9,000,000
Needham & Wellesley	603711	Route 128 Improvement Program Contract 5, Year Two of Six	\$16,800,000	\$4,200,000	\$21,000,000	\$15,000,000 \$28,000,000
		National Highway System Total	\$16,800,000	\$4,200,000	\$21,000,000	
<b>Surface Transportation Program</b>			Federal Funds	State Funds	Total Funds	
Arlington	604687	Massachusetts Ave	\$2,382,672	\$595,668	\$2,978,340	was \$3,548,404 \$710,000 now enhancements
Somerville	601820	Beacon Street	\$0	\$0	\$0	moved to 2015
Concord & Lincoln	602984	Route 2 (Crosby's Corner), Year Three of Five	\$8,976,000	\$2,244,000	\$11,220,000	
Weymouth	601630	Route 18, Year One of Two	\$9,176,000	\$2,294,000	\$11,470,000	\$8,820,000
		Surface Transportation Program Total	\$11,358,672	\$2,839,668	\$25,668,340	

Indicates a change in project co	st					
Indicates removed from TIP (cos		l)				
Indicates a project moved in from	<u> </u>					
Indicates a project moved out to						
Indicates a new addition to the T						
Indicates a new funding category	y					
Highway Safety Improver	•	,	Federal Funds	State Funds	Total Funds	
Concord & Lincoln	602984	Route 2 (Crosby's Corner), Year Three of Five	\$3,867,039	\$429,671	\$4,296,710	
		Highway Safety Improvement Program Total	\$3,867,039	\$429,671	\$4,296,710	
			Minimum H	ISIP Regional Target	\$4,296,710	
<b>Surface Transportation P</b>	rogram/Enhancen	nent	Federal Funds	State Funds	Total Funds	Previous Funds/Notes
Cambridge	605188	Cambridge Common (Construction)	\$832,000	\$208,000	\$1,040,000	from 2014
Arlington	604687	Massachusetts Ave	\$569,600	\$142,400	\$712,000	
<b>6</b>		Surface Transportation Program/Enhancement Total	\$1,401,600	\$350,400	\$1,752,000	
			· ·	get Programming	\$54,717,050	
		*Boston Region MPC	O Regional Targei	t with State Match	\$55,254,051	
FEDERAL AID NON-TAK	RGET PROJECTS					
<b>High-Priority Projects (Tl</b>			Federal Funds	State/Local Funds	Total Funds	Previous Funds/Notes
Framingham	606209	Reconstruction of Route 126 (Concord Street) (HPP 684)	\$3,326,276	\$831,569	\$4,157,845	from 2012
Somerville	601820	Beacon Street Construction (HPP 248)	\$0	\$0	\$0	\$2,883,093 switched with (HPP 431)
Weymouth	601630	Route 18 Construction (HPP 1236), Year One of Two	\$11,947,184	\$2,986,796	\$14,933,980	\$14,933,980 - from 2012
<b>High-Priority Projects (SA</b>	AFETEA-LU)					
Arlington	604687	Massachusetts Ave Construction (HPP 47)	\$1,157,597	\$289,399	\$1,446,996	from 2012
Boston		Improvements to Gainsborough and St. Botolph Sts. Construction (HPP 2012)	\$377,834	\$94,459	\$472,293	
Boston		Improvements to Gainsborough and St. Botolph Sts. Construction (HPP 2012)	\$1,732,520	\$433,130	\$2,165,650	
Cambridge	605188	Cambridge Common (Construction HPP 3536)	\$899,899	\$224,975	\$1,124,874	from 2012
Franklin	604988	Route 140 Improvements Construction (HPP 4279)	\$4,607,375	\$1,151,844	\$5,759,219	from 2012
Somerville	601820	Beacon Street Construction (HPP 431)	\$0	\$0	\$0	to 2015
Section 129			Federal Funds	Other Funds	Total Funds	
Arlington	604687	Massachusetts Ave Construction	\$750,000		\$750,000	from 2012
Framingham	606209	Reconstruction of Route 126 (Concord Street)	\$490,000		\$490,000	from 2012
		High-Priority Projects Total	\$25,288,686	\$6,012,171	\$31,300,857	

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Indicates a new funding category

### FEDERAL-AID BRIDGE PROJECTS

<b>Bridge</b> Chelsea	604428	Washington Ave over the MBTA	Bridge Total	Federal Funds \$2,975,232 <b>\$2,975,232</b>	\$743,808 \$743,808	<i>Total Funds</i> \$3,719,040 <b>\$3,719,040</b>	
Advance Construction Bridge				Federal Funds	State Funds	Total Funds	
Boston	604517	Chelsea Street Bridge		\$9,600,000	\$2,400,000	\$12,000,000	\$14,000,000
Boston	603370	Route 99 (Alford Street) over Mystic River		\$6,400,000	\$1,600,000	\$8,000,000	\$10,000,000
Dedham, Needham & Westwood	603206	Route 128 Improvement Program Contract 4	1	\$0	\$0	\$0	
Lexington	603722	Route 2A over I-95		\$8,000,000	\$2,000,000	\$10,000,000	
Needham, Wellesley	603711	Route 128 Improvement Program		\$1,664,000	\$416,000	\$2,080,000	\$13,000,000 \$2,000,000
			Advance Construction Bridge Total	\$25,664,000	\$6,416,000	\$32,080,000	
Accelerated Bridge Program - Fe	ederal Aid	GANs Projects**		Federal Funds	State Funds	Total Funds	
			Accelerated Bridge Program Total			<b>\$0</b>	
			5 8	Federal-Ai	d Bridge Total	\$35,799,040	

<sup>\*\*</sup>GANs conversion to federal aid to begin in 2015

### FEDERAL AID MAJOR INFRASTRUCTURE AND STATEWIDE CATEGORIES

Interstate Maintenance				Federal Funds	State Funds	Total Funds
Franklin to Milford	606169	Interstate 495		\$0	\$0	\$0
Foxborough	606171	Interstate 95		\$0	\$0	\$0
Foxborough	605596	Interstate 95		\$7,476,480	\$830,720	\$8,307,200
Lexington/Burlington	606170	Interstate 95		\$26,682,750	\$2,964,750	\$29,647,500
Wakefield to Lynnfield	605597	Interstate 95		\$12,348,086	\$1,372,010	\$13,720,096
Wilmington to Woburn	604879	Interstate 93		\$11,027,808	\$1,225,312	\$12,253,120
			<b>Interstate Maintenance Total</b>	\$57,535,124	\$6,392,792	\$63,927,916

moved to 2012

\$10,364,900 \$8,954,750 \$12,356,960

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Indicates a new funding category

\$2,732,800 \$683,200 \$3,416,000 Weymouth 605602 Route 3 **National Highway System Pavement Preservation Total** \$2,732,800 \$683,200 \$3,416,000

> **Total Highway Program** \$189,160,863

State Funds

#### CENTRAL ARTERY/TUNNEL PROJECT

National Highway System (NHS)

Bridge

State Transportation Program (STP)/ Flex

State Transportation Program (STP)

**Federal-Aid Subtotal** 

**Federal-Aid Matching Funds Subtotal** 

Federal Funds	State Funds	Total Funds
\$70,000,000		\$70,000,000

\$70,000,000

\$86,555,000 \$86,555,000

\$20,000,000 \$20,000,000

\$176,555,000

Federal Funds

**Total Federal Fiscal Year 2013 Central Artery/Tunnel Funds** 

\$176,555,000

Total Funds

\$176,555,000

### Commonwealth Funding Commitments

#### STATE IMPLEMENTATION PLAN

Green Line Extension Project\*\*\* 1,000 Parking Spaces

Federal Funds \$100,000,000

State Funds \$150,000,000

Total Funds \$250,000,000

\$1,100,000

### **State Implementation Plan Total**

\$251,100,000

\$2,928,000

<sup>\*\*\*</sup>Green Line cash flows assume FTA New Starts funding. Should New Starts funding not be awarded, the Commonwealth will assume financing of the project. Green Line Extension Project is defined as extension to College Avenue with the Union Square Spur.

Indicates a change in project cost

Indicates removed from TIP (cost not reflected in total)

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*Indicates a new addition to the TIP (action taken as denoted)* 

Indicates a new funding category

### Regional Transit Program

Section 5307		Federal Funds	MBTA Funds	Total Funds
Systemwide	Vehicles - Commuter Rail	\$20,012,172	\$5,003,043	\$25,015,215
Systemwide	Vehicles - Bus/THE RIDE/Ferry/Non-Revenue	\$15,000,000	\$3,750,000	\$18,750,000
Systemwide	Vehicles - Subway	\$40,000,000	\$10,000,000	\$50,000,000
Systemwide	Station Upgrades (all modes)	\$12,000,000	\$3,000,000	\$15,000,000
Systemwide	Accessibility Program	\$25,000,000	\$6,250,000	\$31,250,000
	Government Center			
Systemwide	Facilities Upgrades	\$5,000,000	\$1,250,000	\$6,250,000
Systemwide	Environmental Program	\$4,000,000	\$1,000,000	\$5,000,000
Systemwide	Preventative Maintenance	\$12,000,000	\$3,000,000	\$15,000,000
	Section 5307 MBTA Match Total	\$133,012,172	\$33,253,043	\$166,265,215
Section 5307		Federal Funds	State Funds	Total Funds
Cape Ann	Cape Ann Transportation Authority	\$509,548	\$127,387	\$636,935
MetroWest	MetroWest Transportation Authority	\$1,668,698	\$417,175	\$2,085,873
	Section 5307 State Match Total	\$2,178,246	\$544,562	\$2,722,808

Indicates a change in project cost

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Indicates a project moved in from another TIP element

Indicates a project moved out to another TIP element (cost not reflected in total)

*Indicates a new addition to the TIP (action taken as denoted)* 

Indicates a new funding category

Section 5309 Infrastructure Program			Federal Funds	MBTA Funds	Total Funds
Blue Line	Blue Line Modernization		\$25,000,000	\$6,250,000	\$31,250,000
	Government Center				
Systemwide	System Upgrades		\$3,981,902	\$995,476	\$4,977,378
Systemwide	Power Program		\$35,000,000	\$8,750,000	\$43,750,000
Systemwide	Bridge and Tunnel Program		\$30,000,000	\$7,500,000	\$37,500,000
Systemwide	Track Upgrades		\$0	\$0	\$0
		Section 5309 MBTA Match Total	\$93,981,902	\$23,495,476	\$117,477,378

\$229,172,320 Federal-Aid Subtotal

**Federal-Aid State Matching Funds Subtotal** 

**Federal-Aid MBTA Matching Funds Subtotal** 

\$56,748,519

\$544,562

**Total FFY 2013 Regional Transit Funds** \$903,281,263 **Total FFY 2013 TIP Total** 

\$286,465,400

Indicates a change in project cost

Indicates removed from TIP (cost not reflected in total)

Indicates a project moved in from another TIP element

Indicates a project moved out to another TIP element (cost not reflected in total)

*Indicates a new addition to the TIP (action taken as denoted)* 

Indicates a new funding category

### Regional Highway Program

### FEDERAL-AID TARGET PROJECTS

<b>Congestion Mitigation and Air</b>	r Quality Improvement Program	Federal Funds	State Funds	Total Funds	Previous Funds/Notes
Boston	604761 South Bay Harbor Trail (construction)	\$0	\$0	\$0	moved to 2015
		Federal Funds	State/Local Funds	Total Funds	
Boston Region	Clean Air and Mobility Program	\$1,600,000	\$400,000	\$2,000,000	
	Congestion Mitigation and Air Quality Improvement Program Total	\$1,600,000	\$400,000	\$2,000,000	
		Minimum CM	IAQ Regional Target	\$8,593,421	
National Highway System		Federal Funds	State Funds	Total Funds	Previous Funds/Notes
Dedham, Needham & Westwood	603206 Route 128 Improvement Program Contract 4, Year Six of Six	\$0	\$0	\$0	\$11,500,000 \$5,000,000
Needham & Wellesley	603711 Route 128 Improvement Program Contract 5, Year Three of Six	\$26,400,000	\$6,600,000	\$33,000,000	\$14,900,000 \$30,000,000
	National Highway System Total	\$26,400,000	\$6,600,000	\$33,000,000	
Surface Transportation Progr	am	Federal Funds	State Funds	Total Funds	Previous Funds/Notes
Concord & Lincoln	602984 Route 2 (Crosby's Corner), Year Four of Five	\$6,648,000	\$1,662,000	\$8,310,000	
Weymouth	601630 Route 18, Year Two of Two	\$4,960,000	\$1,240,000	\$6,200,000	moved from 2012 and 2013 \$7,650,000
	Surface Transportation Program Total	\$11,608,000	\$2,902,000	\$14,510,000	
Highway Safety Improvement	t Program (HSIP) Project	Federal Funds	State Funds	Total Funds	
Concord & Lincoln	602984 Route 2 (Crosby's Corner), Year Four of Five	\$3,867,039	\$429,671	\$4,296,710	
	Highway Safety Improvement Program Total	\$3,867,039	\$429,671	\$4,296,710	
		Minimum H	SIP Regional Target	\$4,296,710	
	Tot	tal Regional Targ	get Programming	\$53,806,710	
	*Boston Region MPC			\$53,814,653	

	Accelerated Bridge Program		id Bridge Total	\$0 \$45,341,157	
Accelerated Bridge Program - 1	· · · · · · · · · · · · · · · · · · ·	Federal Funds	State Funds	Total Funds	
	Advance Construction Bridge	<b>Total</b> \$26,000,000	\$6,500,000	\$32,500,000	
eedham, Wellesley	603711 Route 128 Improvement Program	\$5,200,000	\$1,300,000	\$6,500,000	\$15,000
exington	603722 Route 2A over I-95	\$8,000,000	\$2,000,000	\$10,000,000	
edham, Needham & Westwood	603206 Route 128 Improvement Program Contract 4	\$0	\$0	\$0	
oston	603370 Route 99 (Alford Street) over Mystic River	\$2,400,000	\$600,000	\$3,000,000	\$8,600
oston	604517 Chelsea Street Bridge	\$10,400,000	\$2,600,000	\$13,000,000	\$10,000
Advance Construction Bridge		Federal Funds	State Funds	Total Funds	
	Bridge		\$2,568,231	\$12,841,157	
Voburn	603008 Salem Street over MBTA	\$1,451,520	\$362,880	\$1,814,400	
Hopkinton	605774 I-90 Ramp over I-495	\$4,615,454	\$1,153,863	\$5,769,317	
Cambridge	606449 First Street and Land Boulevard	\$3,110,400	\$777,600	\$3,888,000	
oston	604462 West Second Street over Haul Road and CSX	Federal Funds \$1,095,552	<i>State Funds</i> \$273,888	Total Funds \$1,369,440	
FEDERAL-AID BRIDGE P	ROJECTS				
	High-Priority Projects	<b>Total</b> \$7,858,495	\$1,964,624	\$9,823,119	
oston	605789 Melnea Cass Blvd Construction (HPP 4284)	\$4,005,900	\$1,001,475	\$5,007,375	from 2
oston	605789 Melnea Cass Blvd Construction (HPP 756)	\$1,938,598	\$484,650	\$2,423,248	from 2
oston	606134 Warren St/Blue Hill Ave Construction (HPP 2129)	\$1,913,997	\$478,499	\$2,392,496	from 2
Cambridge	605188 Cambridge Common (Construction HPP 3536)	\$0	\$0	\$0	moved to
FEDERAL AID NON-TARGET High-Priority Projects (SAFET					
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dicates removed from TIP (cost not i	PTIPCTPA IN TOTAL I				

<sup>\*\*</sup>GANs conversion to federal aid to begin in 2015

Indicates a change in project cost

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*Indicates a new addition to the TIP (action taken as denoted)* 

Indicates a new funding category

### FEDERAL AID MAJOR INFRASTRUCTURE AND STATEWIDE CATEGORIES

			Total Highway Program \$121,2		\$121,242,986
		National Highway System Pavement Preservation Total	\$0	<b>\$0</b>	\$0
Randolph to Canton	605607 Route 24		\$0	\$0	\$0
National Highway System P	avement Preservation		Federal Funds	State Funds	Total Funds
		Interstate Maintenance Total	\$11,044,800	\$1,227,200	\$12,272,000
Foxborough to Franklin	606176 Interstate 49	5	\$11,044,800	\$1,227,200	\$12,272,000
<b>Interstate Maintenance</b>			Federal Funds	State Funds	Total Funds

CENTRAL ARTERY/TUNNEL PROJECT	Federal Funds	State Funds	Total Funds
National Highway System (NHS)	\$70,000,000		\$70,000,000
Bridge			
State Transportation Program (STP)/ Flex	\$93,795,000		\$93,795,000
State Transportation Program (STP)	\$20,000,000		\$20,000,000

Federal-Aid Subtotal \$183,795,000

Federal-Aid Matching Funds Subtotal

Total Federal Fiscal Year 2014 Central Artery/Tunnel Funds

\$183,795,000
\$183,795,000

### Commonwealth Funding Commitments

STATE IMPLEMENTATION PLAN

Green Line Extension Project\*\*\*

1,000 Parking Spaces

 Federal Funds
 State Funds
 Total Funds

 \$100,000,000
 \$150,000,000
 \$250,000,000

### **State Implementation Plan Total**

\$1,100,000 **\$251,100,000**  \$15,393,840

to 2012

<sup>\*\*\*</sup>Green Line cash flows assume FTA New Starts funding. Should New Starts funding not be awarded, the Commonwealth will assume financing of the project. Green Line Extension Project is defined as extension to College Avenue with the Union Square Spur.

Indicates a change in project cost

Indicates removed from TIP (cost not reflected in total)

Indicates a project moved in from another TIP element

Indicates a project moved out to another TIP element (cost not reflected in total)

*Indicates a new addition to the TIP (action taken as denoted)* 

Indicates a new funding category

### Regional Transit Program

Section 5307			Federal Funds	MBTA Funds	Total Funds
Systemwide	Vehicles - Commuter Rail		\$42,012,172	\$10,503,043	\$52,515,215
Systemwide	Vehicles - Bus/THE RIDE/Ferry/Non	-Revenue	\$15,000,000	\$3,750,000	\$18,750,000
Systemwide	Vehicles - Subway		\$20,000,000	\$5,000,000	\$25,000,000
Systemwide	Station Upgrades (all modes)		\$12,000,000	\$3,000,000	\$15,000,000
Systemwide	Accessibility Program		\$25,000,000	\$6,250,000	\$31,250,000
Systemwide	Facilities Upgrades		\$5,000,000	\$1,250,000	\$6,250,000
Systemwide	Environmental Program		\$2,000,000	\$500,000	\$2,500,000
Systemwide	Preventative Maintenance		\$12,000,000	\$3,000,000	\$15,000,000
		<b>Section 5307 MBTA Match Total</b>	\$133,012,172	\$33,253,043	\$166,265,215
Section 5307			Federal Funds	State Funds	Total Funds
Cape Ann	Cape Ann Transportation Authority		\$509,548	\$127,387	\$636,935
MetroWest	MetroWest Transportation Authority		\$1,668,698	\$417,175	\$2,085,873
		<b>Section 5307 State Match Total</b>	\$2,178,246	\$544,562	\$2,722,808
Section 5309 Infrastructure Program			Federal Funds	MBTA Funds	Total Funds
Blue Line	Blue Line Modernization		\$15,000,000	\$3,750,000	\$18,750,000
Systemwide	System Upgrades		\$13,981,902	\$3,495,476	\$17,477,378
Systemwide	Power Program		\$35,000,000	\$8,750,000	\$43,750,000
Systemwide	Bridge and Tunnel Program		\$30,000,000	\$7,500,000	\$37,500,000
		<b>Section 5309 MBTA Match Total</b>	\$93,981,902	\$23,495,476	\$117,477,378
Federal-Aid Subtotal			\$229,172,320		
Federal-Aid State Matching Funds Su	btotal			\$544,562	
Federal-Aid MBTA Matching Funds S					\$56,748,519

**Total FFY 2014 Regional Transit Funds** 

**Total FFY 2014 TIP Total** 

\$286,465,400

\$842,603,386

Indicates a change in project cost

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*Indicates a new addition to the TIP (action taken as denoted)* 

Indicates a new funding category

### Regional Highway Program

### FEDERAL-AID TARGET PROJECTS

<b>Congestion Mitigation and Air</b>	r Quality Improvement Program	Federal Funds	State Funds	Total Funds	Previous Funds/Notes	
Boston	604761 South Bay Harbor Trail (Construction)	\$3,464,581	\$866,145	\$4,330,726	from 2013	
Boston Region	Clean Air and Mobility Program	\$2,000,000	\$500,000	\$2,500,000	\$2,000,000 \$2,500,000	
	Congestion Mitigation and Air Quality Improvement Program Total	\$5,464,581	\$1,366,145	\$6,830,726		
		Minimum CMAQ Regional Target		\$8,593,421		
National Highway System		Federal Funds	State Funds	Total Funds	Previous Funds/Notes	
Dedham, Needham & Westwood	603206 Route 128 Improvement Program Contract 4, Year Six of Six	\$0	\$0	\$0	\$11,500,000	
Needham & Wellesley	603711 Route 128 Improvement Program Contract 5, Year Three of Six	\$25,600,000	\$6,400,000	\$32,000,000	\$14,900,000 \$30,000,000	
	National Highway System Total	\$25,600,000	\$6,400,000	\$32,000,000		
Surface Transportation Program		Federal Funds	State Funds	Total Funds		
Concord & Lincoln	602984 Route 2 (Crosby's Corner), Year Five of Five	\$11,250,632	\$2,812,658	\$14,063,290		
Lynn	602094 Route 129 (Broadway)	\$0	\$0	\$0	removed from first staff recommendation	
Somerville	601820 Beacon Street	\$1,521,777	\$380,444	\$1,902,222	from 2013	
	Surface Transportation Program Total	\$12,772,409	\$3,193,102	\$15,965,512		
Highway Safety Improvement Program (HSIP) Project		Federal Funds	State Funds	Total Funds		
Concord & Lincoln	602984 Route 2 (Crosby's Corner), Year Five of Five	\$3,867,039	\$429,671	\$4,296,710		
	Highway Safety Improvement Program Total	\$3,867,039	\$429,671	\$4,296,710		
		Minimum HSIP Regional Target		\$4,296,710	710	
*Boston Region MPO Regional Target with State Match				\$59,092,948		
				\$58,589,372		

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*Indicates a new addition to the TIP (action taken as denoted)* 

Indicates a new funding category

### FEDERAL AID NON-TARGET PROJECTS

		High-Priority 1	igh-Priority Projects Total	
Somerville	601820 Beacon Street Construction (HPP 431)	\$1,987,798	\$496,950	\$2,484,748
High-Priority Proje	ects (SAFETEA-LU)	Federal Funds	State Funds	Total Funds

### FEDERAL-AID BRIDGE PROJECTS

Bridge		Federal Funds	State Funds	Total Funds
Boston	600867 Massachusetts Ave over Commonwealth Ave	\$18,547,200	\$4,636,800	\$23,184,000
Chelsea	605287 Route 1 over Arlington and 5th Streets	\$1,792,000	\$448,000	\$2,240,000
Lynn/Saugus	604952 Route 107 over the Saugus River	\$1,792,000	\$448,000	\$2,240,000
Wilmington	42603 Route 38 over the B and M Railroad	\$3,870,720	\$967,680	\$4,838,400
	Bridge Total	\$26,001,920	\$6,500,480	\$32,502,400
Advance Construction Bridg	ge	Federal Funds	State Funds	Total Funds
Boston	603370 Route 99 (Alford Street) over Mystic River	\$2,400,000	\$600,000	\$3,000,000
Boston	604517 Chelsea Street Bridge	\$10,400,000	\$2,600,000	\$13,000,000
Lexington	603722 Route 2A over I-95	\$8,000,000	\$2,000,000	\$10,000,000
Needham, Wellesley	603711 Route 128 Improvement Program	\$5,200,000	\$1,300,000	\$6,500,000
	Advance Construction Bridge Total	\$26,000,000	\$6,500,000	\$32,500,000
Accelerated Bridge Program	Federal Funds	State Funds	Total Funds	
	Accelerated Bridge Program Total			<b>\$0</b>

<sup>\*\*</sup>GANs conversion to federal aid to begin in 2015

from 2013

Federal-Aid Bridge Total

\$65,002,400

# DRAFT FFYs 2012-15 TIP - Version Three FFY 2015

Indicates a change in project cost

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Indicates a new funding category

#### FEDERAL AID MA IOR INFRASTRICTURE AND STATEWIDE CATEGORIES

FEDERAL AID MAJOR INFR	ASIKUCIUKE AND SIA	ALE WIDE CALEGORIES			
Interstate Maintenance			Federal Funds	State Funds	Total Funds
Foxborough to Franklin	606176 Interstate 495		\$8,563,968	\$951,552	\$9,515,520
Danverst to Middleton	Interstate 95		\$17,395,560	\$1,932,840	\$19,328,400
		Interstate Maintenance Total	\$25,959,528	\$2,884,392	\$28,843,920
National Highway System Pav	ement Preservation		Federal Funds	State Funds	Total Funds
	Nat	ional Highway System Pavement Preservation Total	\$0	\$0	\$0

Total Highway Program	\$155,424,016
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Accelerated Bridge Program (ABP)	Federal Funds	State Funds	Total Funds
Bridge	\$150,000,000		\$150,000,000
Federal-Aid Subtotal	\$150,000,000		
			<b>4.5</b> 0 000 000

Federal-Aid Matching Funds Subtotal

Total Federal Fiscal Year 2015 ABP Funds

\$150,000,000
\$150,000,000

## Commonwealth Funding Commitments

STATE IMPLEMENTATION PLANFederal FundsState FundsTotal FundsGreen Line Extension Project\*\*\*\$100,000,000\$150,000,000\$250,000,000

1,000 Parking Spaces

**State Implementation Plan Total** 

\$1,100,000 **\$251,100,000** 

<sup>\*\*\*</sup>Green Line cash flows assume FTA New Starts funding. Should New Starts funding not be awarded, the Commonwealth will assume financing of the project. Green Line Extension Project is defined as extension to College Avenue with the Union Square Spur.

# DRAFT FFYs 2012-15 TIP - Version Three FFY 2015

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## Regional Transit Program

Section 5307			Federal Funds	MBTA Funds	Total Funds
Systemwide	Vehicles - Commuter Rail		\$42,012,172	\$10,503,043	\$52,515,215
Systemwide	Vehicles - Bus/THE RIDE/Ferry/Non-	Davanua	\$15,000,000	\$3,750,000	\$18,750,000
Systemwide	Vehicles - Subway	-Revenue	\$20,000,000	\$5,000,000	\$25,000,000
·	•				
Systemwide	Station Upgrades (all modes)		\$12,000,000	\$3,000,000	\$15,000,000
Systemwide	Accessibility Program		\$25,000,000	\$6,250,000	\$31,250,000
Systemwide	Facilities Upgrades		\$5,000,000	\$1,250,000	\$6,250,000
Systemwide	Environmental Program		\$2,000,000	\$500,000	\$2,500,000
Systemwide	Preventative Maintenance		\$12,000,000	\$3,000,000	\$15,000,000
		Section 5307 MBTA Match Total	\$133,012,172	\$33,253,043	\$166,265,215
Section 5307			Federal Funds	State Funds	Total Funds
Cape Ann	Cape Ann Transportation Authority		\$509,548	\$127,387	\$636,935
MetroWest	MetroWest Transportation Authority		\$1,668,698	\$417,175	\$2,085,873
		<b>Section 5307 State Match Total</b>	\$2,178,246	\$544,562	\$2,722,808
Section 5309 Infrastructure Program			Federal Funds	MBTA Funds	Total Funds
Blue Line	Blue Line Modernization		\$10,000,000	\$2,500,000	\$12,500,000
Systemwide	Vehicles - Subway		\$10,000,000	\$2,500,000	\$12,500,000
Systemwide	System Upgrades		\$8,981,902	\$2,245,476	\$11,227,378
Systemwide	Power Program		\$35,000,000	\$8,750,000	\$43,750,000
Systemwide	Bridge and Tunnel Program		\$30,000,000	\$7,500,000	\$37,500,000
		<b>Section 5309 MBTA Match Total</b>	\$93,981,902	\$23,495,476	\$117,477,378
Federal-Aid Subtotal			\$229,172,320		
Federal-Aid State Matching Funds Sub	total			\$544,562	
Federal-Aid MBTA Matching Funds Su				,	\$56,748,519

**Total FFY 2015 Regional Transit Funds** 

**Total FFY 2015 TIP Total** 

\$286,465,400

\$842,989,416

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## Regional Highway Program

## FEDERAL-AID TARGET PROJECTS

Congestion Mitigation and Air	Quality 1	Improvement Program	Federal Funds	State Funds	Total Funds	Previous Funds/Notes
Concord & Lincoln	602984	Route 2 (Crosby's Corner)	\$784,000	\$196,000	\$980,000	
Milford	606142	Route 16 Intersection Improvements	\$2,800,000	\$700,000	\$3,500,000	
Somerville		Assembly Square Flex to Transit	\$10,000,000	\$2,500,000	\$12,500,000	
				State/Local		
			Federal Funds	Funds/In-Kind	Total Funds	
Boston Region	456661	Clean Air and Mobility Program	\$1,600,000	\$400,000	\$2,000,000	
		MWRTA - Route 7 Saturday Service, year 3	\$38,050	\$7,610	\$45,660	
		Acton - Rail Shuttle, year 2	\$64,579	\$12,916	\$77,495	
		CATA - Stage Fort Shuttle, year 2	\$5,947	\$1,189	\$7,136	
		MBTA - Three Head End Power Unit Retrofits	\$296,484	\$59,297	\$355,781	
		128 Business Council - Smart Bus Application	\$250,000	\$50,000	\$300,000	
		Boston - Bike Share, year 2	\$675,000	\$135,000	\$810,000	
		Brookline - Bike Share, year 1	\$98,308	\$19,662	\$117,970	
		Cambridge - Bike Share, year 1	\$228,384	\$45,677	\$274,061	
		Congestion Mitigation and Air Quality Improvement Program Total	\$15,184,000	\$3,796,000	\$18,980,000	
			Minimum CMA	Q Regional Target	\$0	
National Highway System			Federal Funds	State Funds	Total Funds	
Canton, Randolph & Westwood	087800	Route 128 Improvement Program Contract 3, Year Five of Six	\$4,800,000	\$1,200,000	\$6,000,000	
Dedham, Needham & Westwood	603206	Route 128 Improvement Program Contract 4, Year Three of Six	\$9,600,000	\$2,400,000	\$12,000,000	
		National Highway System Total	\$14,400,000	\$3,600,000	\$18,000,000	

FFY 2011 Element Indicates a change in project cost Indicates removed from TIP (cost not reflected in total) Indicates a project moved in from another TIP element *Indicates a project moved out to another TIP element (cost not reflected in total) Indicates a new addition to the TIP (action taken as denoted) Indicates a new funding category* **Surface Transportation Program** Federal Funds State Funds Total Funds Previous Funds/Notes Concord & Lincoln \$831,590 \$207,897 \$1,039,487 602984 Route 2 (Crosby's Corner) 604812 Route 85 \$8,651,584 Hudson \$2,162,896 \$10,814,480 604915 Route 139 \$4,546,128 \$1,136,532 \$5,682,660 Marshfield **Surface Transportation Program Total** \$14,029,302 \$3,507,325 \$17,536,627 Highway Safety Improvement Program (HSIP) Project Federal Funds Total Funds State Funds

Concord & Lincoln 602984 Route 2 (Crosby's Corner) \$4,296,710

Highway Safety Improvement Program Total \$3,867,039 \$429,671 \$4,296,710

Minimum HSIP Regional Target \$4,296,710

Surface Transportation Program/EnhancementFederal FundsState FundsTotal FundsIpswich604945 North Green Improvements (Construction)\$860,988\$215,247\$1,076,235

Surface Transportation Program/Enhancement Total \$860,988 \$215,247 \$1,076,235

Total Regional Target Programming \$59,889,572

Boston Region MPO Regional Target with State Match \$59,897,183

## FEDERAL AID NON-TARGET PROJECTS

<b>High-Priority Projects (TEA-</b>	-21)	Federal Funds	State/Local Funds	Total Funds	Previous Funds/Notes
Boston	604871 Huntington Ave/Symphony Area Streetscape Constriction (HPP 447)	\$2,979,778	\$744,945	\$3,724,723	\$2,675,290
Boston	604871 Huntington Ave/Symphony Area Streetscape Construction (HPP 1811)	\$1,025,100	\$256,275	\$1,281,375	\$1,025,100
Canton	606086 Reconstruction of I-95 (SB) Off Ramp to University Ave. Design (HPP 864)	\$384,412	\$96,103	\$480,515	
Framingham	606209 Reconstruction of Route 126 (Concord Street) (HPP 684)	\$431,200	\$107,800	\$539,000	
Somerville	605219 Improvements to Broadway in Somerville Construction (HPP 248)	\$2,306,474	\$576,619	\$2,883,093	
High-Priority Projects (SAFE	ETEA-LU)	Federal Funds	State/Local Funds	Total Funds	
Boston	606134 Warren St/Blue Hill Ave Design (HPP 2129)	\$240,000	\$60,000	\$300,000	
Boston	Northern Avenue Bridge Design (HPP 4271)	\$800,000	\$200,000	\$1,000,000	
Boston	Rutherford Ave Design (HPP TI 174)	\$2,400,000	\$600,000	\$3,000,000	
Boston	Sullivan Square, Phase 1 Design (HPP 3568)  Page 2 of 5	\$897,498	\$224,375	\$1,121,873	

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High-Priority Projects (SAFE)	TEA-LU) c	ont.	Federal Funds	State/Local Funds	Total Funds	Previous Funds/Notes
Boston		North Washington St Bridge Design (HPP 2586)	\$1,760,000	\$440,000	\$2,200,000	
Boston		Commonwealth Ave Reservation CAP1A Transit Improvements (Flex to MBTA)	\$2,708,000	\$677,000	\$3,385,000	
Chelsea		Roadway Improvements	\$1,794,997	\$448,749	\$2,243,746	
Franklin	604988	Route 140 Design (HPP 4279)	\$50,000	\$12,500	\$62,500	
Quincy	606235	Adams Green Design (HPP 4272)	\$640,000	\$160,000	\$800,000	
Somerville		Assembly Square Multimodal Access Improvements (flex to transit) (HPP 4281)	\$5,007,375	\$1,251,844	\$6,259,219	
Somerville		I-93 Mystic Avenue Interchange Study (HPP 792)	\$359,000	\$89,750	\$448,750	
Somerville	604778	Union Square Improvements Study (HPP 999)	\$73,961	\$18,490	\$92,451	
Walpole	605187	Washington St Construction (HPP 2431)	\$1,259,860	\$314,965	\$1,574,825	
Weymouth	601630	Route 18 Design (HPP 1236)	\$1,336,000	\$334,000	\$1,670,000	
Section 117			Federal Funds	Other Funds	Total Funds	
Somerville		Adaptive Reuse and Streetscape Improvements (Study)	\$350,000		\$350,000	
Cambridge	605684	Kendall Square/Broadway Streetscape Construction (MA094)	\$750,000		\$750,000	
PLHD Awards (2003)			Federal Funds	Other Funds	Total Funds	
Boston		Long Island Pier Improvements	\$198,700		\$198,700	
2004 Ferry Boat Discretionar	y Commut	er Ferry	Federal Funds	State/Local Funds	Total Funds	
Winthrop		Winthrop Ferry Improvements Construction	\$264,232	\$66,058	\$330,290	
2005 Ferry Boat Discretionar	y Ferry In	frastructure	Federal Funds	State/Local Funds	Total Funds	
Winthrop		Winthrop Ferry Improvements Construction	\$208,167	\$52,042	\$260,209	
2010 Surface Transportation	<b>Priority P</b>	roject Earmark(s)				
Belmont	604688	Trapelo Road Design (MA269)	\$329,943		\$329,943	
		High-Priority Projects T	<b>Social</b> \$28,554,697	\$6,731,514	\$35,286,211	

<sup>\*</sup>Additional money to be provided from outside sources

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ndicates a project moved in from and	ther TIP element				
ndicates a project moved out to anot	her TIP element (cost not reflected in total)				
ndicates a new addition to the TIP (a	ction taken as denoted)				
ndicates a new funding category	Residence   Time   Constitute   Time   T				
	and and				
	DIECTS				
Bridge					
Iudson					
lewton			•	,	,
Vayland	602723 Pelham Island Road over the Sudbury Rive			,	
		Bridge Total	\$7,867,092	\$1,966,773	\$9,833,865
dvance Construction Bridge			Federal Funds	State Funds	Total Funds
oston			\$8,000,000	\$2,000,000	\$10,000,000
oston	603370 Route 99 (Alford Street) over Mystic Rive	er	\$9,600,000	\$2,400,000	\$12,000,000
edham, Needham & Westwood	•		\$1,600,000	\$400,000	\$2,000,000
ynn & Saugus	26710 Route 107 (Fox Hill) Bridge, Year Five		\$400,000	\$100,000	\$500,000
-		<b>Advance Construction Bridge Total</b>	\$19,600,000	\$4,900,000	\$24,500,000
ccelerated Bridge Program -	Federal Aid GANs Projects**		Federal Funds	State Funds	Total Funds
edford	ū	and Related Work			\$100,751,980
					\$100,751,980
		Federal-Aid Bridge Total			\$135,085,845
*GANs conversion to federal aid to begin in					
	ASTRUCTURE AND STATEWIDE CATEGO	DRIES			
nterstate Maintenance					
urlington			, ,		
anvers	606163 Interstate 95		, ,	ŕ	, ,
/alpole/Norwood/Sharon/Canton	605590 Interstate 95				
		Interstate Maintenance Total	\$27,518,891	\$3,057,655	\$30,576,545
tatewide Highway Safety Im <sub>j</sub>	provement Program		Federal Funds	State Funds	Total Funds
Danvers	606163 I-95 Cable Barrier		\$900,000	\$100,000	\$1,000,000
		<b>Interstate Maintenance Total</b>	\$900,000	\$100,000	\$1,000,000

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Safe Routes To School Program	l .		Federal Funds	State Funds	Total Funds	
Canton	605874 Hansen School		\$440,800	\$110,200	\$551,000	
Chelsea	606259 Wright and Browne Schools		\$392,000	\$98,000	\$490,000	\$401,000
Reading	606222 Parker Middle School		\$280,000	\$70,000	\$350,000	
Scituate	606216 Heatherly Elementary School		\$412,000	\$103,000	\$515,000	
		Safe Routes To School Program Total	\$1,524,800	\$381,200	\$1,906,000	

Total Highway Program \$263,744,173

## Clean Air and Mobility Subcommittee Recommendations

Year	Federal Funding	Notes/Proponent Information
2012 Acton - Rail Shuttle, year 3	\$55,327	
2012 CATA - Stage Fort Shuttle, year 3	\$5,000	
2012 Boston - Bike Share, year 3	\$600,000	
2012 Brookline - Bike Share, year 2	\$90,000	
2012 Cambridge - Bike Share, year 2	\$125,822	
2012 Somerville - Community Path Cedar to Lowell	\$690,000	
Total:	\$1,566,149	
Total Available:	\$1,600,000	
2013 Brookline - Bike Share, year 3	\$80,000	
2013 Cambridge - Bike Share, year 3	\$125,822	
? Arlington - Intersection of Route 3 and Route 60		proponent is working on an estimate
? Framingham - Cochituate Rail Trail	\$600,000	proponent is working on an estimate (not final)
P Hopkinton - Crosswalk Beacon at Church and Main Sts.		proponent completed the project on their own
Programme Progra		have not heard from proponent
P Westwood - Crosswalk Improvements on Washington St.		have not heard from proponent

## FFYs 2012-15 TIP Recommendation

Municipality	Project #	Project Name	2012 Recommendation Version Two	2012 MassDOT Proposal	2013 Recommendation Version Two	2013 MassDOT Proposal	2014  Recommendation  Version Two	2014 MassDOT Proposal	2015 Recommendation Version Two	2015 MassDOT Proposal	Total Target Funds Programmed Previously	Total Target Funds Programmed in this Staff Recommendation	Other Funds (Including Federally Legislated Funds or 2011 Funds)	Total in TIP	Project Cost Estimate	Year of Expenditure	
Boston Region	456661	Clean Air and Mobility Program	\$2,000,000	\$2,000,000	\$2,000,000	\$900,000	\$2,000,000	\$0	\$2,500,000	\$0	\$8,500,000	\$2,900,000		\$2,900,000			
Concord & Lincoln	602984	Route 2 (Crosby's Corner)	\$15,406,710	\$11,248,217	\$16,016,710	\$16,016,710	\$12,606,710	\$13.574,084	\$17,860,000	\$17.860,000	\$61,890,130	\$58,699,011	\$6,316,197	\$65,015,208	\$65,196,448	2 .	\$68,189,830 \$2,993,38
Dedham, Needham & Westwood		Route 128 Improvement Program Contract 4	\$23,330,000	\$23,330,000	\$0	\$0	7		1		\$23,330,000	\$23,330,000		\$23,330,000			120
Needham & Wellesley	603711	Route 128 Improvement Program Contract 5	\$0	\$0	\$21,000,000	\$26,000,000	\$33,000,000	\$30,000,000	\$32,000,000	\$30,000,000	\$86,000,000	\$86,000,000		\$86,000,000			1
Arlington	- Carlotte	Massachusetts Ave			\$3,690,340	\$3,690,340					\$3,690,340	\$3,690,340	\$2,196,996 V	\$5,887,336	\$5,887,336		
Belmont	604688	Trapelo Road	\$14,591,678	\$14.591,678	2 (1 )						\$14,591,678	\$14,591,678		\$14,591,678	\$14,591,678		
Cambridge		Cambridge Common (Construction)			\$1,040,000	\$1,040,000					\$1,040,000	\$1,040,000	\$1,124,874 \( \sqrt{1} \)	\$2,164,874	\$3,479,310	\$3,763,222	-\$1,598,348 \$1,000,00
Somerville	604331	Community Path, phase 1	Clean Air	To be fu	nded via Clean Air and	Mobility	9				Clean Air	Clean Air	\$1,012,389	\$1,012,389	\$1,676,740		\$690,000
Weymouth	601630	Route 18		1. 1. 1. 1. 1.	\$11,470,000	\$858,750	\$6,200,000	\$6,090,000		\$10,721,250 Y	\$17,670,000	\$17,670,000	\$14,933,980	\$32,603,980	\$31,349,250	\$32,603,220	\$760
Somerville	601820	Beacon Street			4	\$1,319,690			\$1,902,222		\$1,902,222	\$1,319,690	\$2,484,748	\$3,804,438	\$3,900,000	\$3,956,610	\$152,172 \$1,319,69
Boston	604761	South Bay Harbor Trail (Construction)						\$4,146,726	\$4,330,726		\$0	\$4,146,726		\$4,146,726	\$3,850,000	\$4,146,746	\$20
Natick	601586	Route 9 Oak Street	in the	\$4,158,493	Take the second						\$0	\$4,158,493	\$1,732,500	\$5,890,993	\$5,544,493		
Lynn	602094	Broadway (Lynn)				\$5,421,560				\$0	\$0	\$5,421,560		\$5,421.560	\$4,556,670	\$5,125,634	- *
				1	/		* * * * * * * * * * * * * * * * * * *	*			× 4%	1 1 1 1 1 1 1	8.4			* **	G 8
	Total Regi	onal Discretionary Funds in Recommendation:	\$55,328,388	\$55,328,388	\$55,217,050	\$55,247,050	\$53,806,710	\$53,810,810	\$58,592,948	\$58,581,250	\$222,967,498				8 H	\$23,330,000	
Total	Available	Regional Discretionary Funds (FFYs 2011-15):		\$55,398,024		\$55,254,051		\$53,814,653	k 1 a	\$58,589,372	\$223,056,100		ect that is not fully f				p
													ect not in the Staff I that is included in t		2		9 20
τ	nassigned	Regional Discretionary Funds (FFYs 2011-15):		\$69,636		\$7,001		\$3,843		\$8,122	1		recommendation			I .	



### BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

State Transportation Building Ten Park Plaza, Suite 2150 Boston, MA 02116-3968 Tel. (617) 973-7100 Fax (617) 973-8855 TTY (617) 973-7089 www.bostonmpo.org

Jeffrey B. Mullan MassDOT Secretary and CEO and MPO Chairman

Karl H. Quackenbush Acting Director, MPO Staff

The Boston Region MPO, the federally designated entity responsible for transportation decisionmaking for the 101 cities and towns in the MPO region, is composed of:

MassDOT Office of Planning and Programming

City of Boston

City of Newton

City of Somerville

Town of Bedford

Town of Braintree

Town of Framingham

Town of Hopkinton

Metropolitan Area Planning Council

Massachusetts Bay Transportation Authority Advisory Board

Massachusetts Bay Transportation Authority

MassDOT Highway Division

Massachusetts Port Authority

Regional Transportation Advisory Council (nonvoting)

Federal Highway Administration (nonvoting)

Federal Transit Administration (nonvoting)

#### MEMORANDUM

**DATE** July 28, 2011

TO Transportation Planning and Programming Committee

of the Boston Region Metropolitan Planning Organization

FROM Karl H. Quackenbush, CTPS Acting Director

**RE** Work Program for: MBTA 2012 Review of Fare Structure, Tariffs, and

**Service** 

#### **ACTION REQUIRED**

Review and approval

#### PROPOSED MOTION

That the Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization, upon the recommendation of the Massachusetts Bay Transportation Authority, vote to approve the work program for MBTA 2012 Review of Fare Structure, Tariffs, and Service in the form of the draft dated July 28, 2011.

#### PROJECT IDENTIFICATION

#### **Unified Planning Work Program Classification**

Technical Support/Operations Analysis Projects

#### **CTPS Project Number**

11376

#### Client

Massachusetts Bay Transportation Authority

Project Supervisor: Charles Planck

#### **CTPS Project Supervisors**

Principal: Elizabeth Moore Manager: Robert Guptill

#### **Funding**

Future MBTA contract

#### **IMPACT ON MPO WORK**

The MPO staff has sufficient resources to complete this work in a capable and timely manner. By undertaking this work, the MPO staff will neither delay the completion of nor reduce the quality of other work in the UPWP.

#### **BACKGROUND**

The last MBTA fare increase was in 2007, at which time fares were increased by an average of slightly less than 25 percent. Revenue realized from the fare increase was needed to address a substantial budget shortfall in fiscal year 2007 and anticipated shortfalls in subsequent years. These shortfalls were caused by, and continue to occur, in large part, because of gaps between anticipated and actual dedicated revenue from the state sales tax. The increased costs of labor and materials also contribute to budget gaps.

The MBTA has requested that CTPS analyze the impacts of potential changes in fare structure, tariffs, and service at this time. CTPS has provided technical assistance related to such changes in the past, most recently in 1991, 2000, 2004, and 2007. For the last fare increase, CTPS produced an analysis, much like the one proposed in this work program, which included projections of revenue, ridership, environmental, and socioeconomic impacts related to the proposed fare increase, as well as an analysis of the effects of substantial service reductions that would be needed if the fares were not increased. It is expected that CTPS will accomplish the current analysis by relying on its regional travel demand model along with various other data sources and analysis tools.

As part of the 2004 fare increase, the MBTA Board of Directors created the Rider Oversight Committee (ROC) to discuss customer-service improvements and service-quality issues. This committee is composed of members from three different groups: MBTA staff, transportation advocacy organizations, and riders at large. In late 2004, the MBTA began working with the ROC Finance Subcommittee to explore restructuring the fares. CTPS staff provided extensive technical support to this effort, estimating the revenue and ridership impacts of potential fare-structure changes. As the need for a fare increase in 2007 became apparent, CTPS continued to provide technical support to the ROC Finance Subcommittee, analyzing the impacts of raising the fares, in addition to restructuring them. An integral part of the ROC involvement in restructuring the fares was the development of a new Fare Policy, which established the goals and objectives that guided the fare restructuring. The Fare Policy, which also codified the new fare structure, was finalized through the efforts of an internal MBTA Fare Policy committee.

#### **OBJECTIVE**

To forecast the ridership, revenue, environmental, and socioeconomic impacts of potential changes in MBTA fare structure, tariffs, and service.

#### WORK DESCRIPTION

# Task 1 Establish an Annual Estimate of MBTA Ridership, Calibrate Travel Model, and Summarize Peer Fare Levels

The first task will be to estimate annual MBTA ridership by station, line, mode, and product type. The automated-fare-collection (AFC) system has detailed data on the number of linked trips by date, time, and product type as well as sales of various product types. These data will be used to update the AFC portion of the spreadsheet tool used for the 2007 pre- and post-fare increase impacts analyses. This spreadsheet tool performs various calculations, such as transforming linked trips into unlinked trips and deriving commuter rail trips from pass-ride values and pass sales, and also includes an annual estimate of ridership for the other, non-AFC modes.

Once current ridership has been estimated, the CTPS regional travel demand model, which is currently calibrated to 2009 ridership, will be run and adjusted until it replicates the annual ridership estimate with a reasonable degree of accuracy and with parking at transit parking lots constrained to their capacities.

CTPS will update a matrix that compares the fare levels by mode and fare type of various peer transit agencies.

#### Products of Task 1

- Estimates of current ridership by station, line, mode, and product type for the MBTA system
- Travel model calibrated to current ridership
- Updated peer-agency comparison of fare levels

#### Task 2 Participate in Regular Meetings

The ROC holds meetings of its full membership on a monthly basis, and invites the MBTA General Manager and Secretary of Transportation to participate in every third meeting. The ROC standing committees meet monthly, including the ROC Finance Subcommittee, which discusses issues related to fares and fare structure. CTPS will provide professional staff support for each of the monthly meetings and will also participate in ROC Finance Subcommittee meetings. During the course of these meetings, CTPS staff will respond to any technical questions that may arise, especially as they may pertain to ridership statistics, the current fare structure, adherence to the standards of the Service Delivery Policy, and the Boston region's capital planning process. CTPS will also

model, to the extent possible, the ridership and revenue impacts of fare levels and structures suggested by the ROC.

The MBTA, as it did for the 2007 fare increase and restructuring, will coordinate an internal fare policy committee to discuss revisions to the MBTA Fare Policy with respect to potential changes to the fare structure. CTPS staff will participate in these meetings.

# Task 3 Forecast Ridership Impacts of Potential Changes in Fare Structure, Tariffs, and Service

CTPS uses two methodologies to forecast ridership. The first is a spreadsheet-based model that CTPS constructed to analyze the 2007 fare increase and restructuring. As described above, the spreadsheet-based model lists the number of linked trips for each product type on each mode, including parking utilization. This model then applies price changes to each category along with various elasticities of demand with respect to fares. These elasticities are based on past experiences with fare changes at the MBTA and at peer transit properties around North America. The second methodology uses the CTPS regional travel demand model, a four-step model that estimates the frequency of origins and destinations of trips in each travel zone by trip purposes (trip generation), matches origins with destinations (trip distribution), assigns a specific transportation mode (such as private vehicle, public transportation, walking, etc.) to each origin-destination trip pair (mode choice), and determines the route between the origin and destination using the chosen mode (route assignment).

The primary difference between the two methodologies is that the spreadsheet-based model can only be used to estimate the impacts of a fare change, while the regional travel demand model can forecast impacts caused by both fare changes and service changes. The chief strengths of the CTPS spreadsheet-based model are that it accounts for every distinct fare that can be paid for an MBTA transit service and that it properly assigns the fare to the correct number of passengers who are in that fare-payment and modal category (for example, those who use the LinkPass to ride both a bus and train in the conduct of a trip). In comparison, the regional travel demand model does not permit analysis of fares at this detailed level, but assumes an average modal fare across all fare types. The spreadsheet-based model also estimates the diversion of riders between modal and farepayment categories; for example, when some transit users, faced with a fare increase, choose to continue using the MBTA, but switch to a different route or mode in order to lessen the financial impact of the fare increase. However, unlike the regional travel demand model, the spreadsheet-based model cannot predict how many riders who leave the system due to a fare increase are switching to driving alone, carpooling, or walking. The regional travel demand model also provides the outputs necessary for conducting the environmental and socioeconomic impact analyses.

Using the spreadsheet-based model, CTPS will analyze as many as three separate and complete fare-pricing and fare-structure scenarios, after the MBTA, MassDOT, and the ROC Finance Subcommittee approve of the selection of the scenarios to be analyzed.

Summaries of each scenario will describe the potential fare changes for each fare-payment category and each transit mode. CTPS will also use the spreadsheet-based model to analyze the impacts of individual fare-pricing and fare-structure changes, as permitted by the budget. In addition, a package of proposed service changes will be provided to CTPS by the MBTA to be evaluated in conjunction with the fare structure and tariffs that are ultimately proposed. Using the CTPS regional travel demand model, CTPS will analyze up to three scenarios that reflect possible combinations of changes in fare structure, tariffs, and service.

Due to their complementary nature, the regional travel demand model and the spreadsheet-based model will be used together. As the regional travel demand model's fare categories are much more limited than those used in the spreadsheet-based model, the more detailed fare categories in the spreadsheet-based model will be aggregated and averaged to provide the inputs used in the regional travel demand model. These average fares will be used in the regional travel demand model to forecast ridership changes resulting from the changes in fare structure and tariffs, by line and mode, and these changes will be compared to the estimates from the spreadsheet-based model. These results will be added to estimates of the changes resulting from proposed service changes included in each scenario to provide an estimate of the changes likely from the scenario as a whole. The two models' results will be summarized in tabular and graphical form for review by the MBTA.

#### Products of Task 3

- Forecasts of ridership changes by line and mode of the proposed fare-structure, tariff, and service scenarios
- Forecasts of diversions to the drive-alone, carpool, and walk modes
- Forecasts of change in vehicle-miles traveled (VMT) due to diversions to the drive-alone and carpool modes

# Task 4 Forecast Revenue Impacts of Potential Changes in Fare Structure, Tariffs, and Service

The spreadsheet-based model described above calculates fare-revenue changes along with ridership changes resulting from a fare-structure and/or tariff change. The regional travel demand model also estimates revenue based on the average fare inputs. As was done for ridership, the changes in revenue forecast by the two models will be summarized in tabular and graphical form for review by the MBTA.

#### Product of Task 4

Forecasts of fare-revenue impact of the proposed fare-structure, tariff, and service scenarios

## Task 5 Forecast Air-Quality Impacts of Potential Changes in Fare Structure, Tariffs, and Service

The environmental analysis will consist of forecasting changes in vehicular emissions of ozone precursors (volatile organic compounds and oxides of nitrogen) and other pollutants that might result from changes in fare structure, tariffs, and service. This will entail forecasting changes in both transit-vehicle and automobile emissions, and CTPS has well-established procedures for doing both. The VMT-by-roadway-link output from the regional travel demand model will be combined with the latest MOBILE emissions rates to estimate the total change in emissions for the region.

#### Product of Task 5

Forecasts of emissions changes resulting from the proposed fare-structure, tariff, and service scenarios

# Task 6 Forecast Environmental-Justice Impacts of Potential Changes in Fare Structure, Tariffs, and Service

In this task, the potential impact of changes in fare structure, tariffs, and service on different socioeconomic groups will be analyzed. This work will be closely related to ongoing work at CTPS in the area of environmental justice, and some of the analytical approaches used in that work will be brought to bear in this project. The MBTA measures the impact of service changes on minority and low-income neighborhoods (target populations) compared to all other areas, as part of its biennial service-planning process and ongoing Title VI monitoring program.

As was done for the 2007 pre-fare increase impacts analysis, the average fare-structure and/or tariff changes, in both absolute and percentage terms, will be computed and compared to existing conditions using the regional travel demand model for both target populations and the system. To the extent that proposed service changes are modeled, CTPS will also compare the estimated changes in walking access and egress times, waiting times, in-vehicle travel times, and the number of transfers for both target populations and the system.

#### Products of Task 6

- Comparative analysis of fares from the proposed fare-structure, tariff, and service scenarios
- Comparative analysis of walking access and egress times, waiting times, invehicle travel times, and number of transfers resulting from the proposed servicechange scenarios

#### Task 7 Produce Draft Report for Public Review

In this task, CTPS will compile the results of the analyses performed in Tasks 1-6 into a draft report that will be released for review during the public process.

### Product of Task 7

Draft report in electronic format

# Task 8 Assist the MBTA in Preparing Communication Materials for Public Hearings and Fare Change Implementation

In this task, CTPS will provide the MBTA with explanatory materials in the desired formats for use at public meetings and hearings and for general customer communication in advance of the potential fare increase. In the past, such materials have explained the need for a fare increase, summarized the impacts of the proposed increase, and listed the new fares in tabular format. In addition, CTPS staff will participate in a technical advisory role at public meetings.

#### **Product of Task 8**

Information and materials needed by the MBTA for public hearings

#### Task 9 Additional Analysis as Suggested by Public Hearings

There may be ideas presented during the public process that the MBTA will ask CTPS to analyze. It is possible, for example, that the MBTA might want certain facets of the proposed changes to be modified in the spreadsheet-based model assumptions in order to predict their ridership and revenue consequences. Alternatively, additional work on the socioeconomic impacts could be called for.

#### Product of Task 9

Additional analyses, as requested by the MBTA following the public hearings

#### Task 10 Prepare Final Report

A report that documents all analyses and findings will be prepared. In addition, if an increase is proposed as a result of the process, CTPS will assist the MBTA in preparing the environmental-finding document for the Board of Directors that will include the purpose of and need for a fare increase; actions taken to avoid a fare increase; the impacts of the fare increase, including economic, transportation, air quality, and environmental justice; alternatives to a fare increase, including impacts of no fare increase; and measures to reduce impacts.

#### **Products of Task 10**

- Final report in electronic format
- Environmental findings

### ESTIMATED SCHEDULE

It is estimated that this project will be completed 11 months after the notice to proceed is received. The proposed schedule, by task, is shown in Exhibit 1.

#### **ESTIMATED COST**

The total cost of this project is estimated to be \$124,819. This includes the cost of 48.8 person-weeks of staff time and overhead at the rate of 90.69 percent. A detailed breakdown of estimated costs is presented in Exhibit 2.

KQ/RG/rg

Exhibit 1
ESTIMATED SCHEDULE
MBTA Potential 2012 Fare Increase and Service Reductions: Impact Analysis

							Мс	onth					
	Task	1	2	3	4	5	6	7	8	9	10	11	12
1.	Estimate/Calibrate Annual Ridership												
2.	Participate in Regular Meetings									054505450			1
3.	Forecast Ridership Impacts												
4.	Forecast Revenue Impacts			$\{\cdot,\cdot\}$	41-41-4	4							
5.	Forecast Air Quality Impacts					348							
6.	Forecast EJ Impacts					44.5							
7.	Produce Draft Report					:: :: A							
8.	Prepare Communication Materials												
9.	Perform Additional Analysis												
10.	Prepare Final Report									В			

### Products/Milestones

- A: Draft report
- B: Final report and environmental findings

Exhibit 2 **ESTIMATED COST** MBTA Potential 2012 Fare Increase and Service Reductions: Impact Analysis

			Person-V	Veeks		Direct	Overhead	Total
Task	M-1	P-5	P-4	P-2	Total	Salary	(@ 90.69%)	Cost
I. Estimate/Calibrate Annual Ridership	0.5	1.0	3.0	0.5	5.0	\$6,501	\$5,895	\$12,396
2. Participate in Regular Meetings	2.0	0.0	4.0	0.0	6.0	\$8,154	\$7,395	\$15,549
B. Forecast Ridership Impacts	1.3	0.3	6.5	0.0	8.1	\$10,536	\$9,555	\$20,092
Forecast Revenue Impacts	1.2	0.2	3.5	0.0	4.9	\$6,553	\$5,943	\$12,497
5. Forecast Air Quality Impacts	1.0	0.0	2.5	0.0	3.5	\$4,687	\$4,251	\$8,938
6. Forecast EJ Impacts	0.9	0.0	1.5	1.5	3.9	\$4,585	\$4,158	\$8,743
7. Produce Draft Report	2.2	0.0	3.2	0.0	5.4	\$7,506	\$6,807	\$14,312
B. Prepare Communication Materials	1.0	0.0	2.0	0.0	3.0	\$4,077	\$3,697	\$7,774
9. Perform Additional Analysis	2.5	0.0	2.5	0.0	5.0	\$7,143	\$6,478	\$13,621
). Prepare Final Report	2.0	0.0	2.0	0.0	4.0	\$5,714	\$5,182	\$10,897
Total	14.6	1.5	30.7	2.0	48.8	\$65,456	\$59,362	\$124,819

Other Direct Costs

TOTAL COST \$124,819

**Funding**Future MBTA Contract

### MBTA 25 YEAR OPERATING SOURCES AND USES OF FUNDS

Fiscal Year	<u>Unit</u>	<u>Total</u>	2010	2011	2012-2015	2016-2020	2021-2025	2026-2030	2031-2035
OPERATING REVENUES		2012-2035	Actual *	Budget *					
Tax Revenues		-							
Sales Tax	YOE \$M	27,700	767	767	3,227	4,460	5,321	6,575	8,117
Additional Tax Revenue	YOE \$M	3,840	160	160	640	800	800	800	800
Local Assessments	YOE \$M	4,814	150	150	631	879	983	1,097	1,224
Total Tax Revenues	YOE \$M	36,354	1,077	1,077	4,498	6,139	7,104	8,472	10,141
· · · · · · · · · · · · · · · · · · ·									
Fare Revenues									
Total Fare Revenues (4)	YOE \$M	12,173	439	451	1,835	2,395	2,517	2,645	2,780
Total Fare Revenues	YOE \$M	12,173	439	451	1,835	2,395	2,517	2,645	2,780
- Total Fare Hoverhaus		12,170			1,000	2,000	2,017	2,040	2,700
Non-Fare Operating Revenues						,			
	\(\O_{\operation} \ \O_{\operation} \)		40						107
Advertising and Concession Revenues	YOE \$M	480	12	11	56	79	95	114	137
Real Estate Revenues	YOE \$M	625	18	22	82	111	126	143	162
Total Parking Revenues	YOE \$M	536	30	35	76	115	102	111	131
Interest Income	YOE \$M	8	2	1	6	2	-	-	-
Property Sales	YOE \$M	45	2	4	45	-	-	-	-
Utility Reimbursements	YOE \$M	57	2	3	9	11	12	12	13
Other (including gas rebates) (3)	YOE \$M	19	2	5	1	7	4	4	4
Total Non-Fare Operating Revenues	YOE \$M	1,769	67	82	275	326	338	384	447
Total Operating Revenues								'	
Total Operating Revenues	YOE \$M	50,296	1,584	1,611	6,608	8,859	9,960	11,502	13,368
Endoral Operating Assistance									
FETA Section 5207 Proventative Maintenance	VOEAT		<b>2</b> -						
FTA Section 5307 Preventative Maintenance	YOE \$M	116	29	12	36	20	. 20	20	20
Commonwealth Operating Subsidy for the Green Line	YOE \$M	570	-	-	-	115	132	152	171
Total Operating Revenues (incl. Assistance)	YOE \$M	50,982	1,613	1,623	6,644	8,994	10,112	11,674	13,559
OPERATING COSTS	•							·	
Operating and Maintenance (O&M) Costs									
Green Line O&M Costs	YOE \$M	5,917	143	145	638	1,052	1,215	1,399	1,612
Green line Extension O&M Costs	YOE \$M	570				115	132	152	171
			000	010	001	1		1	
Heavy Rail O&M Costs	YOE \$M	7,613	206	212	931	1,325	1,536	1,774	2,046
Silver Line O&M Costs	YOE \$M	498	14	14	61	88	101	116	132
Trackless Trolley O&M Costs	YOE \$M	554	15	15	68	97	112	129	148
Bus O&M Costs	YOE \$M	10,096	276	281	1,243	1,779	2,047	2,344	2,683
Commuter Rail O&M Costs	YOE \$M	11,788	277	302	1,353	1,990	2,364	2,794	3,287
THE RIDE O&M Costs	YOE \$M	5,346	85	89	458	797	1,055	1,355	1,682
Other O&M Costs	YOE \$M	6,209	144	143	645	1,009	1,239	1,498	1,818
Cost Adjustment	,	272			52	55	55	55	55
Financial Service Charges		161	16	16	1				
·				16	22.	31	33	36	38
Total O&M Costs**	YOE \$M	49,023	1,177	1,217	5,472	8,338	9,889	11,651	13,673
Fund Deposits / Withdrawals						*	•		
Deficiency Fund Deposits (debt financed)	YOE \$M	· •	-	<del>-</del>	- ,	-	-	-	-
Capital Maintenance Fund Deposits Stabilization Fund Deposits	YOE \$M YOE \$M	157	- 0	-	-	-	- 00	, -	45
Total Fund Deposits	YOE \$M	157	0 <b>0</b>	5 <b>5</b>	19 <b>19</b>	26 <b>26</b>	30 <b>30</b>	37 <b>37</b>	45
Total Fulla Deposito	100 9101	107	· ·		13	20	30	37	45
Deficiency Fund Withdrawals	YOE \$M	_		_					
Capital Maintenance Fund Withdrawals	YOE \$M		-	-		_	<u>-</u>	_	_
Stabilization Fund Withdrawals	YOE \$M	157 -	_	5	19	26	30.	37	45
Total Fund Withdrawals	YOE \$M	157	-	5	19	26	30	37	45
			······································						
Financial Service Charges	YOE \$M	-	4	5					
Familia Parasas B. 1			·						
Farebox Recovery Ratio			37.2%	36.9%	33.5%	28.7%	25.5%	22.7%	20.3%
Total Debt Service								,	
Existing Debt Service	YOE \$M	8,391	435	416	1,765	2,317	1,888	1,516	904
			TUJ	710	1,103				
Total New Debt Obligations (2)	YOE <sup>·</sup> \$M	1,280.2	=	-	-	49.7	197.6	391.3	641.6
Total Debt Service	YOE \$M	9,671	435	416	1,765	2,367	2,086	1,907	1,546
Debt Service as a Percentage of Total Operating Costs			26.9%	25.4%	24.4%	22.1%	17.4%	14.1%	10.2%
Total O&M Costs (including Debt Service)	YOE \$M	58,694	1,616	1,639	7,237	10,704	11,975	13,558	15,219
Drawdown on Operating Cash Balance	YOE \$M		-	_	·	_	<b>.</b>		_
Operating Surplus/(Deficit)	YOE \$M	(7,711)	(3)	(16)	(593)	(1,710)	(1,864)	(1,884)	(1,660)
	VIVI	(*;****)	(0)	(10)	(535)	(1,710)	(1,004)	(1,004)	(1,000)
OPERATING CASH BALANCE									
OF LINATING CAST DALANCE				1					
Paringing One 21' O. 1.7.	\/ A +	*							
Beginning Operating Cash Balance	YOE \$M		_	1	(512)	(6,179)	(15,289)	(24,592)	(33,677)
Beginning Operating Cash Balance Operating Surplus/(Deficit) Ending Operating Cash Balance	YOE \$M YOE \$M YOE \$M	(7,711)	- 1	<b>1</b> (0)	<b>(512)</b> (593)	<b>(6,179)</b> (1,710)	<b>(15,289)</b> (1,864)	<b>(24,592)</b> (1,884)	' '



## BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

State Transportation Building Ten Park Plaza, Suite 2150 Boston, MA 02116-3968 Tel. (617) 973-7100 Fax (617) 973-8855 TTY (617) 973-7089 www.bostonmpo.org

Jeffrey B. Mullan MassDOT Secretary and CEO and MPO Chairman

Karl H. Quackenbush Acting Director, MPO Staff

The Boston Region MPO, the federally designated entity responsible for transportation decisionmaking for the 101 cities and towns in the MPO region, is composed of:

MassDOT Office of Planning and Programming

City of Boston

City of Newton

City of Somerville

Town of Bedford

Town of Braintree

Town of Framingham

Town of Hopkinton

Metropolitan Area Planning Council

Massachusetts Bay Transportation Authority Advisory Board

Massachusetts Bay Transportation Authority

MassDOT Highway Division

Massachusetts Port Authority

Regional Transportation Advisory Council (nonvoting)

Federal Highway Administration (nonvoting)

Federal Transit Administration (nonvoting)

#### **MEMORANDUM**

DATE August 4, 2011

TO Transportation Planning and Programming Committee

of the Boston Region Metropolitan Planning Organization

FROM Karl H. Quackenbush, CTPS Acting Director

**RE** Work Program for: Regional HOV Lane System Planning Study

#### **ACTION REQUIRED**

Review and approval

#### PROPOSED MOTION

That the Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization vote to approve the work program for Regional HOV Lane System Planning Study in the form of the draft dated August 4, 2011.

#### PROJECT IDENTIFICATION

#### **Unified Planning Work Program Classification**

**Planning Studies** 

#### **CTPS Project Number**

13250

#### Client

Boston Metropolitan Planning Organization

#### **CTPS Project Supervisors**

Principal: Karl H. Quackenbush Manager: William S. Kuttner

#### **Funding**

MPO §5303 Contract #67436; MPO 3C PL Contract #66104

#### IMPACT ON MPO WORK

This is MPO work and will be carried out in conformance with the priorities established by the MPO.

#### **BACKGROUND**

Traffic on the regional express highway system increased rapidly during the 1970s and 1980s as growth in population, jobs, and auto ownership filled the then recently completed express highway system. Traffic has continued to grow in recent years in response to these trends, but at a slower rate. The recent economic slowdown has resulted in a general leveling of traffic, with increases in some areas and decreases in others. This leveling is assumed to be temporary, and a trend of gradually increasing traffic is projected into the foreseeable future.

Congestion and delay are today commonplace throughout much of the regional express highway system. Congestion does not occur uniformly across the highway system, and the sections with the worst congestion understandably call for the earliest remedies. The completion of the Central Artery project relieved congestion in the core of the region, but substantial congestion remains, and a gradual increase in traffic should be anticipated.

Accommodating traffic growth without serious increases in congestion will require adding capacity in some manner. Widening of U.S. 3 to New Hampshire and the Central Artery Project are complete. Widening of the Route 128 beltway corridor between Routes 9 and 24 is underway, and the possible widening of I-93 to New Hampshire is under investigation. Increasing capacity without widening can in certain instances be achieved using management and operations strategies, such as ramp metering and real-time message boards.

Another approach to adding capacity without adding general-purpose lanes to an existing highway is to set up a special lane dedicated to high-occupancy vehicles, or HOVs. By offering a congestion-free lane for buses and autos with multiple occupants, the number of persons passing through a congested corridor can be significantly increased. Other potential benefits include reduced delay in general-purpose lanes, reduced congestion on surface roadways, and efficient additional capacity to accommodate future travel growth.

There are a number of variants to the design, implementation, and operation of these preferential lane facilities. Some jurisdictions have expanded eligibility criteria to include very low emissions or a willingness to pay, utilizing new open-road tolling technology. Also, pavement and right-of-way requirements can vary depending upon traffic and physical circumstances.

Some HOV facilities have already been implemented in the Boston region, mostly on I-93 within or near Boston. These facilities have increased roadway capacity and reduced travel times for buses and other HOVs. A detailed MPO study of extending and improving the preferential lane facilities in Dorchester is now underway.

The corridors that are analyzed will be organized generally by stretches between interchanges where major expressways, both radial and circumferential, cross one another. Promising sections for HOV implementation may be identified along a portion of one of these longer expressway system components. Where studies of HOV and related options have been undertaken or are currently in process, these past and current efforts will be utilized in this study.

#### **OBJECTIVES**

The principal objectives of this work program are:

- 1. To gather regional vehicle-type and occupancy data to support evaluation of potential HOV lanes, as well as to support development and calibration of the regional traveldemand model set as related to HOV considerations.
- 2. To evaluate components of the regional expressway system between key interchanges by direction for appropriateness and potential benefit of HOV lane implementation.
- 3. To describe on a conceptual basis HOV treatments for expressway system components where significant potential benefits are identified.

#### WORK DESCRIPTION

The work required to accomplish the study objectives has been grouped in four tasks:

#### Task 1 Develop Evaluation Criteria and Data-Gathering Needs

Currently available traffic, travel time, and other data will be studied and organized. A first-pass evaluation of selected expressway system components based upon available data will be developed. This step will suggest the evaluation criteria and identify specific data-gathering needs.

#### Products of Task 1

Compilation of currently available data. One or more preliminary evaluations of selected expressway system components for appropriateness of HOV treatments based on available data. Field data-gathering plan.

#### Task 2 Gather Vehicle-Type and Vehicle-Occupancy Data

CTPS personnel will count, classify, and characterize traffic flows at key locations to obtain data identified in Task 1 as necessary to the evaluation process. These data will be obtained in conformity with the specific vehicle classes used in the various trip tables assigned as part of the regional travel-demand model set.

In addition to collecting vehicle-type and occupancy data to specifically characterize expressway system components, it is also anticipated that a broader sample of count information will be obtained in order to support model development and calibration more fully. This count information could include off-peak directions and periods, as well as non-expressway traffic flows. The count information will be compared with current model assignments in anticipation of possible model calibration efforts that could be undertaken as a separate CTPS activity.

CTPS has undertaken peak-period occupancy counts in support of required HOV facility monitoring as well as some initial occupancy counts on selected regional expressways in anticipation of a broader set of ongoing occupancy and classification efforts. The data from these efforts have been reviewed and will inform further fieldwork in support both of analyzing specific expressway components and of serving broader needs of model development.

Travel times are measured by CTPS as part of the Congestion Management Process (CMP). The ongoing CMP efforts might be augmented in collaboration with this study—for example, by measuring travel times over longer travel distances.

#### Product of Task 2

Tabular information describing the vehicle-type and occupancy findings

#### Task 3 Evaluate Expressway System Components

As field data are obtained, it will be possible to perform a more complete evaluation and comparison of the regional expressway system components.

#### Product of Task 3

Technical memorandum presenting the evaluation of expressway system components for appropriateness of HOV treatments

#### Task 4 Describe Potential HOV Implementation

Potential HOV implementation will be described for one or more of the regional expressway system components found to be appropriate for an HOV treatment. Conceptual analysis of projected use, entry/exit sections, weaves and merges, right-of-way availability, and other sketch-planning considerations will be described and discussed.

#### Products of Task 4

Technical memorandum describing potential HOV or similar preferential lane treatments for a set of regional expressway components.

#### ESTIMATED SCHEDULE

It is estimated that this project will be completed 12 months after the notice to proceed is received. The proposed schedule, by task, is shown in Exhibit 1.

#### **ESTIMATED COST**

The total cost of this project is estimated to be \$59,988. This includes the cost of 31.8 person-weeks of staff time, overhead at the rate of 90.69 percent, and travel. A detailed breakdown of estimated costs is presented in Exhibit 2. About one-fourth of this work will take place in federal fiscal year 2011, with completion in FFY 2012.

KQ/WSK/wsk

Exhibit 1
ESTIMATED SCHEDULE
Regional HOV Lane System Planning Study

							Мо	onth					
	Task	1	2	3	4	5	6	7	8	9	10	11	12
1.	Develop Evaluation Criteria and Data-Gathering Needs						_						
2.	Gather Vehicle-Type and Vehicle-Occupancy Data							Α					
3.	Evaluate Expressway System Components									В			
4.	Describe Potential HOV Implementation												С

#### Products/Milestones

- A: Vehicle-type and vehicle-occupancy data set
- B: Memorandum applying evaluation criteria
- C: Memorandum describing potential implementation

Task 2 occupancy data will be gathered over a two-month period in the fall of 2011 and a two-month period in the spring of 2012.

Exhibit 2 ESTIMATED COST Regional HOV Lane System Planning Study

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		Person-Weeks Direct Overhead								Total
Task	M-1	P-5	P-4	P-2	P-1	Temp	Total	Salary	@ 90.69%)	Cost
1. Develop Evaluation Criteria and Data-Gathering Needs	0.2	2.0	0.0	0.2	0.0	0.0	2.4	\$3,689	\$3,345	\$7,034
2. Gather Vehicle-Type and Vehicle-Occupancy Data	0.0	4.4	0.0	0.0	0.0	16.0	20.4	\$15,165	\$13,753	\$28,919
3. Evaluate Expressway System Components	0.2	2.0	0.0	0.2	0.0	0.0	2.4	\$3,689	\$3,345	\$7,034
4. Describe Potential HOV Implementation	0.1	4.0	1.0	0.2	1.3	0.0	6.6	\$8,811	\$7,990	\$16,801
Total	0.5	12.4	1.0	0.6	1.3	16.0	31.8	\$31,353	\$28,434	\$59,788

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Travel \$200

TOTAL COST \$59,988

Funding MPO §5303 Contract #67436; MPO 3C PL Contract #66104



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The Boston Region MPO, the federally designated entity responsible for transportation decisionmaking for the 101 cities and towns in the MPO region, is composed of:

MassDOT Office of Planning and Programming

City of Boston

City of Newton

City of Somerville

Town of Bedford

Town of Braintree

Town of Framingham

Town of Hopkinton

Metropolitan Area Planning Council

Massachusetts Bay Transportation Authority Advisory Board

Massachusetts Bay Transportation

MassDOT Highway Division

Massachusetts Port Authority

Regional Transportation Advisory Council (nonvoting)

Federal Highway Administration (nonvoting)

Federal Transit Administration (nonvoting)

#### **MEMORANDUM**

**DATE** August 11, 2011

TO Transportation Planning and Programming Committee

of the Boston Region Metropolitan Planning Organization

FROM Karl H. Quackenbush, CTPS Acting Director

**RE** Work Program for: Boston Ramp Study

#### **ACTION REQUIRED**

Review and approval

#### PROPOSED MOTION

That the Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization, upon the recommendation of MassDOT, vote to approve the work program for Boston Ramp Study in the form of the draft dated August 11, 2011.

#### PROJECT IDENTIFICATION

#### **Unified Planning Work Program Classification**

**Planning Studies** 

#### **CTPS Project Number**

95047

#### Client

Massachusetts Department of Transportation

Project Supervisor(s): Mark Berger

#### **CTPS Project Supervisors**

Principal: Karl Quackenbush Manager: Scott Peterson

#### **Funding**

MassDOT SPR Contract #68456

#### **IMPACT ON MPO WORK**

The MPO staff has sufficient resources to complete this work in a capable and timely manner. By undertaking this work, the MPO staff will neither delay the completion of nor reduce the quality of other work in the UPWP.

#### **BACKGROUND**

The purpose of this project is to support a study that MassDOT is conducting that will develop and evaluate alternatives for new ramps along the Massachusetts Turnpike between Brookline Avenue and Berkeley Street in the city of Boston. The Back Bay, Longwood Medical Area, Fenway, and Seaport District neighborhoods are important economic engines within the city of Boston. The Massachusetts Turnpike travels through or very near these neighborhoods, but only provides limited-access ramps in the Back Bay (eastbound-off and westbound-on) and full-access ramps in the Seaport District (all directions). New connections to the Massachusetts Turnpike would also allow for potential new transit bus routes between these neighborhoods as well as better access to Logan Airport.

In 1997, the Massachusetts Turnpike Authority, in conjunction with the Boston Transportation Department and the Boston Redevelopment Authority, conducted the "Boston Extension Ramps Feasibility Study." This previous study developed and analyzed eight new ramp alternatives along I-90 to provide improved access between Back Bay and Logan Airport and the South Boston Waterfront. The new study will provide input into a detailed level-of-service and safety analysis of each alternative's impact on the operations of the Massachusetts Turnpike and surrounding roadways. The study will also analyze the changes in travel patterns caused by each alternative, including detailed level-of-service analysis for key intersections directly affected by changes in Turnpike access. Other than the key intersections, the study will not provide a detailed level-of-service analysis of other roadways and intersections in the study area. A recommended plan of future transportation improvements (short-term and long-term) will be the end product of this project.

#### **OBJECTIVE(S)**

The objective of this work is to conduct six model runs: a 2009 base year, a 2035 no-build forecast year, and four build alternatives for 2035. The four build alternatives are:

- 1. Construct new off-ramp from I-90 WB to Berkeley Street. Close Cortez Street connection to Berkeley Street (if in model). Close Arlington Street I-90 WB on-ramp. New ramp must be tolled using all electronic tolling.
- 2. Construct new off- ramp from I-90 WB to Trinity Place following the Clarendon Street on-ramp right-of-way. Close Clarendon Street and Arlington Street I-90 WB on-ramps. New ramp must be tolled using all electronic tolling.

- 3. Construct new off-ramp from I-90 WB to Brookline Avenue. Close Newbury Street between Kenmore Street and Brookline Avenue to make room for the new ramp. Close Massachusetts Avenue I-90 WB on-ramp. New ramp must be tolled using all electronic tolling.
- 4. As this project progresses, CTPS will work with the project team to test a fourth alternative, based on feedback from the client and stakeholders. This alternative will be developed in more detail in the conceptual design task.

The end product would be a comparison of traffic volumes and other key transportation metrics by peak period between the no-build and build scenarios for multiple locations in the study area.

#### WORK DESCRIPTION

Work on this project will include six tasks. These tasks will consist of the following:

- 1. The model set will be calibrated to a base year (2009) using traffic counts, transit information, congested speeds, and toll revenue. CTPS will utilize electronic toll collection data to help calibrate the model.
- 2. CTPS will develop a no-build scenario for the 2035 forecast year, and apply and analyze the model results.
- 3. CTPS will work with MassDOT to convert the conceptual designs for the four alternatives into inputs that can be modeled.
- 4. Using the model set for 2035, CTPS will test up to a maximum of four alternatives and examine the results for multiple roadway locations, based on input from MassDOT.
- 5. The methodology and results of the analysis will be documented in a technical memorandum.
- 6. CTPS will provide support to MassDOT and its stakeholders for up to one year from the start of this project.

Each of these tasks is described below.

#### Task 1 Develop and Calibrate Base-Year (2009) Model

CTPS will develop a 2009 base-year model and calibrate it to highway and transit use in the study area. The study will focus on 23 intersections and 20 roadway locations. This

base-year model will be used to develop forecast years in the Boston Ramp Study and the Toll Equity Study.

#### Products of Task 1

- A calibrated and validated base-year model set by time period and daily
- Tabular and graphical summaries of highway assignment results for the study area
- Tabular and graphical summaries of turning movements for selected intersections
- Tabular summaries of transit ridership and boardings for selected transit lines and stations

#### Task 2 Model Future-Year No-Build Scenario for 2035

In this task, the 2035 no-build roadway network in the study area will be created, based on the Boston Region MPO's Long-Range Transportation Plan (LRTP) currently under development. The 2035 no-build scenario will use the most recent land use assumptions approved by the MPO for this LRTP. The outputs of the no-build model run will be used as the basis for analyzing the impacts of the build scenarios described in Task 4.

#### Products of Task 2

- A 2035 no-build model set using the MPO-approved land use
- Highway and transit trip tables to use as inputs to the build scenarios
- Tabular and graphic summaries corresponding to those produced in Task 1 for the base year

#### Task 3 Convert Conceptual Designs into Inputs to Use in the Travel Model

CTPS will work with MassDOT to define and clarify the operations for the proposed alternatives in order to incorporate the design characteristics into the travel modeling process.

#### Products of Task 3

Tabular and graphical design concepts and operational characteristics that can be used as input into the modeling process

#### Task 4 Develop and Model Multiple Build Alternatives and Analyze Results

CTPS will modify the no-build model roadway network to reflect up to a maximum of four build scenarios. The build scenarios will utilize the same land use assumptions as the no-build scenario. The results of this modeling will be analyzed, comparing traffic conditions under the no-build scenario to conditions with various configurations of the proposed Boston Ramp alternatives. The build alternatives' traffic operations at 23 intersections will be examined qualitatively to determine their likely impact due to the changes to the roadway network.

#### Products of Task 4

- Tabular summaries of the travel model results by Boston neighborhood, which includes Chinatown, Longwood, and the Back Bay.
- Tabular and graphic summaries corresponding to those produced in Task 1 for the base year.

#### Task 5 Coordinate with Project Team and Provide Ongoing Technical Assistance

CTPS will work with the Boston Ramp project team for up to one year from the start date of this project. The work will consist of attending up to a maximum of five internal meetings and three meetings with stakeholders. CTPS will fulfill any data requests from the project team, when data is readily available, and educate the stakeholders about any past or proposed work discussed in this scope.

#### **Products of Task 5**

Coordinate with the project team, attend meetings, provide data to the project team, and prepare memos and presentations as needed

#### Task 6 Produce Technical Memorandum

Prepare technical memorandum documenting the work done on this task and comparing the model results (changes in peak-hour vehicle volumes and speeds at the selected roadway locations) for the four scenarios with the no-build scenario results.

#### Product of Task 6

A technical memorandum with tabular and graphical summaries of results and documentation of the methodology used in the analysis.

#### ESTIMATED SCHEDULE

It is estimated that this project will be completed 10 months after the notice to proceed is received. The proposed schedule, by task, is shown in Exhibit 1.

#### **ESTIMATED COST**

The total cost of this project is estimated to be \$63,000. This includes the cost of 24.5 personweeks of staff time, overhead at the rate of 94.57 percent, and travel. A detailed breakdown of estimated costs is presented in Exhibit 2.

### Exhibit 1 ESTIMATED SCHEDULE Boston Ramp Study

		Month													
	Task		1	2		3		4	5		6	7	8	9	10
1.	Develop and Calibrate Base-Year (2009) Model														
2.	Model Future-Year No-Build Scenario for 2035														
3.	Convert Conceptual Designs into Inputs to Use in the Travel Model						1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								
4.	Develop and Model Multiple Build Alternatives and Analyze Results														
5.	Coordinate with Project Team and Provide Ongoing Technical Assistance														
6.	Produce Technical Memorandum														

#### Products/Milestones

A: Technical memorandumm with tabular and graphical summaries of results and documentation of the methodology used in the analysis.

Exhibit 2 ESTIMATED COST **Boston Ramp Study** 

			Person-	-Weeks			Direct	Overhead	Total
Task	M-1	P-5	P-4	P-3	SP-3	Total	Salary	(@ 94.57%)	Cost
Develop and Calibrate Base-Year (2009) Model	0.6	1.5	3.6	1.0	0.0	6.7	\$8,901	\$8,417	\$17,318
Model Future-Year No-Build Scenario for 2035	0.6	8.0	1.6	0.0	0.0	3.0	\$4,259	\$4,027	\$8,286
Convert Conceptual Designs into Inputs to Use in the Travel Model	0.2	0.7	0.0	0.0	0.0	0.9	\$1,474	\$1,394	\$2,868
Develop and Model Multiple Build Alternatives and Analyze Results	1.0	1.5	3.9	0.0	0.0	6.4	\$8,881	\$8,399	\$17,281
Coordinate with Project Team and Provide Ongoing Technical Assistance	8.0	0.5	0.0	1.2	0.0	2.5	\$3,356	\$3,174	\$6,530
Produce Technical Memorandum	8.0	0.0	1.1	1.6	1.5	5.0	\$5,487	\$5,189	\$10,677
Total	4.0	5.0	10.2	3.8	1.5	24.5	\$32,358	\$30,601	\$62,960
er Direct Costs									
Travel									\$40

Funding
MassDOT SPR Contract #68456

#### THE COMMONWEALTH OF MASSACHUSETTS MASSACHUSETTS DEPARTMENT OF TRANSPORTATION – HIGHWAY DIVISION

#### NOTICE OF PUBLIC HEARINGS City of Boston's Proposed Non-Radioactive Hazardous Material Route

Public Hearings will be held by MassDOT, as the state routing agency, to discuss the I-93/I-95 Non-Radioactive Hazardous Material ("NRHM") through routing designation proposed by the City of Boston.

#### Boston

Tuesday, August 23, 2011 State Transportation Building 10 Park Plaza, 2<sup>nd</sup> Floor Boston, MA 02116 6:30 p.m. - 8:30 p.m.

#### Waltham

Tuesday, August 30, 2011 Clark Government Center Main Auditorium 119 School Street Waltham, MA 02451 6:30 p.m. – 8:30 p.m.

#### Quincy

Wednesday, August 24, 2011 Thomas Crane Public Library 40 Washington Street Ouincy, MA 02169 6:30 p.m. - 8:30 p.m.

#### Stoneham

Thursday, September 1, 2011 Stoneham Town Hall Auditorium 35 Central Street, Stoneham, MA 02180 6:30 p.m. - 8:30 p.m.

PURPOSE:

The purpose of these hearings is to provide the public with the opportunity to provide testimony and comments regarding the City of Boston's routing analysis and proposed NRHM through routing designation along I-93/I-95. All views and comments made at the hearing will be reviewed and considered to the maximum extent possible.

PROPOSAL: Under the proposed routing designation, the City of Boston would prohibit the use of City streets in the downtown area for the "through" transportation of NRHM where there is neither a point of origin nor destination within the City of Boston. The proposal would designate I-93/I-95 as the prescribed through route over which such NRHM approaching the City of Boston is to be transported. Within Boston, only shipments to destinations/points of origin located within the City would be permissible, provided the motor carrier applies for and receives a permit from the City. For vehicles approaching Boston from Quincy in route to Everett, the routing evaluation prepared by the City identifies the proposed north bound route as: start at Exit 9 on I-93 and continue as follows: Start on I-93 at Exit 9, South on I-93 to I-95N access ramp, North on I-95 to I-93S access ramp, South on the I-93 to Route 38 ramp, South on Route 38, South on Maffa way to Rutherford Avenue, Northwest on Rutherford Ave to Alford Street, Northeast on Alford Street/Route 99, End on Alford St./Route 99 Bridge before Everett. For vehicles approaching Boston from Everett in route to Quincy, the routing evaluation identifies the proposed south bound route as: start on Route 99 Bridge before Everett and continues as follows: Start on Alford Street/Route 99 Bridge just before Everett, Southwest on Alford Street/Route 99, Northwest onto Main Street to Mystic Avenue/Route 38, North on the Mystic Avenue to I-93 ramp, North on the I-93 to I-95S ramp, South on I-95 to I-93N ramp, North on I-93, End on I-93 at Exit 9.

Written views received by MassDOT subsequent to the date of this notice and up to five (5) days prior to a respective hearing date shall be displayed for public inspection and copying at the applicable hearing(s) listed above. Representatives from MassDOT and the City of Boston will be present to discuss the proposed route and answer questions. Additional information, including the City of Boston routing evaluation, will be made available on the MassDOT website listed below.

Written statements and other exhibits in place of, or in addition to, oral statements made at the Public Hearings regarding the proposed undertaking are to be submitted to Thomas F. Broderick, P.E., Acting Chief Engineer, MassDOT, 10 Park Plaza, Suite 4160, Boston, MA 02116, ATTN: BOSTON HAZMAT ROUTE. Such submissions will also be accepted at the public hearings. Mailed statements and exhibits intended for inclusion in the public hearing and comment record must be postmarked within ten (10) business days of September 23, 2011. All comments may also be emailed to <a href="mailto:bostonhazmat@state.ma.us">bostonhazmat@state.ma.us</a>.

The community has declared that these facilities are accessible to all in compliance with the ADA / Title II. However, persons in need of ADA / Title II accommodations should contact John Lozada by phone at (617) 973-7171 or email to <a href="MASSDOT.CivilRights@dot.state.ma.us">MASSDOT.CivilRights@dot.state.ma.us</a>. Requests must be made at least 10 days prior to the date of the public hearing. Every reasonable effort will be made to accommodate the needs.

In case of inclement weather, hearing cancellation announcements will be posted on the internet at <a href="http://www.massdot.state.ma.us/Highway/">http://www.massdot.state.ma.us/Highway/</a>

FRANCIS A. DEPAOLA, P.E. ACTING HIGHWAY ADMINISTRATOR THOMAS F. BRODERICK, P.E. ACTING CHIEF ENGINEER

Boston, Massachusetts